BEACON PLANNING BOARD
One Municipal Plaza - Courtroom
BEACON, NEW YORK 12508
Phone (845) 838-5002 Fax (845) 838-5026

The Planning Board will meet on **Tuesday, September 10, 2019** in the Municipal Center Courtroom. A work session will take place at 7:00 PM for a training workshop, discussion of agenda items and/or topics of interest to the Planning Board. The regular meeting will begin immediately thereafter, but not later than 7:30 p.m.

- **Regular Meeting**

1. 162 Main Street

   Continue public hearing on application to amend existing Site Plan Approval, to add apartment, stairwell and commercial space, 162 Main Street, submitted by The Hose Company, LLC ***(postponed to October 8 at applicant's request)***

2. 184 Main Street

   Continue public hearing on application for Site Plan Approval, one story extension, Retail/Retail, 184 Main Street, submitted by 184 Main Street, LLC

3. 27 Fowler Street

   Public hearing on application for Special Use Permit and Site Plan Approval, Accessory Apartment, 27 Fowler Street, submitted by Marianne Hughes-Joiner

4. 23-28 Creek Drive

   Review request to set public hearing on application for Site Plan Approval, 23-28 Creek Drive, mixed use development, submitted by 23-28 Creek Drive, LLC

5. 296 Main Street

   Review applications for Special Use Permit and Site Plan Approval, Bar and Arcade, 296 Main Street, submitted by Happy Valley Arcade, LLC

6. Beacon Views - Conklin Street

   Review applications for Subdivision and Site Plan Approval, "Beacon Views Townhouses" 42 units, Conklin Street

7. Two Cross Street

   Review applications for Special Use Permit and Site Plan Approval, "Two Cross Street" 4 Cross Street/172 Main Street, four-story mixed use building, submitted by Hudson Todd, LLC ***(postponed at applicant's request)***

- **Miscellaneous Business**

1. Zoning Board of Appeals

   Zoning Board of Appeals – September Agenda

2. Review Local Law

   City Council request to review proposed Local Law amending the Historic District and Landmark Overlay Map (HDLO) and Zoning Map by the addition of 36 landmarked properties

3. 249 Main Street

   Request for extension of Site Plan Approval - 249 Main Street

- **Architectural Review**

1. St. Luke's Place

   Single Family House – St. Luke's Place ***(postponed at applicant's request)***

2. 7 East Main Street

   Certificate of Appropriateness – 7 East Main Street Hudson Valley Brewery, change in façade material

3. 193-195 Main Street

   Certificate of Appropriateness – 193-195 Main Street; change façade color

City of Beacon Planning Board
9/10/2019

Title:

162 Main Street

Subject:

Continue public hearing on application to amend existing Site Plan Approval, to add apartment, stairwell and commercial space, 162 Main Street, submitted by The Hose Company, LLC ***(postponed to October 8 at applicant's request)***

Background:

City of Beacon Planning Board
9/10/2019

Title:

184 Main Street

Subject:

Continue public hearing on application for Site Plan Approval, one story extension, Retail/Retail, 184 Main Street, submitted by 184 Main Street, LLC

Background:

ATTACHMENTS:

Description	Type
184 Main Street Site Plan	Plans
184 Main Street Signed ZBA Resolution	Resolution
Planner Review Letter	Consultant Comment
Engineer Review Letter	Consultant Comment

1 / A1 VICINITY MAP

N.T.S

Zoning Compliance Schedule		
Code/Standard	Required	Proposed
223-41.18 A (7) Uses by right.	Restaurant, coffee house, brew pub	Restaurant
223-41.18 E (1) Front Setback	Minimum zero, maximum 10'	3' 10"
223-41.18 E (3) Side Setback	Minimum zero	zero
223-41.18 E (4) Rear setbacks	100'+ - 25' > 100' - 10'	10'
223-41.18 E (5) Minimum Frontage Occupancy	100%	100%

15' VARIANCE GRANTED FOR REAR YARD SETBACK AT 08/20/2019 ZONING BOARD OF APPEALS MEETING

FENCE DETAIL
N.T.S

2 / A1 PROPOSED AND EXISTING SITE PLAN

1" = 10'-0"

WATER AND SEWER: MUNICIPAL

3 / A1 EXISTING PLAN

1/8" = 1'-0"

WATER AND SEWER: MUNICIPAL

5 / A1 PROPOSED PLAN

1/8" = 1'-0"

Approved by Resolution of the Beacon Planning Board on the _____ day of _____, 20 _____ subject to all conditions as stated therein

Chairman, City Planning Board _____ Date _____

ALFANDRE ARCHITECTURE
Creating spaces and places of lasting beauty
231 Main Street, Suite 201 New Paltz NY 12561 845.255.4774 www.alfandre.com

SITE PLAN APPLICATION
MEYER'S OLDE DUTCH
184 MAIN STREET, BEACON, NY 12508

SITE PLAN AND RENDERINGS

DRAWN BY: GL
PROJECT NO. 18-121
DATE 09/10/2019
SHEET NO. A1

IT IS UNLAWFUL TO MODIFY A DOCUMENT BEARING THE SEAL AND SIGNATURE OF A LICENSED ARCHITECT

8/27/2019 1:21:33 PM

CITY OF BEACON
ZONING BOARD OF APPEALS

RESOLUTION

WHEREAS, an application has been made to the City of Beacon Zoning Board of Appeals by **184 Main, LLC** (the "Applicant") for a 15 foot rear yard setback variance where the minimum required rear yard setback is 25 feet pursuant to City Code § 223-41.18(E)(4), in connection with the proposed construction of a two story building with a 10 foot rear yard setback, on property located at **184 Main Street** in the Central Main Street (CMS) Zoning District. Said premises being known and designated on the tax map of the City of Beacon as **Parcel ID# 30-5954-27-811956**; and

WHEREAS, a duly advertised public hearing on the application was held on August 20, 2019, at which time all those wishing to be heard on the application were given such opportunity; and

WHEREAS, the Board closed the public hearing on August 20, 2019; and

WHEREAS, the proposed action is a Type II Action pursuant to the New York State Environmental Quality Review Act, and accordingly, no further environmental review is required; and

WHEREAS, the Board, from the application, and upon considering each of the factors set forth at Section 223-55(C)(2)(b)[1]-[5] of the City of Beacon Zoning Code, finds with respect to the variance:

1) The variance WILL NOT create an adverse impact to the character of the neighborhood;

2) The benefit the Applicant seeks CANNOT be achieved through another method, feasible for the Applicant to pursue, that does not require the variance;

3) The variance IS NOT substantial;

4) The variance WILL NOT create any adverse impacts to the physical or environmental conditions of the neighborhood; and

5) The need for the variance IS NOT self-created.

NOW, THEREFORE, BE IT RESOLVED, that said application for a 15 foot rear yard setback variance where the minimum required rear yard setback is 25 feet pursuant to City Code § 223-41.18(E)(4), in connection the proposed construction of a second story on the existing building with a 10 foot rear yard setback, on property located at 184 Main Street, is hereby GRANTED, subject to the following conditions:

1. No permit or certificate of occupancy shall be issued until the Applicant has paid in full all application and consultant fees incurred by the City in connection with the review of this application.
2. The Applicant has six months to commence construction and one year to complete construction and obtain a Certificate of Occupancy from the date of this resolution.
3. _____
4. _____

BE IT FURTHER RESOLVED, that the Zoning Board of Appeals may grant a six month extension of this variance approval provided that a written request for an extension is submitted before the variance expires. Such extension shall only be granted upon a showing by the Applicant that the circumstances and conditions upon which the variance was originally granted have not substantially changed.

Chairman Lanier called the roll:

Motion	Second	Zoning Board Member	Aye	Nay	Abstain	Excused	Absent
		Robert Lanier	X				
		Garrett Duquesne	X				
X		Jordan Haug	X				
	X	Judy Smith	X				
		David Jensen	X				
		Motion Carried	**5**	**0**			

Dated: August 20, 2019

Robert K Lanier

Mr. Robert Lanier, Chairman

John Clarke Planning and Design jclarkeplandesign@gmail.com
25 Beech Street, Rhinebeck NY 12572 845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: September 6, 2019
Re: **184 Main Street Site Plan**

I have reviewed the August 20, 2019 Zoning Board of Appeals resolution granting the requested rear yard variance and a new 1-sheet Site Plan, dated September 10, 2019.

Proposal

The applicant is proposing to expand an existing 1-story restaurant with a longer 1-story building and new storefront. The parcel is in the Central Main Street (CMS) district and the Historic District and Landmark Overlay (HDLO) Zone.

Comments and Recommendations

1. The existing building is a contributing structure in the Lower Main Street National Register Historic District. It is also in the HDLO and subject to the Certificate of Appropriateness approval process in the Historic Preservation chapter, the criteria in 134-7, and the design standards in 223-41.18 J. Based on a photo from the 1979 Historic Survey, the current storefront is newer construction. The primary remaining historic elements are the brick façade surrounding the storefront and the simple, stepped roofline. The proposed building design appears to maintain or reproduce these original features.

2. The revised Site Plan needs additional information, including:

   - The Zoning Compliance Table should include landscaped area and required parking with references to requested waivers under 223-41.18 E(12) and 223-41.18 G(4);
   - The cross-hatched alley should be labeled, briefly explaining the easement and who is responsible for maintenance;
   - The parcel number, a survey reference, the square foot area of the lot and the proposed building, and proposed hours of operations should be included on the plans;
   - Proposed floor plans with typical seating arrangements should be included;
   - Any exterior vents and lighting with fixture specifications should be shown, and
   - Scaled building elevations with materials and colors should be provided for the south and west sides.

3. The existing footprint does not project beyond the building to the west, but the Sheet A1 plan shows the existing and new building 1-2 feet in front of the adjacent historic structure.

4. A new street tree was previously proposed as part of this project. The existing gap in street trees could still be filled-in and summer shade could be provided for the south-facing windows and sidewalk by creating a new tree well in the existing brick section along the curb line.

5. The grease trap and fence to the rear appear to encroach into the alley easement.

6. Vents should be located as far away as possible from adjacent residential uses.

7. All exterior lighting fixtures should be historically compatible and be shielded to avoid any spillover light or glare toward adjacent properties and above the horizontal plane into the night sky.

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

John Clarke, Beacon Planning Consultant

c: Dave Buckley, Building Inspector
Jennifer L. Gray, Esq., City Attorney
Arthur R. Tully, P.E., City Engineer
John Russo, P.E., City Engineer
Joe Buglino, R.A., Project Architect

LANC & TULLY

ENGINEERING AND SURVEYING, P.C.

John J. O'Rourke, P.E., Principal
David E. Higgins, P.E., Principal
John Queenan, P.E., Principal
Rodney C. Knowlton, L.S., Principal
Jerry A. Woods, L.S., Principal
John D. Russo, P.E., Principal
John Lanc, P.E., L.S.
Arthur R. Tully, P.E.

September 4, 2019

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

RE: 184 Main Street
City of Beacon
Tax Parcel 5954-27-811956

Dear Mr. Gunn:

My office has received the following in regards to the above application:

- Copy of Zoning Board of Appeals Resolution dated August 20, 2019.
- Plan entitled "Site Plan Application – Meyer's Olde Dutch", dated September 10, 2019, as prepared by Alfandre Architecture.

Based on our review of the above we offer the following comments:

General:

1. The plan shall be revised to include notes regarding the zoning variance that was issued for the project. The note shall be specific to list out when the variance was issued and what the variance was issued for.

The following comments are those as stated in our June 5, 2019 comment letter that have not been addressed.

Site Plan

1. The applicant's consultant shall conduct an Inflow & Infiltration study of the existing site and building 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. A note should also be added to the plans granting the City of Beacon Building Department access to verify where the existing roof leaders and sump pump(s), if present, drain to.

2. The scale noted for the "Vicinity Map" on Sheet 1 should be revised to reflect the actual scale for the map. Section 223-25, Paragraph B(1)(a) states "A map showing the applicant's entire property and adjacent properties and streets, at a convenient scale."

3. The location of the existing utilities (water, sewer, etc.) servicing the site should be shown on the plans. The plan should note as to whether these services will be re-used or if new services will be installed as part of the project.

This completes our review at this time. Further comments may be provided based on future submissions. 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.
David Buckley, Building Inspector

City of Beacon Planning Board
9/10/2019

Title:

27 Fowler Street

Subject:

Public hearing on application for Special Use Permit and Site Plan Approval, Accessory Apartment, 27 Fowler Street, submitted by Marianne Hughes-Joiner

Background:

ATTACHMENTS:

Description	Type
27 Fowler Street Site Plan	Plans
Planner Review Letter	Consultant Comment
DOCS-#685588-v1-Resolution_27_Fowler_Site_Plan_	Resolution

NOTE: THE HOUSE IS A SINGLE- FAMILY RESIDENCE AND THE OWNER WILL OCCUPY ONE OF THE DWELLING UNITS ON THE LOT.

1 PB1.0 PROPOSED SITE PLAN

1" = 10'-0"

ALL SITE PLAN INFORMATION TAKEN FROM A SURVEY
PREPARED BY:
J. WILLIAM KOMISAR, L.L.S.
504 HAIGHT AVENUE
POUGHKEEPSIE, NY 12603
845.485.2626
DATE FEBRUARY 21, 2017

SITE PLAN KEY NOTES:

1. EXISTING GARAGE DOES NOT CURRENTLY HAVE EXISTING PLUMBING, SEWER, OR ELECTRICAL UTILITIES
2. NEW ROOF AT ENTRY
3. EXISTING STOCKADE FENCE
4. EXISTING PAVING STONE AREA
5. EXISTING GRAVEL DRIVEWAY
6. EXISTING BASEMENT ENTRY
7. EXISTING CHIMNEY
8. (3) 9X18 PARKING SPACES
9. SIGHT LINE - SIGHT DISTANCE GREATER THAN 100'.
10. CONNECT PROPOSED WATER LINE TO EXISTING WATER MAIN. SEE DETAIL ON PB1.1.
11. EXISTING CHAIN LINK FENCE
12. EXISTING OVERHEAD WIRES TO UTILITY POLE
13. NEW STAIRS TO EXISTING DECK
14. EXISTING ELECTRIC METER
15. PROPOSED ELECTRIC METER
16. APPROXIMATE LOCATION OF EXISTING UNDER GROUND WATER SERVICE
17. APPROXIMATE LOCATION OF EXISTING UNDER GROUND SEWER LINE
18. PROPOSED 3" UNDER GROUND SEWER LINE
19. PROPOSED 3/4" UNDER GROUND WATER LINE
20. PROPOSED UNDER GROUND ELECTRIC SERVICE
21. CONNECT PROPOSED 3" SEWER LINE TO EXISTING SEWER MAIN. SEE DETAIL ON PB1.1.

2 PB1.0 PARTIAL ZONING MAP

NO SCALE

3 PB1.0 LOCATION MAP

NO SCALE

4 PB1.0 AERIAL PHOTO

NO SCALE

ZONING INFORMATION ACCESSORY BUILDING

TOWNSHIP: CITY OF BEACON SECTION, BLOCK, LOT: 5954-44-972638 ZONE: R1-5	MIN. REAR YD.	MIN. SIDE YD.	MAX CUMULATIVE SF FOR ALL ACCESSORY BLDGS	MAX. SF PERMITTED FOR EA ACCESSORY BLDG(BASED ON FOOTPRINT OF PRINCIPAL BUILDING)	MAX. NUMBER OF SHEDS PERMITTED	OFF STREET PARKING SPACES
ORDINANCE REQUIREMENT:	5 FT	5 FT	720 FT	40 %	1	2 / DWELLING UNIT
EXISTING:	3.7 FT	+/- 0.3 FT	+/- 369.4 SF	40.4%	0	2
PROPOSED:	5 FT	5 FT	+/-362 SF	39.5%	0	3 **

** VARIANCE REQUIRED

5 PB1.0 PARTIAL WATER MAP

1/4" = 1'-0"

6 PB1.0 PARTIAL SEWER MAP

1/32" = 1'-0"

2019-10

CITY OF BEACON
ZONING BOARD OF APPEALS

RESOLUTION

WHEREAS, an application has been made to the City of Beacon Zoning Board of Appeals by **Marianne Hughes Joiner** (the "Applicant") for (1) a variance to provide one off-street parking space where two off street parking spaces are required pursuant to City Code § 223-24.1(F); and (2) a variance to permit an off-street parking facility in the required front yard setback where no off-street parking facility is permitted to be developed in any required front yard setback pursuant to City Code § 223-26(C)(1), in connection with the proposal to convert and enlarge the existing garage into a one bedroom 366 square foot accessory apartment, on property located at **27 Fowler Street** in an R1-5 Zoning District. Said premises being known and designated on the tax map of the City of Beacon as **Parcel ID# 30-5954-44-972638** and

WHEREAS, a duly advertised public hearing on the application was held on April 16, 2019 and continued to May 21, 2019, at which time all those wishing to be heard on the application were given such opportunity; and

WHEREAS, the Board closed the public hearing on May 21, 2019; and

WHEREAS, the proposed action is a Type II Action pursuant to the New York State Environmental Quality Review Act, and accordingly, no further environmental review is required; and

WHEREAS, the Board, from the application, after viewing the premises and neighborhood concerned, and upon considering each of the factors set forth at Section 223-55(C)(2)(b)[1]-[5] of the City of Beacon Zoning Code, finds with respect to the variances that:

1) The variances WILL NOT create an adverse impact to the character of the neighborhood;

2) The benefit the Applicant seeks CANNOT be achieved through another method, feasible for the Applicant to pursue, that does not require the variances;

3) The variances ARE NOT substantial;

4) The variances WILL NOT create any adverse impacts to the physical or environmental conditions of the neighborhood; and

5) The need for the variances IS self-created.

5102/15/669641v1 5/22/19

NOW, THEREFORE, BE IT RESOLVED, that said application for (1) a variance to provide one off-street parking space where two off street parking spaces are required pursuant to City Code § 223-24.1(F); and (2) a variance to permit an off-street parking facility in the required front yard setback where no off-street parking facility is permitted to be developed in any required front yard setback pursuant to City Code § 223-26(C)(1), in connection with the proposal to convert and enlarge the existing garage into a one bedroom 366 square foot accessory apartment, on property located at 27 Fowler Street, is hereby GRANTED.

BE IT FURTHER RESOLVED, that no permit or certificate of occupancy shall be issued until the Applicant has paid in full all application and consultant fees incurred by the City in connection with the review of this application.

BE IT FURTHER RESOLVED, that the Applicant has six months to commence construction and one year to complete construction and obtain a Certificate of Occupancy from the date of the final site plan approval resolution, notwithstanding the foregoing, construction must commence no later than two years from the date of this resolution.

BE IT FURTHER RESOLVED, that the Zoning Board of Appeals may grant a six month extension of this variance approval provided that a written request for an extension is submitted before the variance expires. Such extension shall only be granted upon a showing by the Applicant that the circumstances and conditions upon which the variance was originally granted have not substantially changed.

Chairman Lanier called the roll:

Motion	Second	Zoning Board Member	Aye	Nay	Abstain	Excused	Absent
		Robert Lanier	X				
		Garrett Duquesne				X	
X		Jordan Haug	X				
		Judy Smith	X				
	X	David Jensen	X				
		Motion Carried	**4**	**0**			

Dated: May 21, 2019

Robert K Lanier
Mr. Robert Lanier, Chairman

5102/15/669641v1 5/22/19

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WHALEN ARCHITECTURE pllc
3 VAN WYCK LANE, SUITE #1 WAPPINGERS FALLS, NY 12590
(845) 227-9190 WHALENARCHITECTURE.COM

REVISIONS / ISSUE DATES

NO.	DESCRIPTION	BY	DATE
	ISSUED TO PLANNING BOARD	SW	5/28/19
	ISSUED TO CITY COUNCIL	SW	6/14/19
	ISSUED TO PLANNING BOARD	SW	7/29/19
	ISSUED TO PLANNING BOARD	SW	8/26/19

PROJECT NAME:
Additions & Renovations to:
Hughes Residence
27 Fowler Street
Beacon, NY 12508

THESE DRAWINGS ARE INSUFFICIENT FOR CONSTRUCTION UNLESS SIGNED BY THE SIGNATURE OF THE ARCHITECT OF RECORD

DRAWING TITLE:
SITE PLAN & ZONING INFORMATION

DRAWN BY: SW
SHEET: 1 of 2
DATE: 3/26/19
SCALE: As indicated

DRAWING NO:
PB1.0

PROJECT PHASE:
PB 8/13/19

1 PB1.1 PROPOSED FLOOR PLAN
1/4" = 1'-0"

2 PB1.1 PROPOSED FRONT ELEVATION
1/4" = 1'-0"

3 PB1.1 PROPOSED LEFT ELEVATION
1/4" = 1'-0"

4 PB1.1 PROPOSED REAR ELEVATION
1/4" = 1'-0"

5 PB1.1 PROPOSED RIGHT ELEVATION
1/4" = 1'-0"

TYPICAL SERVICE CONNECTION
N.T.S.

6 PB1.1 SEWER CONNECTION DETAIL
NO SCALE

7 PB1.1 WATER CONNECTION DETAIL
3/4" = 1'-0"

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(845) 227-9190 WHALENARCHITECTURE.COM

REVISIONS / ISSUE DATES

NO.	DESCRIPTION	BY	DATE
	ISSUED TO CITY COUNCIL	SW	6/14/19
	ISSUED TO PLANNING BOARD	SW	7/29/19
	ISSUED TO PLANNING BOARD	SW	8/26/19

THESE DRAWINGS ARE INSUFFICIENT FOR CONSTRUCTION UNLESS BEARING THE SIGNATURE OF THE ARCHITECT OF RECORD

PROJECT NAME:
Additions & Renovations to:
Hughes Residence
27 Fowler Street
Beacon, NY 12508

DRAWING TITLE:
PROPOSED PLAN & ELEVATIONS

DRAWN BY: SW
SHEET: 2 of 2
DATE: 3/26/19
SCALE: As indicated

DRAWING NO:
PB1.1

PROJECT PHASE:
PB 8/13/19

John Clarke Planning and Design jclarkeplandesign@gmail.com
25 Beech Street, Rhinebeck NY 12572 845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: September 6, 2019
Re: **27 Fowler Street, Site Plan for Accessory Apartment**

I have reviewed a 2-sheet Site Plan set, with the last revision date of August 26, 2019.

Proposal

The applicant is proposing to replace an existing garage in the R1-5 zoning district with a studio accessory apartment. The application has received three variances from the ZBA and a Special Permit from the City Council.

Comments and Recommendations

All the comments from my previous memos to the Planning Board have been addressed. The overall plans are acceptable from a planning perspective.

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

John Clarke, Beacon Planning Consultant

c: Dave Buckley, Building Inspector
Jennifer L. Gray, Esq., City Attorney
Arthur R. Tully, P.E., City Engineer
John Russo, P.E., City Engineer
Stephen Whalen, RA, Project Architect

RESOLUTION

CITY OF BEACON
PLANNING BOARD

SITE PLAN APPROVAL FOR
27 FOWLER STREET

WHEREAS, the Beacon Planning Board received an application for Site Plan Approval from Marianne Hughes Joiner (the "Applicant") to construct a 366 square foot accessory apartment (the "Project" or "Proposed Action") on property located at 27 Fowler Street in an R1-5 Zoning District. Said premises being known and designated on the tax map of the City of Beacon as **Parcel ID# 30-5954-44-972638** (the "Property"); and

WHEREAS, the City Council is the approval authority for the Special Use Permit to permit an accessory apartment on the property pursuant to the City of Beacon Zoning Code §§ 223-18.B and 223-24.1; and

WHEREAS, the Planning Board is the approval authority for the Site Plan pursuant to City of Beacon Code § 223-25; and

WHEREAS, the application also consists of application forms, correspondence, and the Environmental Assessment Form (EAF); and

WHEREAS, the Site Plan is shown on the following drawings entitled, "Additions & Renovations to: Hughes Residence", Sheets 1-2, prepared by Whalen Architecture:

Sheet	Title	Dated
1 of 2	*Site Plan and Zoning Information*	last rev. 7/29/19
2 of 2	*Proposed Plan & Elevations*	last rev. 7/29/19; and

WHEREAS, the Proposed Action is a Type II Action, pursuant to § 617.5(c)(11) the New York State Environmental Quality Review Act (SEQRA), and accordingly no further environmental review is required; and

WHEREAS, on May 21, 2019, the Zoning Board of Appeals granted the Applicant (1) a variance to provide one off-street parking space where two off street parking spaces are required pursuant to City Code § 223-24.1(F); and (2) a variance to permit an off-street parking facility in the required front yard setback where no off-street parking facility is allowed in such setback pursuant to City Code § 223-26(C)(1), in connection with the proposal to convert and enlarge the existing garage into a one bedroom 366 square foot accessory apartment; and

WHEREAS, on July 17, 2019, the City Council granted the requested Special Use Permit to the Applicant for the proposed 366 square foot accessory apartment on the Property; and

WHEREAS, on September 10, 2019 the Planning Board opened a duly noticed public hearing on the application for Site Plan approval, at which time all those interested were given an opportunity to be heard, and the public hearing was closed on September 10, 2019; and

WHEREAS, the Planning Board is fully familiar with the Project and has reviewed the Project relative to all applicable provisions of the City Code.

NOW THEREFORE BE IT RESOLVED, that the Planning Board hereby grants Site Plan Approval for the Project, as shown on the Site Plan Drawings and application materials described above, subject to the conditions and modifications set forth herein.

A. The following conditions shall be fulfilled prior to the signing of the Site Plan by the Chairman of the Planning Board:

1. All application review fees shall be paid in full.

2. The Applicant shall seek and obtain all required permits and/or approvals from the appropriate agencies for the Project and shall meet all conditions contained in such approvals, as required therein.

3. The comments contained in the City Engineer's letter to the Planning Board dated August 7, 2019, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Engineer.

When the conditions above have been satisfied, six (6) sets of the above referenced plans revised as per the conditions above shall be submitted for endorsement by the Planning Board Chairman. One set of the endorsed plans will be returned to the Applicant, one set will be retained by the City Clerk, one set will be provided to the Planning Board, and one set each will be forwarded to the Building Inspector, City Engineer and City Planner.

B. Prior to the issuance of the Certificate of Occupancy, the following conditions shall be fulfilled to the satisfaction of the Building Inspector:

1. Based on the current and anticipated future need for park and recreational opportunities in the City of Beacon, as set forth in the analysis provided by BFJ Planning, and the demands of the future population of the Project, the Planning Board hereby finds that additional recreation/parkland should be created as a condition of approval. However, the Planning Board hereby determines that recreation/parkland of adequate size and location cannot be provided on the Project Site. Therefore, that Applicant shall pay a Recreation Fee as prescribed under Sections 223-25.H(4) and 223-61.A(7) of the Zoning Law.

The Planning Board hereby requires that, prior to the issuance of the Certificate of Occupancy, the Applicant shall pay a Recreation Fee for the new accessory apartment in accordance with Sections 223-25.H(4) and 223-61.A(7) of the Zoning Law, as per the City's Fee Schedule in effect at the time of payment.

C. The following are general conditions which shall be fulfilled:

1. The Building Inspector and the City Engineer shall have the right to direct the Applicant to cause the placement, cleaning and/or repair of sedimentation and erosion control devices wherever and whenever deemed necessary during construction.
2. In the event the apartment is no longer in compliance with the City of Beacon City Code or the terms of this Resolution, the Certificate of Occupancy shall be revoked until the violations are cured.

3. The Applicant shall be responsible for the payment of all application review costs incurred by the City in its review and approval of this project. Such fees shall be paid by the Applicants within thirty (30) days of each notification by the City that such fees are due. If such fees are not paid within the thirty (30) day period, and an extension therefor has not been granted by the City, this resolution shall be rendered null and void.

9. As used herein, the term "Applicant" shall include the Applicant and the Applicant's heirs, successors and assigns, and where applicable its contractors and employees.

10. If any of the conditions enumerated in this resolution upon which this approval is granted are found to be invalid or unenforceable, then the integrity of this resolution and the remaining conditions shall remain valid and intact.

11. The approval granted by this resolution does not supersede the authority of any other entity.

12. The Applicant must return for approval from the Planning Board if any changes to the endorsed plans and/or this resolution of approval are subsequently desired other than changes determined to be field changes by the Building Inspector or City Engineer.

Resolution Adopted: September 10, 2019
Beacon, New York

_____ _____, 2019

John Gunn, Chairman Dated
City of Beacon Planning Board

5102/15/685588v1 9/9/19

Motion by _____, seconded by _____:

Gary Barrack	Voting:	Jill Reynolds	Voting:
David Burke	Voting:	J. Randall Williams	Voting:
Patrick Lambert	Voting:	John Gunn, Chairman	Voting:
Rick Muscat	Voting:		

Resolution: Approved
Denied

City of Beacon Planning Board
9/10/2019

Title:

23-28 Creek Drive

Subject:

Review request to set public hearing on application for Site Plan Approval, 23-28 Creek Drive, mixed use development, submitted by 23-28 Creek Drive, LLC

Background:

ATTACHMENTS:

Description	Type
23-28 Creek Drive - Request to set Public Hearing for Site Plan Approval	Cover Memo/Letter

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
tpalmer@cuddyfeder.com

August 27, 2019

BY HAND DELIVERY
AND EMAIL (egrogan@cityofbeacon.org)
Hon. John Gunn, Chairman
And Members of the Planning Board
City of Beacon Planning Board
1 Municipal Center
Beacon, New York 12508

Re: Application for Site Plan Approval – Site Plan Public Hearing
Premises: 23-28 Creek Drive, Beacon, New York
Tax Parcel ID: 6054-37-037625

Dear Chairman Gunn and Members of the Planning Board:

On behalf of our client 23-28 Creek Drive, LLC (the "Applicant"), we are writing to respectfully request that the above-referenced matter be placed on the Planning Board's upcoming September 10, 2019 meeting Agenda in order to consider setting the Site Plan Public Hearing for this Board's October 8, 2019 meeting Agenda.

As this Board is aware, at this time the Applicant is reviewing the Application for Area Variances with the Zoning Board of Appeals ("ZBA"). The Applicant is also in communication with City Staff regarding the Applicant's request to appear again at the City Council in order to coordinate scheduling of the Public Hearing on the Concept Plan.

In the alternative, if the Board sees fit, the Applicant respectfully requests leave from this Board to work with the Planning Board Secretary to timely notice the required Site Plan Public Hearing for the Applicant's next appearance before the Planning Board (anticipated in October), to follow the review of the project by the ZBA,[1] without first reappearing at the Planning Board for the sole purpose of setting the Site Plan Public Hearing.

We appreciate your consideration and guidance in this matter.

Very truly yours,

Taylor M. Palmer
cc: Jennifer L. Gray, Esq.
David Buckley, Building Inspector

[1] Note: It is anticipated that the ZBA will consider a Resolution at the ZBA's September 17th meeting. The Public Hearing on the Area Variances was closed at the ZBA's August 20th meeting.

City of Beacon Planning Board
9/10/2019

Title:

296 Main Street

Subject:

Review applications for Special Use Permit and Site Plan Approval, Bar and Arcade, 296 Main Street, submitted by Happy Valley Arcade, LLC

Background:

ATTACHMENTS:

Description	Type
296 Main Street Site Plan & SUP Application	Application
296 Main Street EAF	EAF
296 Main Street Sheet 1 Site Plan	Plans
296 Main Street Sheet 2 Existing Survey Demolition Plan	Plans
296 Main Street Sheet 3 Plans Elevations	Plans
296 Main Street Sheet 4 Stormwater Utility Plan	Plans
Planner Review Letter	Consultant Comment
Engineer Review Letter	Consultant Comment

APPLICATION FOR SPECIAL USE PERMIT

Submit to Planning Board Secretary, One Municipal Plaza, Suite One, Beacon, New York 12508

IDENTIFICATION OF APPLICANT

Name: Happy Valley Arcade, LLC

Address: 1192 North Avenue
Beacon, NY 12508

Signature:

Date: August 27, 2019

Phone: 312-833-2554

(For Official Use Only)	Date	Initials
Application & Fee Rec'd	8-27-19	
Initial Review	9-10-19	
PB Public Hearing		
Sent to City Council		
City Council Workshop		
City Council Public Hearing		
City Council Approve/Disapprove		

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: Aryeh Siegel Architect

Address: 84 Mason Circle
Beacon, NY 12508

Phone: 845-838-2490

Fax: 845-838-2657

Email address: ajs@ajsarch.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: 296 Main Street

Tax Map Designation: Section 5954 Block 36 Lot(s) 933866

Land Area: 0.124 Acres

Zoning District(s) CMS

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: Bar

Gross Non-Residential Floor Space: Existing 4,403 sf Proposed 0

TOTAL: 4,403 sf

Dwelling Units (by type): Existing Proposed 0

TOTAL: 0

ITEMS TO ACCOMPANY THIS APPLICATION

a. Five (5) **folded** copies and One (1) digital copy of a site location sketch showing the location of the subject property and the proposed development with respect to neighboring properties and developments.

b. Five (5) **folded** copies and One (1) digital copy of the proposed site development plan, consisting of sheets, showing the required information as set forth on the back of this form and other such information as deemed necessary by the City Council or the Planning Board to determine and provide for the property enforcement of the Zoning Ordinance.

c. Five (5) **folded** copies and One (1) digital copy of additional sketches, renderings or other information.

d. An application fee, payable to the City of Beacon, computed per the attached fee schedule.

e. An initial escrow amount, payable to the City of Beacon, as set forth in the attached fee schedule.

APPLICATION FOR SITE PLAN APPROVAL

Submit to Planning Board Secretary, One Municipal Plaza, Suite One, Beacon, New York 12508

IDENTIFICATION OF APPLICANT

Name: Happy Valley Arcade, LLC

Address: 1192 North Avenue
Beacon, NY 12508

Signature:

Date: August 27, 2019

Phone: 312-833-2554

(For Official Use Only)	Date	Initials
Application & Fee Rec'd	8-27-19	
Initial Review	9-10-19	
Public Hearing		
Conditional Approval		
Final Approval		

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: Aryeh Siegel Architect

Address: 84 Mason Circle
Beacon NY 12508

Phone: 845-838-2490

Fax: 845-838-2657

Email address: ajs@ajsarch.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: 296 Main Street

Tax Map Designation: Section 5954 Block 36 Lot(s) 933866

Land Area: 0.124 Acres

Zoning District(s) CMS

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: Bar

Gross Non-Residential Floor Space: Existing 4,403 sf Proposed 0

TOTAL: 4,403 sf

Dwelling Units (by type): Existing 0 Proposed 0

TOTAL: 0

ITEMS TO ACCOMPANY THIS APPLICATION

a. One electronic and five (5) **folded** paper copies of a site location sketch showing the location of the subject property and the proposed development with respect to neighboring properties and developments.

b. One electronic and five (5) **folded** paper copies of the proposed site development plan, consisting of sheets, showing the required information as set forth on the back of this form and other such information as deemed necessary by the City Council or the Planning Board to determine and provide for the property enforcement of the Zoning Ordinance.

c. One electronic and five (5) **folded** paper copies of additional sketches, renderings or other information.

d. An application fee, payable to the City of Beacon, computed per the attached fee schedule.

e. An initial escrow amount, payable to the City of Beacon, as set forth in the attached fee schedule.

INFORMATION TO BE SHOWN ON SITE LOCATION SKETCH

a. Property lines, zoning district boundaries and special district boundaries affecting all adjoining streets and properties, including properties located on the opposite sides of adjoining streets.
b. Any reservations, easements or other areas of public or special use which affect the subject property.
c. Section, block and lot numbers written on the subject property and all adjoining properties, including the names of the record owners of such adjoining properties.

INFORMATION TO BE SHOWN ON THE SITE DEVELOPMENT PLAN

a. Title of development, date and revision dates if any, north point, scale, name and address of record owner of property, and of the licensed engineer, architect, landscape architect, or surveyor preparing the site plan.
b. Existing and proposed contours at a maximum vertical interval of two (2) feet.
c. Location and identification of natural features including rock outcrops, wooded areas, single trees with a caliper of six (6) or more inches measured four (4) feet above existing grade, water bodies, water courses, wetlands, soil types, etc.
d. Location and dimensions of all existing and proposed buildings, retaining walls, fences, septic fields, etc.
e. Finished floor level elevations and heights of all existing and proposed buildings.
f. Location, design, elevations, and pavement and curbing specifications, including pavement markings, of all existing and proposed sidewalks, and parking and truck loading areas, including access and egress drives thereto.
g. Existing pavement and elevations of abutting streets, and proposed modifications.
h. Location, type and design of all existing and proposed storm drainage facilities, including computation of present and estimated future runoff of the entire tributary watershed, at a maximum density permitted under existing zoning, based on a 100 year storm.
i. Location and design of all existing and proposed water supply and sewage disposal facilities.
j. Location of all existing and proposed power and telephone lines and equipment, including that located within the adjoining street right-of-way. All such lines and equipment must be installed underground.
k. Estimate of earth work, including type and quantities of material to be imported to or removed from the site.
l. Detailed landscape plan, including the type, size, and location of materials to be used.
m. Location, size, type, power, direction, shielding, and hours of operation of all existing and proposed lighting facilities.
n. Location, size, type, and design of all existing and proposed business and directional signs.
o. Written dimensions shall be used wherever possible.
p. Signature and seal of licensed professional preparing the plan shall appear on each sheet.
q. Statement of approval, in blank, as follows:

Approved by Resolution of the Beacon Planning Board
on the _____ day of _____, 20_____
subject to all conditions as stated therein

_____ _____
Chairman, City Planning Board **Date**

APPLICATION PROCESSING RESTRICTION LAW

Affidavit of Property Owner

Property Owner: The Field Holding Company, LLC

If owned by a corporation, partnership or organization, please list names of persons holding over 5% interest.

List all properties in the City of Beacon that you hold a 5% interest in:

Applicant Address: 296 Main Street

Project Address: 296 Main Street

Project Tax Grid # 5954-36-933866

Type of Application Site Plan

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, Jeffrey Werner, 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 ☑
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 ☑
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 ☑

Signature of Owner

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.)	✓		JM
ALL taxes are current for properties in the City of Beacon are current (Tax Dept.)		✓	JM
ALL Special Assessments, i.e. water, sewer, fines, etc. are current (Water Billing)		✓	JM

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 223-62 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, JOIN VENTURE OR OTHER BUSINESS ENTITY, EXCEPT A CORPORATION:

Name of Entity	Address of Entity
Field Properties, LLC	36 Winston Lane, Garrison, NY 10524
Place where such business entity was created New York	Official Registrar's or Clerk's office where the documents and papers creating entity were filed NY Department of State
Date such business entity or partnership was created 11/10/2017	Telephone Contact Information 914-490-1432

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

5102/11/612145v1 10/23/17

SECTION B. List all persons, officers, limited or general partners, directors, members, shareholders, managers, and any others with any interest 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
Jeffrey Werner	36 Winston Lane Garrison, NY 10524	914-490-1432	Member - 100%

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.
Field Properties, LLC	38 Winston Lane Garrison, NY 10524	914-490-1432	12/11/17 Purchase	

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
Field Properties, LLC	36 Winston Lane, Garrison, NY 10524

SECTION H. 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 I. 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, Jeffrey Werner being first duly sworn, according to law, deposes and says that I am (Title) Member, an active and qualified member of the Field Properties, 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) Jeffrey Werner

(Signature) _____

CITY OF BEACON
SITE PLAN SPECIFICATION FORM

Name of Application: 296 Main Street - Happy Valley Bar

PLEASE INDICATE WHETHER THE SITE PLAN DRAWINGS SHOW THE SUBJECT INFORMATION BY PLACING A CHECK MARK IN THE APPROPRIATE BOXES BELOW.

	YES	NO
The site plan shall be clearly marked "Site Plan", it shall be prepared by a legally certified individual of firm, such as a Registered Architect or Professional Engineer, and it shall contain the following information:	✓	
LEGAL DATA		
Name and address of the owner of record.	✓	
Name and address of the applicant (if other than the owner).	✓	
Name and address of person, firm or organization preparing the plan.	✓	
Date, north arrow, and written and graphic scale.		
NATURAL FEATURES		
Existing contours with intervals of two (2) feet, referred to a datum satisfactory to the Planning Board.		✓
Approximate boundaries of any areas subject to flooding or stormwater overflows.		✓
Location of existing watercourses, wetlands, wooded areas, rock outcrops, isolated trees with a diameter of eight (8) inches or more measured three (3) feet above the base of the trunk, and any other significant existing natural features.		✓
EXISTING STRUCTURES, UTILITIES, ETC.		
Outlines of all structures and the location of all uses not requiring structures. Paved areas, sidewalks, and vehicular access between the site and public streets.	✓	
Locations, dimensions, grades, and flow direction of any existing sewers, culverts, water lines, as well as other underground and above ground utilities within and adjacent to the property.	✓	
Other existing development, including fences, retaining walls, landscaping, and screening.	✓	
Sufficient description or information to define precisely the boundaries of the property.	✓	
The owners of all adjoining lands as shown on the latest tax records.	✓	
The locations, names, and existing widths of adjacent streets and curb lines.	✓	
Location, width, and purpose of all existing and proposed easements, setbacks, reservations, and areas dedicated to private or public use within or adjacent to the properties.	✓	

PROPOSED DEVELOPMENT	YES	NO
The location, use and design of proposed buildings or structural improvements.	✓	
The location and design of all uses not requiring structures, such as outdoor storage (if permitted), and off-street parking and unloading areas.	✓	
Any proposed division of buildings into units of separate occupancy.	✓	
The location, direction, power, and time of use for any proposed outdoor lighting.	✓	
The location and plans for any outdoor signs.	✓	
The location, arrangement, size(s) and materials of proposed means of ingress and egress, including sidewalks, driveways, or other paved areas.	✓	
Proposed screening and other landscaping including a planting plan and schedule prepared by a qualified individual or firm.	✓	
The location, sizes and connection of all proposed water lines, valves, and hydrants and all storm drainage and sewer lines, culverts, drains, etc.	✓	
Proposed easements, deed restrictions, or covenants and a notation of any areas to be dedicated to the City.		✓
Any contemplated public improvements on or adjoining the property.		✓
Any proposed new grades, indicating clearly how such grades will meet existing grades of adjacent properties or the street.		✓
Elevations of all proposed principal or accessory structures.	✓	
Any proposed fences or retaining walls.	✓	
MISCELLANEOUS		
A location map showing the applicant's entire property and adjacent properties and streets, at a convenient scale.	✓	
Erosion and sedimentation control measures.		✓
A schedule indicating how the proposal complies with all pertinent zoning standards, including parking and loading requirements.	✓	
An indication of proposed hours of operation.	✓	
If the site plan only indicates a first stage, a supplementary plan shall indicate ultimate development.		✓

For all items marked "NO" above, please explain below why the required information has not been provided:

Items marked no are not applicable to this project

Items marked no are not applicable to this project

Items marked no are not applicable to this project

Items marked no are not applicable to this project

Items marked no are not applicable to this project

Items marked no are not applicable to this project

Items marked no are not applicable to this project

Applicant/Sponsor Name: Johnny Coughlin

Signature:

Date: August 27, 2019

617.20
Appendix B
Short Environmental Assessment Form

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:
296 Main Street Bar

Project Location (describe, and attach a location map):
296 Main Street

Brief Description of Proposed Action:
Convert existing garage to Bar use. Existing office use on 2nd floor to remain. Existing retail use at front building to remain.

Name of Applicant or Sponsor:	Telephone: 312-833-2554
Happy Valley Arcade, LLC	E-Mail: johnnycoughlin22@gmail.com

Address:
1192 North Avenue

City/PO:	State:	Zip Code:
Beacon	NY	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 governmental Agency? If Yes, list agency(s) name and permit or approval: City of Beacon Planning Board: Site Plan Approval; City of Beacon Building Department: Building Permit	☐	☑

3.a. Total acreage of the site of the proposed action? 0.124 acres
b. Total acreage to be physically disturbed? 0 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.124 acres

4. Check all land uses that occur on, adjoining and near the proposed action.
☑ 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?	☐	☑
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	☑	☐
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
b. Are public transportation service(s) available at or near the site of the proposed action?	☐	☑
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☐	☑
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: _____	☐	☑
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____	☐	☑
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____	☐	☑
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	☑	☐
b. Is the proposed action located in an archeological sensitive area?	☐	☑
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		
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 plain?	☑	☐
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? ☑ NO ☐ YES	☐	☑
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☐ NO ☑ YES		

	NO	YES
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size:	☑	☐
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:	☐	☑

I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor name: Johnny Coughlin Date: August 27, 2019

Signature:

Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2. 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)?	☐	☐

	No, or small impact may occur	Moderate to large impact may occur
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?	☐	☐

Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3. 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.

☐ 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.

Name of Lead Agency	Date
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

EAF Mapper Summary Report

Saturday, November 24, 2018 1:49 PM

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 Register of Historic Places]	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

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.

HATCHING LEGEND

- CONCRETE SIDEWALK
- PAVERS
- GRASS

Bulk Zoning Regulations Table

	Required Setbacks			Proposed Setbacks			Lot Depth Required	Lot Depth Existing	Lot Width Required	Lot Width Existing	Minimum Building Frontage	Proposed Building Frontage	Allowable Building Height	Proposed Building Height	Allowable Building Depth	Proposed Building Depth	Lot Area
	Front	Side	Rear	Front	Side	Rear											
Zoning District																	
CMS (Central Main Street District)	0' min. 0' max.	0'	25'	7.7' [1]	.75' 1.5'	2.1' [1]	75'	108'	N/A	50'	80%	100%	38'	24'	150'	98' [1]	5,401 sf

Notes:
1. Existing Condition

Location Map

Not to Scale

CONCRETE INTERLOCKING PAVER DETAIL
SCALE: 1-1/2" = 1'-0"

MODERN FORMS "SUSPENSE" OUTDOOR DARK SKY COMPLIANT WALL SCONCE #306563. SIZE: SMALL. BRUSHED ALUMINUM FINISH. 11 WATT (590 LUMENS) 120 VOLT INTEGRATED LED: CRI: 90 COLOR TEMP: 3000K

L1: Wall Mounted

NOTE: THE MANUFACTURER DOES NOT PROVIDE PHOTOMETRIC INFORMATION FOR THESE FIXTURES. FIXTURES WILL BE SHIELDED TO AVOID LIGHT SPILLAGE ONTO ADJACENT PROPERTIES, AND TO SHIELD FROM LIGHT PROJECTING UPWARD TO THE SKY

L2: Wall Mounted

HAMPTON BAY
"1-LIGHT ZINC OUTDOOR WALL LANTERN" MODEL # HSP1691A
60 W INCANDESCENT LAMP OR LED EQUIVALENT - MAX COLOR TEMPERATURE SHALL BE 3000K

SITE PLAN INFORMATION BASED ON A SURVEY DATED OCTOBER 10, 2018 BY: HOWARD WEEDEN, L.S. 62 MAIN STREET, WALDEN, NY

0 5' 10' 20'
SCALE: 1" = 10'

Site Plan

Scale: 1" = 10'

Zoning Summary

Zoning District:	CMS (Central Main Street District)
Tax Map No.:	5459-36-933866
Lot Area:	0.124 acre (5,401 sf)
Building Footprint:	3,294 square feet
Historical Overlay District:	No
Parking Overlay District:	Yes
Existing Use:	Retail / Office Space
Proposed Use:	Bar / Retail / Office Space

Parking & Loading

Use & Parking Requirements	1964 Area	1964 Parking Requirement	Proposed Area	Current Parking Requirement
Retail Service (1964 Use) Automobile Service Garage *1 space per 200 gsf*	1,858 gsf	10 spaces		
Apartment (1964 Use) *1 1/2 space per Apartment*	1 Apartment	2 spaces		
Mercantile (1964 Use) *1964 - 1 space per 200 SF of gross floor area excluding basement and utility areas*	*998 sf*	*5 spaces*		
Bar- Current *2.5 spaces per 1,000 SF*			1,800 sf	5 spaces
Retail - Current Present - 3 spaces per 1,000 SF *of gross floor area*			998 sf	1 space
Office- Current *2 spaces per 1,000 square feet*			1,109 sf	3 spaces
Total Required Parking Spaces		***17 spaces***		***9 spaces***
Total Proposed Parking Spaces				**0 spaces (Note 1)**

Notes:

1. Parking is not required per Beacon Zoning Code Section 223-26 (B.2): The building was in existence on April 20, 1964. The existing use in 1964 was found in the 1964 Beacon Directory. The new use is less than 25% greater intensity than the use existing in 1964. 17 parking spaces would have been required in 1964 for the uses in existence at that time. 9 parking spaces are required for the current proposed uses.
2. There is no space on the property to provide parking.
3. For lots of 8,000 square feet or less, where the provision of on-site parking is infeasible, the Planning Board may waive all parking requirements, provided that the total floor area of the building is no greater than 5,000 square feet
4. Restaurant Hours of operation: 9am – 2am, Monday through Sunday, inclusive

Index of Drawings

Sheet 1 of 4	Site Plan
Sheet 2 of 4	Existing Conditions & Demolition Plan
Sheet 3 of 4	Plans & Elevations
Sheet 4 of 4	Storm Water Utility Plan

REVISIONS:

NO.	DATE	DESCRIPTION	BY

Site Plan Application

Sheet 1 of 4 - Site Plan

Owner:
Field Properties, LLC
36 Winston Lane
Garrison, New York 10524

Applicant:
Big Village Media
1192 North Avenue
Beacon, New York 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

296 Main Street - Happy Valley Bar

Beacon, New York
Scale: 1" = 10'
August 27, 2019

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.

REVISIONS:			
NO.	DATE	DESCRIPTION	BY

Existing Conditions & Demolition Plan

Scale: 1" = 10'

Site Plan Application

Sheet 2 of 4 - Existing Conditions / Demolition Plan

Owner:
Field Properties, LLC
36 Winston Lane
Garrison, New York 10524

Applicant:
Big Village Media
1192 North Avenue
Beacon, New York 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

296 Main Street - Happy Valley Bar

Beacon, New York
Scale: 1" = 10'
August 27, 2019

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.

REVISIONS:

NO.	DATE	DESCRIPTION	BY

Existing 2nd Floor Plan

Scale: $\frac{1}{8}$" = 1'-0"

1st Floor Plan

Scale: $\frac{1}{8}$" = 1'-0"

Street Elevation

Scale: $\frac{1}{8}$" = 1'-0"

Front Elevation

Scale: $\frac{1}{8}$" = 1'-0"

Side Elevation

Scale: $\frac{1}{8}$" = 1'-0"

Site Plan Application

Sheet 3 of 4 - Plans & Elevations

Owner:
Field Properties, LLC
36 Winston Lane
Garrison, New York 10524

Applicant:
Big Village Media
1192 North Avenue
Beacon, New York 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

296 Main Street - Happy Valley Bar

Beacon, New York
Scale: As Noted
August 27, 2019

LEGEND:

- EXISTING SEWER MANHOLE
- EXISTING LAMP
- EXISTING WATER VALVE
- EXISTING SEWER SERVICE LINE
- EXISTING STORMWATER LINE
- PROPOSED STORMWATER LINE
- PROPOSED FORCE MAIN
- PROPOSED ROOF LEADER PIPE
- IMPERVIOUS SURFACE
- PROPOSED ROOF LEADER LOCATION
- PROPOSED STORMWATER CLEANOUT

PROFILE VIEW

NOTES:
1. YARD DRAIN TO BE MODEL DB-POLY20DIA FROM WOODARDS CONCRETE PRODUCTS, 629 LYBOLT ROAD BULLVILLE, NY 10915.

POLYETHYLENE YARD DRAIN DETAIL
NOT TO SCALE

NOTES:
1. SAW CUT AS INDICATED, 18" BEYOND EXCAVATION.
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

PROJECT INFORMATION:

PARCEL OWNER:	JOHN COUGHLIN, 1192 NORTH AVENUE, BEACON NY 12508
ENGINEER OF RECORD:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PROJECT LOCATION:	296 MAIN STREET BEACON, NY 12508
TAX PARCEL ID:	5954-27-869916
PARCEL AREA:	±0.09 ACRES
ZONING DISTRICT:	(CMS) CENTRAL MAIN STREET
POTABLE WATER SUPPLY:	MUNICIPAL
SEWAGE DISPOSAL:	MUNICIPAL

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.

EXISTING STORM AND SEWER NOTES

1. EXISTING STORM AND SEWER LINE LOCATIONS AND ELEVATIONS SHOWN ON THIS PLAN WERE TAKEN FROM FIELLD MEASURMENTS, GIS INFORMATION AND OBSERVATIONS BY HUDSON LAND DESIGN, AND HAVE NOT BEEN VERIFIED BY THE PROJECT SURVEYOR. THEREFORE, THE LOCATIONS AND ELEVATIONS SHOULD BE CONSIDERED APPROXIMATE.

NOTES:
1. ALL ROOF LEADER PIPES SHALL BE 6"ø SCH 40 PVC @ 2.0% SLOPE MIN. UNLESS SPECIFIED OTHERWISE.
2. PVC JOINT CONNECTIONS SHALL BE MADE WITH PVC CEMENT.
3. ROOF LEADER HEADER PIPES SHALL BE 10"ø HDPE PIPE.
4. SUBSTITUTIONS OF PIPE MATERIAL SHALL BE BROUGHT TO THE DESIGN ENGINEER'S ATTENTION FOR REVIEW.

ROOF LEADER CONNECTION 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. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

STORM LINE TRENCH 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 INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 3433, OR APPROVED EQUAL.

CAST IRON STORMWATER FLAT INLET GRATE DETAIL
NOT TO SCALE

STORMWATER UTILITY PLAN
SCALE: 1" = 10'
GRAPHIC SCALE

10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

STATE OF NEW YORK — MICHAEL A. BODENKOPF — 085495 — 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

STORMWATER UTILITY PLAN

HAPPY VALLEY ARCADE

296 MAIN STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-27-869916 (± 0.09 AC.)

JOB #: 2019:035
DATE: 08/27/19
SCALE: 1" = 10'
TITLE: SUP-1
SHEET: 4 OF 4

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

John Clarke Planning and Design jclarkeplandesign@gmail.com
25 Beech Street, Rhinebeck NY 12572 845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: September 6, 2019
Re: **296 Main Street Site Plan**

I have reviewed a Special Permit and Site Plan Application, Short EAF Part 1, and a 4-sheet Site Plan Application set, all dated August 27, 2019.

Proposal

The applicant is proposing to convert an existing one-story rear garage into a bar with outdoor patio, maintaining the front building's first floor retail use and second story office use. The 0.124-acre parcel is in the Central Main Street (CMS) district.

Comments and Recommendations

1. In the Zoning Regulations Table, the Maximum Front Setback is 10 feet, the Proposed Building Frontage should be listed as less than 50%, but can be attributed to an existing condition, and the Minimum Landscaped Area should be included in the table.

2. Under 223-41.18 E(12), a minimum of 10% of the lot must be landscaped with trees, shrubs, or grass (5% if the landscaped area is accessible to the public). All landscaping should be labeled by species and size. Sheet 4 shows a row of plantings along the eastern property line, but it is not included on the Sheet 1 Site Plan. Screening and/or fencing along the edge of the patio seems appropriate.

3. The Parking Table should show that retail, office, and other non-retail commercial require two spaces per 1,000 square feet of floor area. The 1964 parking exemption appears to apply for this project, but that should be confirmed by the Building Inspector.

4. Note 4 on Sheet 1 should give the operation hours of the proposed bar. It should also note whether the patio is proposed to have outdoor speakers or any live or amplified music.

5. Sheets 1 and 3 propose a front fence, so a fence detail should be included in the plans.

6. Sheet 1 shows the front step is to remain, but it is to be removed on Sheet 2.

7. The public entrance to the rear building should be from Main Street, not North Cedar Street where there is no sidewalk along this side of the street.

8. Are the garage doors designed to be opened? According to the design standards in 223-41.18 J(9), individual window proportions shall be greater in height than in width, with a few exceptions.

9. The Sheet 4 Project Information table needs to be corrected for owner, parcel number, and area.

10. A bar in the CMS district requires a Special Permit from the City Council. Once the Board is generally satisfied with the plans, it should submit a recommendations report on the bar/arcade use to the Council.

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

John Clarke, Beacon Planning Consultant

c: Dave Buckley, Building Inspector
Jennifer L. Gray, Esq., City Attorney
Arthur R. Tully, P.E., City Engineer
John Russo, P.E., City Engineer
Aryeh Siegel, Project Architect

LANC & TULLY

ENGINEERING AND SURVEYING, P.C.

John J. O'Rourke, P.E., Principal
David E. Higgins, P.E., Principal
John Queenan, P.E., Principal
Rodney C. Knowlton, L.S., Principal
Jerry A. Woods, L.S., Principal
John D. Russo, P.E., Principal
John Lanc, P.E., L.S.
Arthur R. Tully, P.E.

September 4, 2019

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

RE: Happy Valley Bar - 296 Main Street
City of Beacon

Dear Mr. Gunn:

My office has received the following in regard to the above application:

- Applications for Special Use Permit and Site Plan.
- Short Environmental Assessment Form dated August 27, 2019.
- Set of plans entitled "Site Plan Application – 296 Main Street – Happy Valley Bar", dated August 27, 2019 and consisting of sheets 1 through 4 as prepared by Aryeh Siegel, Architect and Hudson Land Design.

This parcel was last before the Planning Board in February 2019 with a project titled "Ziatun Restaurant". Based on our review of the above our office has no engineering comments at this time. Further comments may be provided based on future submissions. 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.
David Buckley, Building Inspector

(845) 294-3700 • P.O. Box 687, Route 207, Goshen, N.Y. 10924 • FAX (845) 294-8609
www.lanctully.com

City of Beacon Planning Board
9/10/2019

Title:

Beacon Views - Conklin Street

Subject:

Review applications for Subdivision and Site Plan Approval, “Beacon Views Townhouses” 42 units, Conklin Street

Background:

ATTACHMENTS:

Description	Type
Beacon Views Application Cover Letter	Cover Memo/Letter
Beacon Views Exhibit A Images of Premises	Plans
Beacon Views Exhibit B -Full EAF	EAF
Beacon Views Exhibit C Traffic Impact Study	Backup Material
Beacon Views Exhibit D School Impact Analysis	Backup Material
Beacon Views Exhibit E - Phase 1 Report Final	Backup Material
Beacon Views Exhibit F -Site Plan Approval Application	Application
Beacon Views Exhibit G - Subdivision Application	Application
Beacon Views Exhibit H - Contract Cover Page	Application
Beacon Views Exhibit I - Correction Access Easement and Maintenance Agreement	Backup Material
Beacon Views Exhibit J - Preliminary Water and Wastewater Engineering Report	Backup Material
Beacon Views Renderings and Floor Plans Sheets 1-3	Plans
Beacon Views Site Plans Full Set	Plans
Beacon Views SWPPP	Backup Material
Planner Review Letter	Consultant Comment
Engineer Review Letter	Consultant Comment

CUDDY +FEDER LLP

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T 914 761 1300
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Taylor M. Palmer, Esq.
tpalmer@cuddyfeder.com

August 27, 2019

BY HAND DELIVERY
AND E-MAIL

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

Re: Applications for Site Plan & Subdivision Approval – Beacon Views Townhouses
Premises: Conklin Street, Beacon, New York
Tax Parcel ID: 6055-03-331123

Dear Chairman Gunn and Members of the Planning Board:

On behalf of Beacon Views LLC (the "Applicant"), the Contract-Vendee of the above-referenced Premises, we respectfully submit this letter and the referenced enclosures in support of the enclosed Applications for Site Plan and Subdivision Approval proposing to develop the Premises into a for-sale townhouse Project with 42 townhouse units (4 of which are Below-Market-Rate ("BMR")) units (the "Project").[1] The proposed for-sale townhouse Project will involve individually-owned townhouses and common lands, including the parking areas and passive recreation trail area, which will be owned by a property's owner's association. Townhouses are a principally permitted use on the Premises and the Project *does not* require any variances from the Zoning Ordinance. The Applicant respectfully requests that this matter be placed on the Planning Board's September 10, 2019 meeting Agenda for preliminary review.

BACKGROUND - THE BEACON VIEWS PROPERTY

The presently vacant 8.6+/- acre Premises is located northwest of Conklin Street and northeast of Delevan Avenue and Hastings Drive. The Premises abuts improved real properties including the 160-bed Wingate at Beacon skilled nursing facility and the 68-unit Highland Meadows senior, affordable housing development (the former Saint Francis Hospital) to the southwest. The Premises also adjoin the Meadow Ridge I and Meadow Ridge II multi-family residential developments to the northwest and the 25 Townsend Street property (formerly the Knights of Columbus property) that was recently approved for a 13-lot residential subdivision to the northeast. *See* **Exhibit A** – Images of Premises.

[1] Note: In accordance with City of Beacon Zoning Code Article IVB, ten percent (10%) of all projects containing ten (10) or more units shall consist of BMR units.

The Premises was previously subdivided by the former Saint Francis Hospital (and then owner, Hudson Valley Properties & Rentals, Inc.) in the late 1990s, which subdivided the Premises from the properties that now comprise the Meadow Ridge I & II residential developments.[2] Indeed, as this Board may be aware, a prior proposal for the Premises involved a multi-family development consisting of 72 total residential units and related off-street parking.

The Applicant believes that they have developed a reduced density proposal that will be a positive addition to the neighborhood and is compatible with existing development in the area. Located outside of the City's downtown, northwest of the expanded Fishkill Creek Greenway & Heritage Trail (the "Greenway Trail"), the Project will also allow for potential future pedestrian connections to the Meadow Ridge and Fishkill Correction Facility properties, as well as potential pedestrian linkages to the Beacon Correctional Facility property that is being considered for redevelopment through a Request for Proposals (RFP) process with NYS Empire State Development.[3] Together, the enclosed drawings document that the proposed development is compatible with the existing scale and density of surrounding development.

THE PROPOSED TOWNHOUSE DEVELOPMENT PROJECT

After reviewing the Premises in the context of the existing and future development around the site and prior to submitting these Applications, the Applicant and its consultants met with the Building Department and the City Planner for two (2) pre-submission conferences in order to discuss the nature of the proposed Townhouse development and its potential interconnectivity with existing and proposed developments in the area. As detailed herein, and as more fully shown in the enclosed Site Plans and renderings, the Applicant proposes to consolidate the development footprint and create 42 individual for-sale lots, one (1) lot for each Townhouse.[4] The common amenity and service areas of the site (including a gazebo and passive recreation area and trail) will be managed by the property's owner's association.

The proposed townhouses are arranged in groups of four (4) and five (5) units, with distinct

---

[2] *See* Filed Map 10853, filed in the Dutchess County Clerk's Office on August 11, 1999 (Note: The Premises comprising Meadow Ridge I and II would later be further subdivided into two (2) separate lots).

[3] Note: As this Board is aware, the former Beacon Correctional Facility recently considered development proposals for the redevelopment of the Beacon Correctional Facility premises.

[4] Note: Located in the RD-5 District, the Planning Board has authority review the applications for Site Plan and Subdivision approval for the townhouse development, which townhouses are considered a permitted principal use in the RD-5 District in accordance with Zoning Code Section 223-17C – Schedule of Regulations for Residential Districts. *See* Schedule of Use Regulations for Residential Districts, footnote "l" and principal permitted use "18.", which permits "[a]ttached or semiattached singlefamily dwellings (townhouses) on separate building lots in an RD District only, provided that a subdivision plan and a site development plan... are approved the Planning Board."

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designs for the inside units and the ends in order to avoid repetition along the façade. The end units are set forward by two feet to add depth to the groups. Units may also be staggered vertically within the groups to follow the proposed grading. The main entrance and single-width garage door on the inside units are at the front. The end units have a double width garage door on the front face, and the main entrance at the side. The Project will include 157 parking spaces (where 84 spaces are required), including two (2) parking spaces per unit located within the respective unit's garage, as well as between one (1) and (2) parking spaces available per unit within the driveway, together with 13 visitor parking spaces. *See* enclosed Site Plans. The provision of sufficient on-site parking for the residents and visitors ensures that on-street parking will not be used for this development.

Regarding the building design, the first floor exterior finish is brick similar to the color mix on Beacon's Main Street. A precast water table separates the brick from the siding above. The inside units have a brick tower up to a gable dormer at the roof level. The vinyl clapboard siding above the brick is a sandstone color on the inside units, and a golden tan color on the end units. The end units have a matching color fish scale shake at the gable to differentiate the finish texture from the clapboard below. Windows are clad double hung, with decorative shutters. The roofs are architectural asphalt shingles, and the level of the exterior finish of the townhouses is consistent with similar developments in the area.

Rendered elevations have also been submitted which show the Project within its neighborhood setting. Proposed floor plans are also enclosed herein, and the preliminary subdivision layout is also shown on the Site Plan. Together, the drawings document that the proposed development is compatible with the existing scale and density of surrounding development and is therefore consistent with the character of the neighborhood.

AFFORDABLE-WORKFORCE HOUSING ANALYSIS

As noted above, the proposed number of townhouse units is 42 units in total, four (4) of which are BMR units. The provision of the BMR units results in two (2) density bonus units, however, the Applicant *will not* be constructing the maximum 52 developable units on the Premises and instead proposes 42 units. The proposed Project meets the requirements of the City's Affordable-Workforce Housing Law (the "AWHL"). The four (4) BMR units are townhouse units, the same unit type as the remainder of the Project. They meet the requirements of 223-41.10.D as to comparable size. They are not less than seventy-five percent (75%) of the size of the standard units. The lot size of the BMR units is similar to the market rate units and will be "mixed through" the development as required. They will be constructed in conjunction with the market-rate units. The BMR units will be rented or sold in full conformance with the applicable provisions of the City's AWHL.

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STATE ENVIRONMENTAL QUALITY REVIEW

The proposed Project is classified as a Type I Action for a Coordinated Review pursuant to the State Environmental Quality Review Act ("SEQRA") Regulations. A copy of the Applicant's Full Environmental Assessment Form ("EAF") for the Project is enclosed as **Exhibit B**.

In further support of the Applicant's Site Plan and Subdivision Application submissions, and in connection with the SEQRA review of the Project the Applicant retained Maser Consulting P.A. in order to review any potential traffic impacts from the Project. Additionally, the Applicant retained Hudson Valley Cultural Resource Consultants, Ltd., in order to complete a Phase 1A Literature Search and Sensitivity Assessment and a Phase 1B Archaeological Field Reconnaissance Survey of the Project, as well as AKRF Environmental, Planning, and Engineering Consultants ("AKRF") to analyze the potential for public school-age children to live in the proposed townhouse development. *See* **Exhibits C, D & E**, discussed below herein.

Additionally, as noted in the EAF, as site disturbance will exceed 1-acre, environmental water management practices engineered by Insite Engineering will process stormwater on the property as detailed in the enclosed preliminary Stormwater Pollution and Prevention Plan ("SWPPP"). The Project will be supplied by public water and sewer. Accordingly, enclosed for this Board's consideration is the Applicant's Preliminary Water and Wastewater Engineering Report for the Project. *See* **Exhibit J**.

A. *Traffic Analysis and Project Site Circulation & Access:*

While the Premises has frontage along Conklin Street, as is more fully detailed on the enclosed Site Plans, the Project proposes to be accessed from the southwest, via an extension of Hastings Drive, which connects south to Delevan Avenue and out to Fishkill Avenue (NYS Route 52). Sheet 3 (SP-1) of the enclosed Site Plans details the proposed driveway extension and sidewalk over the Highland Meadows property utilizing the existing Access Easement and Maintenance Agreement over the Highland Meadows property,[5] together with the proposed extensive landscaping and improvement plan contemplated in the Easement Agreement. The enclosed Site Plans also show the proposed emergency access at the northeast end of the site, through the existing access easement over the 25 Townsend Subdivision property.

As noted above, the Applicant's traffic consultant also reviewed the potential traffic generation

[5] *See* **Exhibit I** - Copy of the Correction Access Easement and Maintenance Agreement by and between Saint Francis' Hospital and Highlands at Beacon LLC, recorded in the Dutchess County Clerk's Office on November 19, 2013 as Document #: 02-2013-6208 (the "Easement Agreement"). The Original Access Easement Agreement was recorded in the Dutchess County Clerk's Office on June 19, 2007, as document No. 02-2007-4290.

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from the proposed Project. Enclosed as **Exhibit C**, please find a copy of the Traffic Impact Study dated August 16, 2019 (the "TIS"), which provides in relevant part that: "... similar Levels of Service and delays will be experienced at the area intersections under the future No-Build and future Build Conditions [and] [t]hus, the Beacon Views development traffic is no expected to cause any significant impact in overall operation." *See* TIS at page 8. As confirmed in the TIS, it is respectfully submitted that the proposed Project will not have any significant adverse traffic impacts.

B. *School District Study:*

As will be more fully discussed with the Planning Board during the SEQRA Public Hearing regarding the Project, it is respectfully submitted that the potential number of school children that *may* be generated by the Project *will be minimal.* The Applicant's Planning Consultant, AKRF, analyzed the potential for the Project to result in school-age children attending the Beacon City School District ("Beacon CSD") and whether the 42-unit owner-occupied three (3)-bedroom attached townhouse units would have any potential impacts on the Beacon CSD.

As is more fully detailed in the enclosed School Impact Analysis, which is enclosed as **Exhibit D**, AKRF used two (2) primary methods to estimate potential school-age children ("PSAC") – including the conservative "Rutgers multipliers" as well as case study data from the Beacon CSD.[6] Based on the Rutgers multipliers, the School Impact Analysis concludes in relevant part that:

> It can therefore be concluded that the conservative estimate of twelve (12) PSAC that might be generated from the Proposed Project would not result in a significant adverse impact, and the Project will generate a substantial annual tax revenue surplus for the District.

See **Exhibit D** - School Impact Analysis, at page 6. It is respectfully submitted that the proposed Project will not have any significant adverse environmental impacts on the school district.

C. *Phase IA & Phase IB Reports:*

Additionally, in connection with the review of the Premises, Hudson Valley Cultural Resource Consultants, Ltd. ("HVCRC") completed a Phase 1A Literature Search and Sensitivity Assessment and a Phase 1B Archaeological Field Reconnaissance Survey (collectively the "Archaeological

[6] Note: At this time, AKRF has requested data from the Beacon CSD to augment the Rutgers multipliers, which enrollment data we understand is forthcoming as noted in the School Impact Analysis. Once the Beacon CSD date is available the School Impact Analysis will be updated in connection with the SEQRA review of the Project.

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Reports") of the Project and the Premises. *See* **Exhibit E.**

Following literary and onsite investigations of the history and environmental conditions at the Premises, the Archaeological Reports confirm that:

> No significant cultural material was identified during the Phase 1 Cultural Resource Survey. Therefore, the proposed undertaking will not affect any potentially significant cultural resources. In the opinion of HVCRC that no additional cultural resources investigations are warranted for the proposed Project...

See **Exhibit E.** Accordingly, while the site investigations find that there will not be an impact to cultural resources, as noted in the Archaeological Reports, the recommendations in the report are subject to concurrence by the NYS Office of Parks, Recreation and Historic Preservation, which will be considered in the SEQRA review of the Project.

As noted above, the proposed Project is designed to be consistent with the existing character of the neighborhood and surrounding properties, both visually and functionally, and the proposed Project will not have an adverse effect or impact on the physical or environmental conditions in the neighborhood or district. In addition, the proposed Project not adversely impact the environment.

CONCLUSION:

For the foregoing reasons, and as will be further discussed at this Board's September 12th Regular Meeting and the subsequent SEQRA, Site Plan and Subdivision Public Hearings on this Project, the Applicant respectfully submits that the proposed Project satisfies the purposes of the RD-5 District and the City's Zoning and Subdivision Regulations in consideration of the instant Applications for Site Plan and Subdivision Approval. The principally permitted townhouse Project on this large property limits the density to nearly twenty percent (20%) below the permitted residential density, while providing four (4) BMR units and developing zoning-compliant, handsome architectural features on an underutilized property.

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In support of this Application, please find enclosed five (5) copies of the instant letter with the following documents:[7]

Exhibit A: Google Map Aerials and Images of the Premises;

Exhibit B: Full Environmental Assessment Form (EAF);

Exhibit C: Traffic Impact Study prepared by Maser Consulting P.A., dated August 16, 2019;

Exhibit D: Beacon Views Development School District Impact Analysis, prepared by AKRF Environmental, Planning, and Engineering Consultants, dated August 21, 2019;

Exhibit E: Phase IA Literature Search and Sensitivity Assessment & Phase IB Archaeological Field Reconnaissance Survey, prepared by Hudson Valley Cultural Resource Consultants, Ltd., dated August 2019;

Exhibit F: Application Form for Site Plan Approval;

Exhibit G: Application Form for Subdivision Approval;

Exhibit H: Contract of Sale and Assignment of Contract;

Exhibit I: Correction Access Easement and Maintenance Agreement by and between Saint Francis' Hospital and Highlands at Beacon LLC, recorded in the Dutchess County Clerk's Office on November 19, 2013 as Document#: 02-2013-6208; and

Exhibit J: Preliminary Water and Wastewater Engineering Report dated August 27, 2019, prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.

In further support of this Application, we respectfully submit five (5) copies of the Site Plans entitled "Beacon Views", prepared Insite Engineering, dated August 27, 2019, consisting of eleven (11) sheets, as well as rendered images and floor plans entitled "Beacon Views Townhouse Development – Site Plan Application", prepared by Aryeh Siegel Architect, dated August 27, 2019, and consisting of three (3) sheets.

Please also find enclosed five (5) copies of the Preliminary Stormwater Pollution and Prevention Plan ("SWPPP"), dated August 27, 2019, prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.

Additionally, this submission includes a check made payable to the City of Beacon in the amount of $15,000.00, representing the Site Development Plan & Subdivision Application filing fee, as

[7] Note: Pursuant to our communications with the City of Beacon Building Department, five (5) copies of this submission will be delivered to the Building Department, together with an electronic copy of the same.

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well as a second check payable to the City of Beacon in the amount of $11,000.00 for the establishment of an escrow for professional fees.

We look forward to appearing at this Board's regular meeting on Tuesday, September 10th, in order to initially review the proposed Project. In the meantime, should this Board or City Staff have any questions or comments with regard to the foregoing, please do not hesitate to contact me.

Very truly yours,

Taylor M. Palmer

Enclosures
Cc: Jennifer L. Gray, Esq.
David Buckley, Building Inspector
Aryeh J. Seigel Architect
Insite Engineering Surveying & Landscape Architecture, P.C.
Maser Consulting P.A.
AKRF
Hudson Valley Cultural Resource Consultants, Ltd.
Beacon Views LLC

Exhibit A (Cont.)

Google Maps Aerial of Premises & Surrounding Development:

Exhibit A (Cont.)

Dutchess Parcel Access – Premises & Surrounding Development:

Exhibit A (Cont.)

Dutchess Parcel Access (Zoomed Out) – Premises & Surrounding Development:

Exhibit A (Cont.)

Excerpt of City of Beacon Zoning Map (Revised 9/24/18) – Zoned RD-5:

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: Beacon Views Townhouses		
Project Location (describe, and attach a general location map): 100 Conklin Street, Beacon, NY 12508		
Brief Description of Proposed Action (include purpose or need): Application for Site Development Plan approval proposing the development of 42 townhomes subdivided into individual townhouse lots, and supporting improvements including a road, stormwater management facilities and public utility connections.		
Name of Applicant/Sponsor: Beacon Views, LLC	Telephone: 718-258-9027 E-Mail: ctadult@aol.com	
Address: 500 River Avenue, Suite 145		
City/PO: Lakewood	State: NJ	Zip Code: 08701
Project Contact (if not same as sponsor; give name and title/role): Greg Kamedulski	Telephone: 203-313-9412 E-Mail: gkamedulsky@gmail.com	
Address: 500 River Avenue, Suite 145		
City/PO: Lakewood	State: NJ	Zip Code: 08701
Property Owner (if not same as sponsor): Highlands at Beacon LLC	Telephone: E-Mail:	
Address: 2847 Church Street		
City/PO: Pine Plains	State: NY	Zip Code: 12567

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	City of Beacon Planning Board - Site Plan Approval & Subdivision Approval	8/27/19
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☐Yes ☑No		
e. County agencies ☑Yes ☐No	Dutchess County Planning Dutchess County Department of Health	10/1/19
f. Regional agencies ☐Yes ☑No		
g. State agencies ☑Yes ☐No	NYSDEC GP-0-15-002 Stormwater General Permit	10/1/19
h. Federal agencies ☑Yes ☐No	ACOE Wetland General Permit	10/1/19

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?
RD-5 - Designed Residence District

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 Schools

b. What police or other public protection forces serve the project site?
City of Beacon Police

c. Which fire protection and emergency medical services serve the project site?
City of Beacon Fire Department

d. What parks serve the project site?
City of Beacon Parks and Recreation, Memorial Park

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)? Residential

b. a. Total acreage of the site of the proposed action? 8.55 acres
b. Total acreage to be physically disturbed? 3.25 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 8.55 acres

c. Is the proposed action an expansion of an existing project or use? ☐ 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)? % _____ Units: _____

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)
Residential, Creation of townhouse lots.
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? 43
iv. Minimum and maximum proposed lot sizes? Minimum 1,800 Maximum 6.8 ac

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 24 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: _____

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	42			
At completion of all phases	42			

g. Does the proposed action include new non-residential construction (including expansions)? ☐ Yes ☑ No

If Yes,

i. Total number of structures _____

ii. Dimensions (in feet) of largest proposed structure: _____height; _____width; and _____ length

iii. Approximate extent of building space to be heated or cooled: _____ 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: Stormwater Management

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☑ Other specify: Stormwater runoff

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): Earth Fill

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): Federal flagged wetland PF01E

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:
The proposed project would fill the existing wetland by approximately 9,460 s.f.

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☑ Yes ☐ No
If Yes, describe: In order to limit disturbance into the wetland, retaining walls will be installed.

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: .22 ac±
- expected acreage of aquatic vegetation remaining after project completion: 2.33 ac±
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): Site grading.
- proposed method of plant removal: Excavation
- if chemical/herbicide treatment will be used, specify product(s): None

v. Describe any proposed reclamation/mitigation following disturbance:
1 to 1 creation of wetlands

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: 13,860 (max day) 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:

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: 13,860 (max day) 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: City of Beacon
- 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

- 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):

_____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

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 2.26 acres (impervious surface)

_____ Square feet or 8.55 acres (parcel size)

ii. Describe types of new point sources. Roadway catch basins, roof drain connections, cut off swales

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)?

Onsite stormwater management facilities

- If to surface waters, identify receiving water bodies or wetlands: _____

  Onsite wetland
- 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)

Heavy equipment during construction.

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)

Boilers for each residential unit.

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 0 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

N/A

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

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 - 5 pm
- Saturday: _____
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: _____
- Saturday: _____
- Sunday: _____
- Holidays: _____

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:

Typical noise associated with excavation and general construction during business hours.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☑ Yes ☐ No

Describe: Limited tree clearing for improvements. New landscape screening will be installed.

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:

Roadway pole mounted lights at 18' high with house side shields.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☑ Yes ☐ No

Describe: Limited tree clearing for improvements. New landscape screening will be installed.

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

N/A

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

N/A

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: _____

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): _____

ii. If mix of uses, generally describe: _____

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		2.1 ac±	
• Forested	6.0 ac±	2.6 ac±	
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)	2.6 ac±	2.3 ac±	
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: Slope, Lawn and Landscape Areas		1.6 ac±	

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:

Beacon High School, Roundbout Middle School, 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? varies feet

b. Are there bedrock outcroppings on the project site? ☐Yes☑No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:

Bernardston Silt (BeB) (BeC)	52 %
Canandaigua Silt (Ca)	29 %
Nassau Cardigan Complex (NwC)	19 %

d. What is the average depth to the water table on the project site? Average: varies feet

e. Drainage status of project site soils:
☑ Well Drained: 66 % of site
☐ Moderately Well Drained: ____ % of site
☑ Poorly Drained 34 % of site

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 50 % of site
☑ 10-15%: 15 % of site
☑ 15% or greater: 35 % 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 Federal Wetland PF01E Approximate Size 2.55 ac onsite
- 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: _____

m. Identify the predominant wildlife species that occupy or use the project site:
Whitetail Deer
Gray Squirrel
Racoon

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: Matteawan State Hospital

iii. Brief description of attributes on which listing is based:
Area of social history, health and medicine and institutional architecture

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: Hudson Highlands Scenic Area

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Hudson River Valley Scenic Area of Statewide Significance

iii. Distance between project and resource: 2.4 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 Jeffrey J. Contelmo, P.E. Date 8/27/19
Insite Engineering, Surveying & Landscape Architecture, P.C.

Signature _____ Title Senior Principal Engineer

PRINT FORM

EAF Mapper Summary Report

Monday, July 01, 2019 12:51 PM

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]	Yes
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.iv [Surface Water Features - Wetlands Name]	Federal Waters
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

Engineers Planners Surveyors Landscape Architects Environmental Scientists

MASER CONSULTING P. A.

Traffic Impact Study

Beacon Views

City of Beacon, Dutchess County, New York

August 16, 2019

Prepared For

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Prepared By

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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 Views project, a 42 unit townhome development (the "Project"), which is proposed to be developed on the vacant property located northeast of Delavan Avenue, northwest of Desoto Avenue, and north of Conklin Street in the City of Beacon, Dutchess County, New York. The Project will be constructed with access to the extension of Hastings Drive, which in turn connects to Delavan Avenue as shown in Appendix A, on Figure No. 1. An emergency access connection will also be provided to the 25 Townsend Street property located to the north of the Project.

A Design Year of 2022 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 proposed 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 Maser Consulting, P.A. 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 Year 2019 Existing Traffic Volumes representing existing traffic conditions in the vicinity of the site.

The Year 2019 Existing Traffic Volumes were then projected to the 2022 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 Year 2022 No-Build Traffic Volumes.

Estimates were then made of the potential traffic that the proposed 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 Year 2022 No-Build Traffic Volumes resulting in the Year 2022 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.

II. EXISTING ROADWAY AND TRAFFIC DESCRIPTIONS

A. DESCRIPTION OF EXISTING ROADWAYS

As shown on Figure No. 1, the proposed Project will be accessed from Delavan Avenue via Hastings Drive, which is an access connection to be located approximately 700 feet northwest of Fishkill Avenue (NYS Route 52). 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 "C" 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 in the study area under New York State Department of Transportation (NYSDOT) jurisdiction. The roadway generally traverses in a northeasterly direction throughout Southern Dutchess County. In the vicinity of the site the roadway provides regional access to I-84 and the downtown Beacon Main Street area. The roadway generally consists of a two-lane cross-section in the immediate area of the project site with additional auxiliary lanes provided at various intersections. The posted speed limit is 30 mph in the City of Beacon.

2. Delavan Avenue

   Delavan Avenue is a two-lane local roadway that generally traverses in an east/west direction. The roadway begins at a stop sign controlled "T" intersection with NYS Route 52 (Fishkill Avenue) and terminates as a cul-de-sac and/or dead end. It provides access to approximately 29 homes and Salem Tabernacle Church. There are sidewalks along each side of the roadway. Delavan Avenue also provides access to two local roadways: 1) Arquilla Drive (Beacon Volunteer Ambulance Corps), and 2) Hastings Drive (Wingate at Beacon and Highland Meadows Senior Residence). The Beacon Views Development is proposed to be accessed via a new roadway connection from the Hastings Drive extension, which in turn connects to Delavan Avenue. The roadway does not have a posted speed limit.

B. YEAR 2019 EXISTING TRAFFIC VOLUMES

(Figures No. 2. and 3)

Manual traffic counts were collected by representatives of Maser Consulting, P.A. on Tuesday, August 6, 2019 for the AM and PM 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 and counts along Fishkill Avenue. These included those conducted by our office during January 2019. The counts were also compared 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 Year 2019 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 Delavan Avenue
- Delavan Avenue and Hastings Drive

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 5:00 PM – 6:00 PM

The resulting Year 2019 Existing Traffic Volumes are shown on Figures No. 2 and 3 for the Weekday Peak AM Hour and Weekday Peak PM Hour, respectively.

C. ACCIDENT DATA

Accident data has been requested from the New York State Department of Transportation (NYSDOT) for the intersection of Route 52 and Delavan Avenue. Once received, it will be summarized.

III. EVALUATION OF FUTURE TRAFFIC CONDITIONS

A. YEAR 2022 NO-BUILD TRAFFIC VOLUMES

(Figure No. 4 through 9)

The Year 2019 Existing Traffic Volumes were increased by a growth factor of 2% per year to account for general background growth resulting in the Year 2022 Projected Traffic Volumes which are shown on Figures No. 4 and 5 for each of the Peak Hours. In addition, traffic from other specific potential developments in the area, including the 511 Fishkill multi-use commercial development, were identified. The resulting traffic volumes associated with these other developments are shown on Figures No. 6 and 7 for each of the peak hours. These volumes were added to the 2022 Projected Traffic Volumes resulting in the Year 2022 No-Build Traffic Volumes which are shown on Figures No. 8 and 9 for the Weekday Peak AM and Weekday Peak PM Hours, respectively.

B. SITE GENERATED TRAFFIC VOLUMES

(Table No. 1)

Estimates of the amount of traffic to be generated by the proposed residential development project 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", 10th Edition, 2017, based on Land Use Category – 220 Multi-family Housing (Low Rise). Table No. 1 summarizes the trip generation rates and corresponding site generated traffic volumes for the Weekday Peak AM and Weekday Peak PM Hours.

C. ARRIVAL/DEPARTURE DISTRIBUTION

(Figures No. 10 and 11)

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 the expected travel patterns on the surrounding roadway network, the distributions were identified. The anticipated arrival and departure distributions are shown on Figures No. 10 and 11, respectively.

D. 2022 BUILD CONDITIONS TRAFFIC VOLUMES

(Figures No. 12 through 15)

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. 12 and 13 for each of the peak hours, respectively. The site generated traffic volumes were then added to the Year 2022 No-Build Traffic Volumes to obtain the Year 2022 Build Traffic Volumes. The resulting Year 2022 Build Traffic Volumes are shown on Figures No. 14 and 15 for the Weekday Peak AM and Weekday Peak PM Hours, respectively.

E. DESCRIPTION OF ANALYSIS PROCEDURES

It was necessary to perform capacity analyses in order to determine existing and future traffic operating conditions at the study area intersections. 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*. 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 2019 Existing, 2022 No-Build and 2022 Build Conditions. Appendix "C" 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 Delavan Avenue

   NYS Route 52 (Fishkill Avenue) and Delavan Avenue intersect at a stop sign controlled "T" intersection. The Delavan Avenue approach consists of two-lanes with a painted stop bar and crosswalk. The NYS Route 52 (Fishkill Avenue) approaches each consist of one lane with a double yellow center line and white shoulder edge line.

   Capacity analysis was conducted for this intersection utilizing the 2019 Existing Traffic Volumes. The analysis results indicate that the (Delavan Avenue) side road approach intersection is currently operating at a Level of Service "D" during the AM and PM Peak Hours. It should be noted that Fishkill Avenue operates at a Level of Service "A" during these time periods.

   The capacity analysis was recomputed using the 2022 No-Build and Build Traffic volumes. Striping improvements on the Delavan Avenue approach, including centerline and stop bar, are recommended. The intersection is expected to experience Levels of Service "C" or better during the AM Peak Hour and a Level of Service "E" or better during the PM Peak Hours under future conditions.

   It should be noted that it is not unusual for an unsignalized intersection to experience a Level of Service "E" during peak hours for traffic exiting the side road. It should also be noted that there are some gaps in traffic along Fishkill Avenue that are created by traffic signals located to the north and south of this location that allow side road traffic to be processed at intervening street locations. Thus, while there will be some additional vehicle trips generated by this project on Delavan Avenue, no significant impacts on traffic flow is expected based on the analysis contained herein.

2. Delavan Avenue and Hastings Drive

   Hastings Drive intersects Delavan Avenue at a "T" shaped intersection by a "Stop" sign. The levels of service were analyzed using the Existing, No-Build and Build scenarios and will have a Level of Service "A" for all conditions.

IV. 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 Beacon Views development traffic is not expected to cause any significant impact in overall operation.

BEACON VIEWS

APPENDIX A

FIGURES

NOTE: LINE DIAGRAM NOT TO SCALE

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BEACON VIEWS

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AS SHOWN	07/15/19	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
19002075A	190808RH_FIGURES

SHEET TITLE:
SITE LOCATION MAP

SHEET NUMBER:
1

2075A_Beacon Views\Reports\Traffic\Figures\Figures\190808RH_figures.dwg\1 By: RHILARIO

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By: RHILARIO

2075A_Beacon Views\Reports\Traffic\Figures\Figures\190808RH_figures.dwg\2

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PROJECT NUMBER:	DRAWING NAME:
19002075A	190808RH_FIGURES

SHEET TITLE:
2019 EXISTING TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
2

NOTE: LINE DIAGRAM NOT TO SCALE

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PROJECT NUMBER:	DRAWING NAME:
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SHEET TITLE:
2019 EXISTING TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
3

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SHEET TITLE:
2022 PROJECTED TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
4

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2022 PROJECTED TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
5

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PROJECT NUMBER:	DRAWING NAME:
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OTHER DEVELOPMENT TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR

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OTHER DEVELOPMENT TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR

SHEET NUMBER:
7

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WEEKDAY PEAK AM HOUR

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WEEKDAY PEAK PM HOUR

SHEET NUMBER:
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SHEET TITLE:
SITE GENERATED TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
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SHEET TITLE:
SITE GENERATED TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
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SHEET TITLE:
2022 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
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19002075A	190808RH_FIGURES

SHEET TITLE:
2022 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
15

BEACON VIEWS

APPENDIX B

TABLES

TABLE NO. 1

HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED SITE GENERATED TRAFFIC VOLUMES

BEACON VIEWS CITY OF BEACON, NEW YORK	ENTRY		EXIT	
	HTGR[1]	VOLUME	HTGR[1]	VOLUME
TOWNHOUSES (42 DWELLING UNITS)				
PEAK AM HOUR	0.17	7	0.43	18
PEAK PM HOUR	0.42	18	0.28	12

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, 10TH EDITION, 2017. ITE LAND USE CODE - 220 - MULTIFAMILY HOUSING (LOW-RISE)

TABLE NO. 2 AM

LEVEL OF SERVICE SUMMARY TABLE

				2019 EXISTING			2022 NO-BUILD			2022 BUILD			CHANGE IN DELAY NO-BUILD TO BUILD
			AM	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	
1	NYS ROUTE 52 & DELAVAN AVENUE/ MAVIS DRIVEWAY	UNSIGNALIZED											
	NYS ROUTE 52	EB	LTR	0.05	A	8.4	0.05	A	8.5	0.05	A	8.6	0.1
	NYS ROUTE 52	WB	LTR	0.00	A	8.3	0.00	A	8.5	0.00	A	8.5	0.0
	MAVIS DRIVEWAY	NB	LTR	0.01	B	13.8	0.01	B	14.7	0.01	C	15.0	0.3
	DELAVAN AVENUE	SB	LTR	0.15	C	17.8	0.17	C	19.7	0.25	C	21.4	1.7
2	DELAVAN AVENUE & HASTINGS DRIVE	UNSIGNALIZED											
	HASTINGS DRIVE	WB	LR	0.02	A	9.0	0.02	A	9.1	0.05	A	9.2	0.1
	DELAVAN AVENUE	SB	L	0.00	A	7.5	0.00	A	7.5	0.00	A	7.5	0.0

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

TABLE NO. 2 PM

LEVEL OF SERVICE SUMMARY TABLE

				2019 EXISTING			2022 NO-BUILD			2022 BUILD			CHANGE IN DELAY NO-BUILD TO BUILD
			PM	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	
1	NYS ROUTE 52 & DELAVAN AVENUE/ MAVIS DRIVEWAY	UNSIGNALIZED											
	NYS ROUTE 52	EB	LTR	0.04	A	8.9	0.04	A	9.2	0.05	A	9.3	0.1
	NYS ROUTE 52	WB	LTR	0.01	A	8.5	0.01	A	8.6	0.01	A	8.6	0.0
	MAVIS DRIVEWAY	NB	LTR	0.07	C	18.5	0.08	C	21.0	0.08	C	21.8	0.8
	DELAVAN AVENUE	SB	LTR	0.35	D	26.9	0.45	E	35.7	0.54	E	42.5	6.8
2	DELAVAN AVENUE & HASTINGS DRIVE	UNSIGNALIZED											
	HASTINGS DRIVE	WB	LR	0.08	A	9.2	0.09	A	9.3	0.1	A	9.4	0.1
	DELAVAN AVENUE	SB	L	0.00	A	7.4	0.00	A	7.4	0.00	A	7.4	0.0

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

BEACON VIEWS

APPENDIX C

LEVEL OF SERVICE STANDARDS

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.

BEACON VIEWS

APPENDIX D

CAPACITY ANALYSIS

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	23	1	20	1	0	3	45	420	6	3	351	46
Future Volume (vph)	23	1	20	1	0	3	45	420	6	3	351	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	12	16	16	16	16	12	12	12	12	12	12
Grade (%)		-2%			-1%			0%			-3%	
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
Frt		0.939			0.899			0.998			0.984	
Flt Protected		0.974			0.988			0.995				
Satd. Flow (prot)	0	1672	0	0	1884	0	0	1813	0	0	1808	0
Flt Permitted		0.974			0.988			0.995				
Satd. Flow (perm)	0	1672	0	0	1884	0	0	1813	0	0	1808	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		724			126			581			1007	
Travel Time (s)		16.5			2.9			13.2			22.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	4%	2%	2%	5%	5%
Parking (#/hr)			0									
Adj. Flow (vph)	26	1	22	1	0	3	50	467	7	3	390	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	49	0	0	4	0	0	524	0	0	444	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	0.84	0.99	0.84	0.84	0.84	0.84	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	23	1	20	1	0	3	45	420	6	3	351	46
Future Vol, veh/h	23	1	20	1	0	3	45	420	6	3	351	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-2	-	-	-1	-	-	0	-	-	-3	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	5	5	5	2	2	2	5	4	2	2	5	5
Mvmt Flow	26	1	22	1	0	3	50	467	7	3	390	51

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	994	996	416	1004	1018	471	441	0	0	474	0	0
Stage 1	422	422	-	571	571	-	-	-	-	-	-	-
Stage 2	572	574	-	433	447	-	-	-	-	-	-	-
Critical Hdwy	6.75	6.15	6.05	6.92	6.32	6.12	4.15	-	-	4.12	-	-
Critical Hdwy Stg 1	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.518	4.018	3.318	2.245	-	-	2.218	-	-
Pot Cap-1 Maneuver	247	270	645	233	251	601	1103	-	-	1088	-	-
Stage 1	633	611	-	522	521	-	-	-	-	-	-	-
Stage 2	533	531	-	616	588	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	233	252	645	213	234	601	1103	-	-	1088	-	-
Mov Cap-2 Maneuver	233	252	-	213	234	-	-	-	-	-	-	-
Stage 1	594	609	-	490	489	-	-	-	-	-	-	-
Stage 2	497	498	-	591	586	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	17.8	13.8	0.8	0.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1103	-	-	413	329	1088	-	-
HCM Lane V/C Ratio	0.045	-	-	0.011	0.149	0.003	-	-
HCM Control Delay (s)	8.4	0	-	13.8	17.8	8.3	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	0.5	0	-	-

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1	22	5	78	15	1
Future Volume (vph)	1	22	5	78	15	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-2%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.873		0.993	
Flt Protected		0.998			0.955	
Satd. Flow (prot)	0	1642	1532	0	1716	0
Flt Permitted		0.998			0.955	
Satd. Flow (perm)	0	1642	1532	0	1716	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		382	724		221	
Travel Time (s)		8.7	16.5		5.0	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Parking (#/hr)		0		0		
Adj. Flow (vph)	1	29	6	101	19	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	30	107	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	1.13	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	1	22	5	78	15	1
Future Vol, veh/h	1	22	5	78	15	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	6	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	29	6	101	19	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	107	0	-	0	88	57
Stage 1	-	-	-	-	57	-
Stage 2	-	-	-	-	31	-
Critical Hdwy	4.15	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1465	-	-	-	906	1001
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	984	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1465	-	-	-	905	1001
Mov Cap-2 Maneuver	-	-	-	-	905	-
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	984	-

Approach	SE	NW	SW
HCM Control Delay, s	0.3	0	9
HCM LOS			A

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1465	-	910
HCM Lane V/C Ratio	-	-	0.001	-	0.023
HCM Control Delay (s)	-	-	7.5	0	9
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	40	1	40	5	1	11	31	475	3	7	542	25
Future Volume (vph)	40	1	40	5	1	11	31	475	3	7	542	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	12	16	16	16	16	12	12	12	12	12	12
Grade (%)		-2%			-1%			0%			-3%	
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
Frt		0.933			0.910			0.999			0.994	
Flt Protected		0.976			0.986			0.997			0.999	
Satd. Flow (prot)	0	1664	0	0	1904	0	0	1852	0	0	1875	0
Flt Permitted		0.976			0.986			0.997			0.999	
Satd. Flow (perm)	0	1664	0	0	1904	0	0	1852	0	0	1875	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		724			126			581			1007	
Travel Time (s)		16.5			2.9			13.2			22.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	2%	2%	2%	2%	5%
Parking (#/hr)			0									
Adj. Flow (vph)	43	1	43	5	1	12	34	516	3	8	589	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	0	0	18	0	0	553	0	0	624	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	0.84	0.99	0.84	0.84	0.84	0.84	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	40	1	40	5	1	11	31	475	3	7	542	25
Future Vol, veh/h	40	1	40	5	1	11	31	475	3	7	542	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-2	-	-	-1	-	-	0	-	-	-3	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	5	2	2	2	2	5
Mvmt Flow	43	1	43	5	1	12	34	516	3	8	589	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1211	1206	603	1227	1218	518	616	0	0	519	0	0
Stage 1	619	619	-	586	586	-	-	-	-	-	-	-
Stage 2	592	587	-	641	632	-	-	-	-	-	-	-
Critical Hdwy	6.75	6.15	6.05	6.92	6.32	6.12	4.15	-	-	4.12	-	-
Critical Hdwy Stg 1	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.518	4.018	3.318	2.245	-	-	2.218	-	-
Pot Cap-1 Maneuver	180	207	510	166	193	566	949	-	-	1047	-	-
Stage 1	505	509	-	513	513	-	-	-	-	-	-	-
Stage 2	521	525	-	480	491	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	167	194	510	144	181	566	949	-	-	1047	-	-
Mov Cap-2 Maneuver	167	194	-	144	181	-	-	-	-	-	-	-
Stage 1	480	503	-	487	487	-	-	-	-	-	-	-
Stage 2	483	499	-	433	485	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	26.9	18.5	0.5	0.1
HCM LOS	D	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	949	-	-	285	251	1047	-	-
HCM Lane V/C Ratio	0.036	-	-	0.065	0.351	0.007	-	-
HCM Control Delay (s)	8.9	0	-	18.5	26.9	8.5	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	1.5	0	-	-

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1	19	12	39	57	1
Future Volume (vph)	1	19	12	39	57	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-2%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.897		0.998	
Flt Protected		0.998			0.953	
Satd. Flow (prot)	0	1642	1574	0	1721	0
Flt Permitted		0.998			0.953	
Satd. Flow (perm)	0	1642	1574	0	1721	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		382	724		221	
Travel Time (s)		8.7	16.5		5.0	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Parking (#/hr)		0		0		
Adj. Flow (vph)	1	25	16	51	74	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	26	67	0	75	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	1.13	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	1	19	12	39	57	1
Future Vol, veh/h	1	19	12	39	57	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	6	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	25	16	51	74	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	67	0	-	0	69	42
Stage 1	-	-	-	-	42	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	4.15	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1516	-	-	-	928	1020
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	988	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1516	-	-	-	927	1020
Mov Cap-2 Maneuver	-	-	-	-	927	-
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	988	-

Approach	SE	NW	SW
HCM Control Delay, s	0.4	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1516	-	928
HCM Lane V/C Ratio	-	-	0.001	-	0.081
HCM Control Delay (s)	-	-	7.4	0	9.2
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.3

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	24	1	21	1	0	3	48	465	6	3	376	49
Future Volume (vph)	24	1	21	1	0	3	48	465	6	3	376	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	12	16	16	16	16	12	12	12	12	12	12
Grade (%)		-2%			-1%			0%			-3%	
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
Frt		0.939			0.899			0.998			0.985	
Flt Protected		0.974			0.988			0.995				
Satd. Flow (prot)	0	1672	0	0	1884	0	0	1813	0	0	1809	0
Flt Permitted		0.974			0.988			0.995				
Satd. Flow (perm)	0	1672	0	0	1884	0	0	1813	0	0	1809	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		724			126			581			1007	
Travel Time (s)		16.5			2.9			13.2			22.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	4%	2%	2%	5%	5%
Parking (#/hr)			0									
Adj. Flow (vph)	27	1	23	1	0	3	53	517	7	3	418	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	51	0	0	4	0	0	577	0	0	475	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	0.84	0.99	0.84	0.84	0.84	0.84	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	24	1	21	1	0	3	48	465	6	3	376	49
Future Vol, veh/h	24	1	21	1	0	3	48	465	6	3	376	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-2	-	-	-1	-	-	0	-	-	-3	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	5	5	5	2	2	2	5	4	2	2	5	5
Mvmt Flow	27	1	23	1	0	3	53	517	7	3	418	54

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1079	1081	445	1090	1105	521	472	0	0	524	0	0
Stage 1	451	451	-	627	627	-	-	-	-	-	-	-
Stage 2	628	630	-	463	478	-	-	-	-	-	-	-
Critical Hdwy	6.75	6.15	6.05	6.92	6.32	6.12	4.15	-	-	4.12	-	-
Critical Hdwy Stg 1	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.518	4.018	3.318	2.245	-	-	2.218	-	-
Pot Cap-1 Maneuver	218	243	622	205	224	563	1074	-	-	1043	-	-
Stage 1	612	595	-	488	493	-	-	-	-	-	-	-
Stage 2	499	504	-	594	570	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	204	225	622	186	207	563	1074	-	-	1043	-	-
Mov Cap-2 Maneuver	204	225	-	186	207	-	-	-	-	-	-	-
Stage 1	569	593	-	454	458	-	-	-	-	-	-	-
Stage 2	461	469	-	568	568	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	19.7	14.7	0.8	0.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1074	-	-	374	295	1043	-	-
HCM Lane V/C Ratio	0.05	-	-	0.012	0.173	0.003	-	-
HCM Control Delay (s)	8.5	0	-	14.7	19.7	8.5	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	0.6	0	-	-

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1	23	5	83	16	1
Future Volume (vph)	1	23	5	83	16	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-2%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.872		0.994	
Flt Protected		0.998			0.954	
Satd. Flow (prot)	0	1642	1531	0	1716	0
Flt Permitted		0.998			0.954	
Satd. Flow (perm)	0	1642	1531	0	1716	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		382	724		221	
Travel Time (s)		8.7	16.5		5.0	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Parking (#/hr)		0		0		
Adj. Flow (vph)	1	30	6	108	21	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	31	114	0	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	1.13	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.3

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	1	23	5	83	16	1
Future Vol, veh/h	1	23	5	83	16	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	6	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	30	6	108	21	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	114	0	-	0	92	60
Stage 1	-	-	-	-	60	-
Stage 2	-	-	-	-	32	-
Critical Hdwy	4.15	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1457	-	-	-	901	997
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	983	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1457	-	-	-	900	997
Mov Cap-2 Maneuver	-	-	-	-	900	-
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	983	-

Approach	SE	NW	SW
HCM Control Delay, s	0.3	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1457	-	905
HCM Lane V/C Ratio	-	-	0.001	-	0.024
HCM Control Delay (s)	-	-	7.5	0	9.1
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	42	1	42	5	1	12	33	524	3	7	615	27
Future Volume (vph)	42	1	42	5	1	12	33	524	3	7	615	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	12	16	16	16	16	12	12	12	12	12	12
Grade (%)		-2%			-1%			0%			-3%	
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
Frt		0.933			0.908			0.999			0.994	
Flt Protected		0.976			0.987			0.997			0.999	
Satd. Flow (prot)	0	1664	0	0	1901	0	0	1852	0	0	1875	0
Flt Permitted		0.976			0.987			0.997			0.999	
Satd. Flow (perm)	0	1664	0	0	1901	0	0	1852	0	0	1875	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		724			126			581			1007	
Travel Time (s)		16.5			2.9			13.2			22.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	2%	2%	2%	2%	5%
Parking (#/hr)			0									
Adj. Flow (vph)	46	1	46	5	1	13	36	570	3	8	668	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	93	0	0	19	0	0	609	0	0	705	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	0.84	0.99	0.84	0.84	0.84	0.84	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.9

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	42	1	42	5	1	12	33	524	3	7	615	27
Future Vol, veh/h	42	1	42	5	1	12	33	524	3	7	615	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-2	-	-	-1	-	-	0	-	-	-3	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	5	2	2	2	2	5
Mvmt Flow	46	1	46	5	1	13	36	570	3	8	668	29

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1350	1344	683	1366	1357	572	697	0	0	573	0	0
Stage 1	699	699	-	644	644	-	-	-	-	-	-	-
Stage 2	651	645	-	722	713	-	-	-	-	-	-	-
Critical Hdwy	6.75	6.15	6.05	6.92	6.32	6.12	4.15	-	-	4.12	-	-
Critical Hdwy Stg 1	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.518	4.018	3.318	2.245	-	-	2.218	-	-
Pot Cap-1 Maneuver	146	174	461	134	161	528	885	-	-	1000	-	-
Stage 1	460	473	-	478	485	-	-	-	-	-	-	-
Stage 2	486	497	-	435	453	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	134	161	461	113	149	528	885	-	-	1000	-	-
Mov Cap-2 Maneuver	134	161	-	113	149	-	-	-	-	-	-	-
Stage 1	432	467	-	449	456	-	-	-	-	-	-	-
Stage 2	444	467	-	386	447	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	35.7	21	0.5	0.1
HCM LOS	E	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	885	-	-	244	207	1000	-	-
HCM Lane V/C Ratio	0.041	-	-	0.08	0.446	0.008	-	-
HCM Control Delay (s)	9.2	0	-	21	35.7	8.6	0	-
HCM Lane LOS	A	A	-	C	E	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	2.1	0	-	-

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1	20	13	41	60	1
Future Volume (vph)	1	20	13	41	60	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-2%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.898		0.998	
Flt Protected		0.998			0.953	
Satd. Flow (prot)	0	1642	1576	0	1721	0
Flt Permitted		0.998			0.953	
Satd. Flow (perm)	0	1642	1576	0	1721	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		382	724		221	
Travel Time (s)		8.7	16.5		5.0	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Parking (#/hr)		0		0		
Adj. Flow (vph)	1	26	17	53	78	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	27	70	0	79	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	1.13	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	1	20	13	41	60	1
Future Vol, veh/h	1	20	13	41	60	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	6	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	26	17	53	78	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	70	0	-	0	72	44
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	4.15	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1512	-	-	-	925	1018
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	987	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1512	-	-	-	924	1018
Mov Cap-2 Maneuver	-	-	-	-	924	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	987	-

Approach	SE	NW	SW
HCM Control Delay, s	0.4	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1512	-	925
HCM Lane V/C Ratio	-	-	0.001	-	0.086
HCM Control Delay (s)	-	-	7.4	0	9.3
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.3

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	34	1	29	1	0	3	51	465	6	3	376	53
Future Volume (vph)	34	1	29	1	0	3	51	465	6	3	376	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	12	16	16	16	16	12	12	12	12	12	12
Grade (%)		-2%			-1%			0%			-3%	
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
Frt		0.939			0.899			0.998			0.983	
Flt Protected		0.974			0.988			0.995				
Satd. Flow (prot)	0	1672	0	0	1884	0	0	1813	0	0	1806	0
Flt Permitted		0.974			0.988			0.995				
Satd. Flow (perm)	0	1672	0	0	1884	0	0	1813	0	0	1806	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		724			126			581			1007	
Travel Time (s)		16.5			2.9			13.2			22.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	4%	2%	2%	5%	5%
Parking (#/hr)			0									
Adj. Flow (vph)	38	1	32	1	0	3	57	517	7	3	418	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	0	0	4	0	0	581	0	0	480	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	0.84	0.99	0.84	0.84	0.84	0.84	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	34	1	29	1	0	3	51	465	6	3	376	53
Future Vol, veh/h	34	1	29	1	0	3	51	465	6	3	376	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-2	-	-	-1	-	-	0	-	-	-3	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	5	5	5	2	2	2	5	4	2	2	5	5
Mvmt Flow	38	1	32	1	0	3	57	517	7	3	418	59

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1090	1092	448	1105	1118	521	477	0	0	524	0	0
Stage 1	454	454	-	635	635	-	-	-	-	-	-	-
Stage 2	636	638	-	470	483	-	-	-	-	-	-	-
Critical Hdwy	6.75	6.15	6.05	6.92	6.32	6.12	4.15	-	-	4.12	-	-
Critical Hdwy Stg 1	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.518	4.018	3.318	2.245	-	-	2.218	-	-
Pot Cap-1 Maneuver	215	239	620	200	220	563	1070	-	-	1043	-	-
Stage 1	610	593	-	483	489	-	-	-	-	-	-	-
Stage 2	495	501	-	589	568	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	201	220	620	178	203	563	1070	-	-	1043	-	-
Mov Cap-2 Maneuver	201	220	-	178	203	-	-	-	-	-	-	-
Stage 1	564	591	-	447	452	-	-	-	-	-	-	-
Stage 2	455	463	-	555	566	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	21.4	15	0.8	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1070	-	-	365	290	1043	-	-
HCM Lane V/C Ratio	0.053	-	-	0.012	0.245	0.003	-	-
HCM Control Delay (s)	8.6	0	-	15	21.4	8.5	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	0.9	0	-	-

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1	23	5	90	34	1
Future Volume (vph)	1	23	5	90	34	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-2%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.872		0.997	
Flt Protected		0.998			0.953	
Satd. Flow (prot)	0	1642	1531	0	1719	0
Flt Permitted		0.998			0.953	
Satd. Flow (perm)	0	1642	1531	0	1719	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		382	724		221	
Travel Time (s)		8.7	16.5		5.0	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Parking (#/hr)		0		0		
Adj. Flow (vph)	1	30	6	117	44	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	31	123	0	45	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	1.13	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.1

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	1	23	5	90	34	1
Future Vol, veh/h	1	23	5	90	34	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	6	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	30	6	117	44	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	123	0	-	0	97	65
Stage 1	-	-	-	-	65	-
Stage 2	-	-	-	-	32	-
Critical Hdwy	4.15	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1446	-	-	-	895	991
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	983	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1446	-	-	-	894	991
Mov Cap-2 Maneuver	-	-	-	-	894	-
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	983	-

Approach	SE	NW	SW
HCM Control Delay, s	0.3	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1446	-	897
HCM Lane V/C Ratio	-	-	0.001	-	0.051
HCM Control Delay (s)	-	-	7.5	0	9.2
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.2

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	49	1	48	5	1	12	41	524	3	7	615	36
Future Volume (vph)	49	1	48	5	1	12	41	524	3	7	615	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	12	16	16	16	16	12	12	12	12	12	12
Grade (%)		-2%			-1%			0%			-3%	
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
Frt		0.934			0.908			0.999			0.993	
Flt Protected		0.976			0.987			0.996			0.999	
Satd. Flow (prot)	0	1666	0	0	1901	0	0	1849	0	0	1873	0
Flt Permitted		0.976			0.987			0.996			0.999	
Satd. Flow (perm)	0	1666	0	0	1901	0	0	1849	0	0	1873	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		724			126			581			1007	
Travel Time (s)		16.5			2.9			13.2			22.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	2%	2%	2%	2%	5%
Parking (#/hr)			0									
Adj. Flow (vph)	53	1	52	5	1	13	45	570	3	8	668	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	106	0	0	19	0	0	618	0	0	715	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	0.84	0.99	0.84	0.84	0.84	0.84	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	49	1	48	5	1	12	41	524	3	7	615	36
Future Vol, veh/h	49	1	48	5	1	12	41	524	3	7	615	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-2	-	-	-1	-	-	0	-	-	-3	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	2	2	2	5	2	2	2	2	5
Mvmt Flow	53	1	52	5	1	13	45	570	3	8	668	39

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1373	1367	688	1392	1385	572	707	0	0	573	0	0
Stage 1	704	704	-	662	662	-	-	-	-	-	-	-
Stage 2	669	663	-	730	723	-	-	-	-	-	-	-
Critical Hdwy	6.75	6.15	6.05	6.92	6.32	6.12	4.15	-	-	4.12	-	-
Critical Hdwy Stg 1	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.75	5.15	-	5.92	5.32	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.518	4.018	3.318	2.245	-	-	2.218	-	-
Pot Cap-1 Maneuver	141	169	458	129	155	528	878	-	-	1000	-	-
Stage 1	457	470	-	468	476	-	-	-	-	-	-	-
Stage 2	476	489	-	431	449	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	128	154	458	106	142	528	878	-	-	1000	-	-
Mov Cap-2 Maneuver	128	154	-	106	142	-	-	-	-	-	-	-
Stage 1	423	464	-	433	440	-	-	-	-	-	-	-
Stage 2	428	452	-	376	443	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	42.5	21.8	0.7	0.1
HCM LOS	E	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	878	-	-	234	198	1000	-	-
HCM Lane V/C Ratio	0.051	-	-	0.084	0.538	0.008	-	-
HCM Control Delay (s)	9.3	0	-	21.8	42.5	8.6	0	-
HCM Lane LOS	A	A	-	C	E	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	2.8	0	-	-

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1	20	13	59	72	1
Future Volume (vph)	1	20	13	59	72	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		-2%	6%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.889		0.999	
Flt Protected		0.998			0.953	
Satd. Flow (prot)	0	1642	1560	0	1723	0
Flt Permitted		0.998			0.953	
Satd. Flow (perm)	0	1642	1560	0	1723	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		382	724		221	
Travel Time (s)		8.7	16.5		5.0	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Parking (#/hr)		0		0		
Adj. Flow (vph)	1	26	17	77	94	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	27	94	0	95	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	1.13	1.04	1.04	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	1	20	13	59	72	1
Future Vol, veh/h	1	20	13	59	72	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	6	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	26	17	77	94	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	94	0	-	0	84	56
Stage 1	-	-	-	-	56	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	4.15	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1481	-	-	-	910	1002
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	987	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1481	-	-	-	909	1002
Mov Cap-2 Maneuver	-	-	-	-	909	-
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	987	-

Approach	SE	NW	SW
HCM Control Delay, s	0.4	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1481	-	910
HCM Lane V/C Ratio	-	-	0.001	-	0.104
HCM Control Delay (s)	-	-	7.4	0	9.4
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0.3

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Memorandum

To:	Beacon Views LLC; City of Beacon Planning Board
From:	AKRF, Inc. (Peter Feroe, AICP)
Date:	August 21, 2019
Re:	Beacon Views Townhouse Development: School Impact Analysis

A. INTRODUCTION

AKRF, Inc. has prepared detailed analyses relating to the potential for public school-age children to live in a proposed 42-unit attached townhome development (the "Proposed Project") to be located off Conklin Street in the City of Beacon, New York (the "Project Site"). The Project Site comprises one parcel, tax block and lot 331123-0.

The Proposed Project will be a high-end development with 42 owner-occupied 3-bedroom attached townhouse style units. Beacon Views LLC (the "Applicant") estimates that the units will be priced at approximately $375,000 to $400,000 each.

The Proposed Project requires Site Plan approval from the City of Beacon Planning Board. As such, the Proposed Project is required to comply with the State Environmental Quality Review Act (SEQRA) and its implementing regulations (6 NYCRR Part 617). AKRF understands that, as part of the SEQRA review, the City of Beacon would evaluate the potential impacts of the Proposed Project to the Beacon City School District ("Beacon CSD" or, the "District").

This memorandum analyzes the potential for the Proposed Project to result in school-age children attending the Beacon CSD and any potential impact to the District.

B. POTENTIAL SCHOOL-AGE CHILDREN GENERATION

I. METHODOLOGY

There are two primary methods used by planners to estimate the number of public school-age children (PSAC) that may live within a particular project.

1. Use of a "multiplier" of the number of PSAC per housing unit based on US Census data and specific to housing unit type, size (e.g., bedroom count), and value; and
2. Use of case study data obtained from local school districts for the number of registered public school students per address for representative developments.

Both approaches have limitations related to quality and age of data, and must be seen as approximations of the number of actual school-age children that may live at a project. However, both methods are widely used by communities as an effective method for anticipating potential effects of new development.

Multiplier

For more than a decade, the standard multiplier used to estimate project-generated PSAC was the Rutgers University's Center for Urban Policy Research (CUPR) 2006 "multipliers" based on 2000 Census data (the "Rutgers Study"). Specifically, CUPR queried the Public Use Microdata Sample (PUMS) from the 2000 Census to determine the population characteristics of various types of housing. The population characteristics queried included average household size, number of PSAC, and number of PSAC by grade range. The housing characteristics queried included the state of residence, housing tenure (i.e., owner or renter), housing size (e.g., number of bedrooms), housing type (e.g., single- or multi-family), and housing price. Only housing built between 1990 and 2000 was queried. Based on these queries, CUPR published a series of state-specific tables that included various population characteristics, including the number of PSAC for various types and sizes of housing. These became known as the "Rutgers" multipliers. Today, these multipliers are widely viewed as overly conservative (i.e., that they predict many more public school children will reside in new developments than is actually observed) based on several reasons, including the fact that data from New York City skew the multipliers unnecessarily high. Nevertheless, these multipliers are still commonly used by communities throughout the region and, as such, AKRF has included an estimate of the number of school age children that may live at the Proposed Project based on these multipliers.

Case Study

To augment the use of the Rutgers multipliers, AKRF has requested data from the Beacon CSD for similarly sized and programmed attached townhome developments within the District. This data will be used to develop Beacon CSD specific estimates of the number of PSAC that may live within the Proposed Project. As of the date of this memo, enrollment data has not been received from the District. When the information becomes available, AKRF will update this memorandum with that information in connection with the SEQRA review of the Proposed Project.

II. ANTICIPATED NUMBER OF SCHOOL AGE CHILDREN

Multiplier

As stated above, the Rutgers study provides PSAC multipliers based on the type of unit (e.g., detached, attached, multi-family), the size of the unit (e.g., number of bedrooms), and the value of the housing unit in 2005. As shown in Table 3-1 of the Rutgers Study (**Appendix 1**), the PSAC multipliers vary significantly based on the value of the unit. Housing values in the Rutgers Study are arrayed by terciles (i.e., thirds) and are based on housing prices in 2005. AKRF adjusted these 2005 home values to present day values using data from the U.S. Federal Housing Finance Agency. Between 2005 and 2018, housing values in New York State rose approximately 24 percent.[1] Therefore, the 2005 housing value of $269,500 (i.e., the lower bound of the top tercile of 3-BR attached houses) would be approximately $334,180 in 2019 dollars. With an estimated housing cost of $375,000 to $400,000 per unit, the Proposed Project townhouses would be well within the top tercile of townhouse values in New York State.

Therefore, AKRF applied the top tercile (>$269,500) multiplier for single-family attached houses with 3-bedrooms, which is 0.28 PSAC per unit. Using this multiplier, it is estimated that there would be 12 PSAC living in the Proposed Project (see **Table 1**).

[1] U.S. Federal Housing Finance Agency, All-Transactions House Price Index for New York State [NYSTHPI], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/ATNHPIUS36027A, August 7, 2019.

Table 1
Anticipated Number of Public School Age Children Based on Rutgers Data

Type of Unit	Number of Townhouse Units	More than $269,500*	
		Multiplier	Number PSAC
3-BR Single-Family Attached	42	0.28	12
TOTAL	**42**		**12**

Notes: Bedroom (BR)
Sources: * Rutgers University Center for Urban Policy Research; New York (3-1) All Public School Children: School-Age Children in Public School (PSAC); Single-Family Attached, 3 BR; More than $269,500

C. BEACON CITY SCHOOL DISTRICT

The Beacon City School District operates six schools, including four regional elementary schools, one middle school, and one high school:

1. South Avenue Elementary School (PK, K-5)
2. Glenham Elementary School (PK, K-5)
3. J.V. Forrestal Elementary School (PK, K-5)
4. Sargent Elementary School (PK, K-5)
5. Rombout Middle School (6-8)
6. Beacon High School (9-12)

I. ENROLLMENT

As presented in **Table 2** below, for 2018 school year, the Beacon City School District has a total enrollment of 2,948 students (pre-K to 12th grade).[2] This is a 20 percent decline in total enrollment since Beacon CSD's peak of 3,708 students in 2004. The 2018 enrollment is approximately the same as Beacon CSD's enrollment 1993 (2,935 students). Cornell's Program on Applied Demographics predict that enrollment in the Beacon CSD will continue to decline, estimating a loss of 285 to 519 students by 2028.[3]

[2] Cornell Program on Applied Demographics. Pad.human.cornell.edu/schools/enrollment.cfm.

[3] Cornell Program on Applied Demographics. Pad.human.cornell.edu/schools/projections.cfm.

Table 2
Beacon City School District Enrollment

Year	Enrollment (K-12)	Decrease from Peak Enrollment
2004	3,708	--
2005	3,633	-2%
2006	3,484	-6%
2007	3,364	-9%
2008	3,378	-9%
2009	3,443	-7%
2010	3,433	-7%
2011	3,368	-9%
2012	3,253	-12%
2013	3,190	-14%
2014	3,111	-16%
2015	2,997	-19%
2016	2,923	-21%
2017	2,950	-20%
2018	2,948	-20%

Notes: The most recent peak enrollment occurred in 2004.
Sources: Cornell Program on Applied Demographics.

II. BUDGET

Beacon CSD has a budget of $73,563,000 for the 2019-2020 school year, which is a 4.3 percent increase from the 2018-2019 school year and an 18.3 percent increase from the 2013-2014 school year (see **Table 3**). For the 2019-2020 school year, Beacon CSD expects to receive $29,474,648 in State Aid, which is 40.0 percent of the total expected revenue. As such, the District must raise 60 percent of its budget from the Tax Levy, reserve funds, and miscellaneous revenue sources (e.g., building rental) (see **Table 4**).[4]

The District breaks down their budget into three parts: administrative, instructional, and capital. For the 2019-2020 budget, the District has allocated $55,251,312, or 75.1 percent, for its instructional budget, which includes transportation. Using the 2018 enrollment figure above, that equates to a per student instructional cost of approximately $18,742.

Beacon CSD current approved capital projects include health and safety upgrades, building repairs, renovations to classrooms for new technologies, and construction of a turf field.[5] No building or facility expansion are planned.

[4] https://www.beaconk12.org/cms/lib/NY01813524/Centricity/Domain/418/Budget%20Presentation%202019-20.pdf

[5] https://www.beaconk12.org/domain/437

Table 3
Historical Budget for Beacon City School District

Year	Total Budget
2013-2014	$62,185,000
2014-2015	$64,625,000
2015-2016	$66,250,000
2016-2017	$66,750,000
2017-2018	$68,625,000
2018-2019	$70,520,000
2019-2020	$73,563,000
Sources: Beacon City School District (www.beaconcityk12.org)	

Table 4
2019-2020 Beacon CSD Budget Detail

	Source / Use	Budget	Percentage of Total
Expenses	Administrative	$7,086,808	9.6%
	Instructional	$55,251,312	75.1%
	Capital	$11,224,880	15.3%
	Total Expense	$73,563,000	100%
Revenue	Tax Levy	$40,338,152	54.8%
	State Aid	$29,474,648	40.1%
	Reserve / Fund Balance	$2,700,200	3.7%
	Miscellaneous	$1,050,000	1.4%
	Total Revenue	$73,563,000	--
Sources: Beacon City School District. Budget Presentation 2019-2020 and Proposed Budget.			

D. ESTIMATE OF FUTURE SCHOOL TAX GENERATION

The Project Site has a current assessed value of $301,000. The 2019 Beacon CSD mill rate for non-homestead properties is 21.47.[6] Therefore, the Project Site currently pays $6,462 per year in school taxes.

As stated above, the Applicant is proposing a high-end, owner-occupied townhouse development and estimates that the market value of the townhouses would be approximately $375,000 to $400,000.[7] The 2019 Beacon CSD mill rate for homestead properties is 15.78.[8] Therefore, the Proposed Project would generate approximately $248,535 to $265,104 in property taxes for the Beacon CSD {15.78 x 375 x 42 = $248,535; 15.78 x 400 x 42 = $265,104}, which is an increase of $242,072 to $258,642 from existing conditions (see **Table 5**).

E. CONCLUSION

The Proposed Project would generate a total of $439,583 to $468,888 in annual property tax revenue for the four taxing jurisdictions that serve the Project Site, including Dutchess County, the City of Beacon,

[6] https://www.dutchessny.gov/Departments/Real-Property-Tax/Docs/tax-rates-2019.pdf

[7] Properties in Beacon are assessed at 100% of their market value.

[8] https://www.dutchessny.gov/Departments/Real-Property-Tax/Docs/tax-rates-2019.pdf

Beacon CSD, and the Howland Library District. This is an increase of $428,169 to $457,474 in property tax revenue from what is currently generated by the Project Site (see **Table 5**).

The potential financial surplus to the Beacon CSD is discussed below. With respect to the other three taxing jurisdictions, the County, Library, and City, it is the Applicant's opinion that the relatively small number of residents that would live in the Proposed Project would be unlikely to result in a significant increase in costs related to the provision of services. The roads within the Proposed Project would be private, and a homeowner's association would be created to assume maintenance responsibility for the Project's shared land and infrastructure. Therefore, it is the Applicant's opinion that the Proposed Project would result in a surplus in revenue to the various taxing jurisdictions.

Table 5
Property Tax Payments of the Proposed Project

Taxing Jurisdiction	Current Property Tax Payment*	Tax Rate (Homestead)	Total Project Tax Revenue**	Increase in Tax Revenue from Current Condition
County	$1,038	3.45	$54,338 - $57,960	$53,299 - $56,922
City	$3,735	8.25	$129,938 - $138,600	$126,202 - $134,865
Beacon CSD	$6,462	15.78	$248,535 - $265,104	$242,072 - $258,642
Howland Library District	$178	0.43	$6,773 - $7,224	$6,595 - $7,046
Total	**$11,414**	**27.91**	$439,583 - $468,888	$428,169 - $457,474

Notes: * Current Property Tax Payment based on the Project Site's current assessed value of $301,000 and non-homestead tax rates for the City, School District, and Library District
** Range based on estimated value of $375,000-$400,000 per unit.

As shown above, the Beacon CSD has experienced declining enrollment for the past 15 years. Since 2004, the District's enrollment has shrunk by 20 percent, or 760 students. Projections indicate that this decline is likely to continue for the next decade. The District's current capital projects are focused on maintaining a state of good repair and modernizing classrooms; they are not focused on expanding capacity to meet enrollment needs. Therefore, it is unlikely that the addition of 12 PSAC to the Beacon CSD, as estimated in this memorandum, would adversely affect the capacity of the District's facilities.

Based on the estimated 12 PSAC, the Proposed Project could be expected to add approximately $224,904 in annual expenses to the Beacon CSD {18,742 x 12 = 224,904}. As stated above, State Aid accounts for approximately 40 percent of the revenue for the Beacon CSD, with the remaining 60 percent being funded by the tax levy and the fund balance. Therefore, the actual cost to Beacon CSD taxpayers for the potential addition of 12 PSAC is approximately $134,942 {224,904 x 60% = 134,942}. In this scenario, the Proposed Project would result in a surplus to the Beacon CSD of approximately $107,130 to $123,699 per year (see **Table 6**).

Table 6
Projected Fiscal Impact to the Beacon CSD

Methodology	Estimated Number of PSAC	Instructional Cost per Student	Total Instructional Cost (Project)	Instructional cost Attributable to Property Tax (60%)	Estimated Increase in Project Property Taxes	Surplus to Beacon CSD
Rutgers	12	$18,742	$224,904	$134,942	$242,073 - $258,642	$107,130 - $123,699
Case Study	**To be updated upon receipt of case study data*					

It can therefore be concluded that the conservative estimate of twelve (12) PSAC that might be generated from the Proposed Project would not result in a significant adverse impact, and the Project will generate a substantial annual tax revenue surplus for the District.

Appendix 1

NEW YORK (3--1) ALL PUBLIC SCHOOL CHILDREN: SCHOOL-AGE CHILDREN IN PUBLIC SCHOOL (PSAC)

STRUCTURE TYPE /BEDROOMS/ VALUE (2005)/TENURE	TOTAL PSAC	PUBLIC SCHOOL GRADE K-2	3-6	7-9	10-12	Gr. 9 Only
Single-Family Detached, 2 BR						
All Values	0.27	0.07	0.09	0.07	0.04	0.02
Less than $106,000	0.32	0.08	0.10	0.09	0.06	0.03
$106,000 to $164,500	0.26	0.07	0.10	0.06	0.03	0.03
More than $164,500	0.21	0.07	0.07	0.05	0.02	0.02
Single-Family Detached, 3 BR						
All Values	0.64	0.18	0.22	0.14	0.10	0.05
Less than $135,000	0.79	0.21	0.27	0.18	0.13	0.05
$135,000 to $194,500	0.63	0.18	0.22	0.13	0.10	0.05
More than $194,500	0.50	0.14	0.17	0.11	0.08	0.04
Single-Family Detached, 4 BR						
All Values	1.00	0.25	0.36	0.23	0.17	0.07
Less than $224,500	1.15	0.25	0.41	0.27	0.23	0.09
$224,500 to $329,500	0.98	0.27	0.34	0.22	0.16	0.06
More than $329,500	0.87	0.24	0.32	0.19	0.11	0.05
Single-Family Detached, 5 BR						
All Values	1.23	0.29	0.41	0.28	0.24	0.10
Less than $329,500	1.48	0.30	0.45	0.41	0.32	0.17
$329,500 to $748,500	1.14	0.26	0.40	0.24	0.23	0.08
More than $748,500	1.03	0.34	0.38	0.17	0.14	0.06
Single-Family Attached, 2 BR						
All Values	0.17	0.06	0.05	0.03	0.03	0.01
Less than $135,000	0.23	0.08	0.07	0.04	0.04	0.02
$135,000 to $194,500	0.18	0.06	0.06	0.03	0.04	0.01
More than $194,500	0.11	0.03	0.03	0.03	0.02	0.02
Single-Family Attached, 3 BR						
All Values	0.52	0.11	0.19	0.11	0.11	0.03
Less than $164,500	0.69	0.15	0.28	0.12	0.13	0.05
$164,500 to $269,500	0.54	0.11	0.18	0.12	0.13	0.03
More than $269,500	0.28	0.06	0.10	0.08	0.05	0.03
Single-Family Attached, 4 BR						
All Values	0.86	0.11	0.31	0.23	0.21	0.06
Less than $224,500	0.98	0.17	0.35	0.25	0.20	0.08
$224,500 to $329,500	0.92	0.06	0.32	0.27	0.27	0.07
More than $329,500		Insufficient Sample				
5+ Units–Own, 1 BR						
All Values	0.15	0.05	0.07	0.01	0.02	0.00
Less than $164,500	0.18	0.06	0.08	0.04	0.00	0.00
$164,500 to $269,500	0.16	0.06	0.08	0.00	0.03	0.00
More than $269,500	0.10	0.02	0.05	0.00	0.04	0.00
5+ Units–Own, 2 BR						
All Values	0.09	0.02	0.04	0.02	0.01	0.01
Less than $135,000	0.00	0.00	0.00	0.00	0.00	0.00
$135,000 to $329,500	0.15	0.05	0.06	0.02	0.03	0.02
More than $329,500	0.05	0.00	0.03	0.02	0.00	0.00
5+ Units–Own, 3 BR						
All Values	0.49	0.10	0.07	0.14	0.19	0.06
Less than $224,500		Insufficient Sample				
$224,500 to $748,500		Insufficient Sample				
More than $748,500		Insufficient Sample				

PHASE 1A LITERATURE SEARCH AND SENSITIVITY ASSESSMENT & PHASE 1B ARCHAEOLOGICAL FIELD RECONNAISSANCE SURVEY

BEACON VIEWS PROJECT

100 CONKLIN STREET,
BEACON, DUTCHESS COUNTY, NEW YORK

PREPARED FOR:

BEACON VIEWS LLC
C/O NATHAN KAHN
1041 EAST 22 STREET
BROOKLYN NEW YORK 11210

HUDSON VALLEY
CULTURAL RESOURCE CONSULTANTS, LTD.
3 LYONS DRIVE POUGHKEEPSIE, NY 12601

AUGUST 2019

MANAGEMENT SUMMARY

SHPO Project Review Number (if available):

Involved State and Federal Agencies: **ACOE, SEQR**

Phase of Survey: **Phase 1A Literature Search & Sensitivity Assessment & Phase 1B Archaeological Field Reconnaissance Survey**

Location Information:

Location: **100 Conklin Street**

Minor Civil Division: **City of Beacon**

County: **Dutchess County**

Survey Area (English& Metric)

Length: **1010'/307.9 m**

Width: **470'/143.2 m**

Depth (when appropriate):

Number of Acres Surveyed: **8.6 acres (3.48 ha)**

USGS 7.5 Minute Quadrangle Map: **Wappingers NY Quadrangle**

Archaeological Survey Overview

Number & Interval of Shovel Tests: **79 @50' (15m) intervals**

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:

Results of Architectural Survey

Number of buildings/structures/cemeteries within Project APE: **0**

Number of buildings/structures/cemeteries adjacent to Project APE: **0**

Number of previously determined NR listed or eligible buildings/structures/cemeteries/districts: **0**

Number of identified eligible buildings/structures/cemeteries/districts: 0

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

Date of Report: **August 2019**

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Photo 2: A wetland is located in the southwestern portion of the Project APE. View to the north.

Photo 3: The western boundary of the parcel is defined by a chain-link fence. View to the west.

Photo 4: A hay field borders the property to the east. View to the southeast.

Photo 5: The residential properties along Conklin Street are built on a substantial amount of fill. View to the south.

Photo 6: A previously or developed property, formerly operated by the Knights of Columbus borders the southeastern part of the property. View to the east.

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Photo 8: View to the southeast along the southern boundary of the Project APE. This location has been disturbed by the prior construction activities.

Photo 9: The Project APE is overgrown with vegetation and the ground surface is covered with downed trees. View to the northeast.

Photo 10: A large ceramic drainage pipe was identified in the central portion of the APE, draining into the wetland area. View to the north.

Photo 11: The landscape next to the north of the pipe, at the base of the slope has been built up and leveled. View to the east.

Photo 12: The landscape at the base of the slope appears to have been artificially leveled. View to the east.

Photo 13: Transect 4 tested a level area at the base of the slope. View to the west.

Photo 14: The fence line defined the northeastern parcel boundary, and served as a baseline for Transects 5 through 13. View to the west.

Photo 15: Piles of concrete and asphalt are located within the disturbed area, along the eastern boundary of the parcel. View of a pile on Transect 6.

Photo 16: The landscape in the eastern portion of the parcel is much higher than the ground surface to the west. View to the south along TR 5.

I. Phase 1A Literature Search and Sensitivity Assessment

A. Beacon Views Project Description

In July of 2019, Hudson Valley Cultural Resource Consultants (HVCRC) was retained to complete a Phase 1A Literature Search and Sensitivity Assessment and Phase 1B Archaeological Field Reconnaissance Survey of the Beacon Views project located at the northern extent of Conklin Street, a short distance north of Fishkill Creek 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 Area 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 Beth Selig, MA, RPA, President and Principal Investigator with HVCRC. A project site visit was conducted Beth Selig on August 5, 2019 to observe and photograph existing conditions within the Project APE. The information gathered during the walkover reconnaissance is included in the relevant sections of the report.

The Beacon Views (hereafter "the Project APE") consists of ±8.6 acres (3.48 h) of woodland located on the northwestern side of a residential neighborhood. The Area of Potential Effect (APE) includes the entirety of the parcel, excepting a large wetland. An area of slope in excess of 12% grade is located in the western portion of the parcel. In its current state, the Project APE is an overgrown agricultural and lightly forested parcel that contains a wetland area and slopes that ascend to a knoll. In some locations, the vegetation is very dense. Within the wetland area, the ground surface is mucky, with areas of standing water. At the time of the field investigations, the wetland had been flagged, but the survey of the boundaries had not been completed.

The proposed undertaking includes constructing a townhome residential development within the boundaries of the parcel. These structures will be located outside the boundaries of the delineated wetland. A recreation area is proposed in the western portion of the parcel, with a trail extending to adjoining properties. No impacts are proposed within the boundaries of the wetland.

Figure 1: 2016 USGS Wappingers NY Topographical Quadrangle. 7.5 Minute Series. (Source: USGS.gov.) Scale: 1"=1250'.

Photo 1: The western portion of the parcel is a lightly wooded elevated knoll. View to the northeast.

Photo 2: A wetland is located in the southwestern portion of the Project APE. View to the north.

Photo 3: The western boundary of the parcel is defined by a chain-link fence. View to the west.

Photo 4: A hay field borders the property to the east. View to the southeast.

Photo 5: The residential properties along Conklin Street are built on a substantial amount of fill. View to the south.

Photo 6: A previously or developed property, formerly operated by the Knights of Columbus borders the southeastern part of the property. View to the east.

B. ENVIRONMENTAL CONDITIONS

The landscape within the Project APE is a mix of lightly wooded areas, wetlands and areas overgrown with dense old field succession vegetation. The elevations within the Project APE include slopes that rise from the southwestern edge of the parcel at 176' (53.65 m) Above Mean Sea Level, to 250' (76.2 m) AMSL in the northwestern portion of the parcel.

ECOLOGY

The Project APE 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 Taconic Mountains physiographic province that extends from the Washington County, New York-Rutland County, Vermont line in the north to the vicinity of Harriman Dutchess County in the south. The Taconic Mountains rise above the landscape east of the Hudson River and create a transition from the low-lying Hudson River Valley to the Green Mountains in Vermont and the Berkshire Mountains in Massachusetts. Ground surface elevations range from near sea level in the vicinity of the City of Troy to approximately 1,900 feet AMSL at Perigo Hill in the vicinity of East Poestenskill on the Rensselaer Plateau. The Rensselaer Plateau forms the foothills of the Taconic Mountains to the east.

The topography of the Taconic Mountains physiographic province reflects the complex structural geology of the relatively resistant rock types underlying the province. Most of the ridges and valleys trend roughly north-south as a result of the similarly trending structural features (folds and faults), produced by the Taconic Orogeny.

The surficial geologic deposits overlying the bedrock of the Taconic Mountains physiographic province consist primarily of glacial till in the form of ground moraines and north-south oriented drumlins. The north-south orientation of the drumlins is indicative of the direction of ice movement during the most recent ice advance during the Wisconsin Period of Pleistocene glaciation.

DRAINAGE

Drainage on the site is into Fishkill Creek, which is located 2200' (670.7m) to the southeast of the Project APE. 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 characteristics of the soils within the Project APE have an important impact on the potential for the presence of cultural material, since the types of soils present affect the ability of an area to support human populations. 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. Details of the soils within the Project APE have been included below in Table 1.

Figure 2: Aerial Image showing soil units within the Project APE. (Source: Natural Resources Conservation Service.) Scale: 1"=235'.

Table 1: Soil Unit Descriptions (Natural Resources Conservation Service, 2019)

Map Unit Symbol	Map Unit Name	Soil Horizons & Texture	Slope	Drainage	Landform
BeB	Bernardston silt loam	H1 - 0 to 8 inches: silt loam H2 - 8 to 27 inches: silt loam H3 - 27 to 80 inches: silt loam	3 to 8 %	Well drained	Drumlinoid ridges, hills, till plains
BeC	Bernardston silt loam	H1 - 0 to 8 inches: silt loam H2 - 8 to 27 inches: silt loam H3 - 27 to 80 inches: silt loam	8 to 15 %	Well drained	Drumlinoid ridges, hills, till plains
Ca	Canandaigua silt loam, neutral substratum	H1 - 0 to 6 inches: silt loam H2 - 6 to 40 inches: silt loam H3 - 40 to 72 inches: silt loam	0 to 3%	Very Poorly Drained, Hydric Soil	Depressions
NwC	Nassau-Cardigan complex, rolling, very rocky	H1 - 0 to 5 inches: channery silt loam H2 - 5 to 16 inches: very channery silt loam H3 - 16 to 20 inches: unweathered bedrock	5 to 15%	Somewhat excessively drained	Benches, ridges, till plains
		H1 - 0 to 8 inches: channery silt loam H2 - 8 to 20 inches: channery loam H3 - 20 to 30 inches: channery silt loam H4 - 30 to 34 inches: unweathered bedrock		Well Drained	Ridges, hills

C. Recorded Archaeological Sites and Surveys

To gather information on the history and prehistory of the Project APE and the surrounding region, HVCRC consulted historical documents and maps available at the Library of Congress, David Rumsey Cartography Associates and the New York Public Library. HVCRC 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 the Project APE. HVCRC also consulted regional Native American sources (e.g. Beauchamp 1900; Parker 1920; Ritchie 1980; Ritchie and Funk 1973) for descriptions of regional archeological sites.

Previously Recorded Archaeological Sites

Twelve previously documented archaeological sites have been identified within a one-mile radius of the Project APE. None of these identified sites will be impacted by the proposed project.

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

Site Number	Site Name	Distance from Project APE	Time Period	Site Type/ Materials Recovered
02741.000343	Groveville Mill	2640' / 0.8 k	Historic	Post 1930 concrete foundation
2706.000051	J.B. Seaman Residence	5280' / 1.6k	Historic	Location of nineteenth century Map Documented Structure (MDS)
2706.000052	G A Seaman Historic Site	3960' / 1.6k	Historic	Location of Map Documented Structures
2716.000019	Leacote Stone Water Tower 1925	3960' / 1.6k	Precontact	Scraper and FCR, Small Camp site, National Register Listed
2741.000013	Schenck Mill Site	5280' / 1.6k	Historic	Location of Map Documented Mill Structure
2741.000015	Jarvis Site	5280' / 1.6k	Historic	Location of Map Documented Structures
2741.000016	Fishkill Landing Settlement	3960' / 1.6k	Historic	Location of Map Documented Structures
2741.000345	Matteawan Company	3960' / 1.6k	Historic	Location of nineteenth century Map Documented Structures
2741.000346	Schenck Grist Mill	5280' / 1.6k	Historic	Location of Map Documented Mill Structure
NYSM 6621	AC Parker Dutchess	2640' / 0.8k	Historic	Traces of Occupation
NYSM 7856	AC Parker Dutchess 13A	2640' / 0.8k	Precontact	Burial site, location of several precontact cemeteries
NYSM 9055	AC Parker Dutchess	5280' / 1.6 k	Precontact	A.C. Parker 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. A total of three surveys have been completed within a one mile radius of the Project APE. These surveys, completed for both municipal undertakings as well as residential developments, did not identify any archaeological sites.

D. NATIONAL REGISTER ELIGIBLE/LISTED SITES

The National Register Database and OPRHP files were reviewed to identify structures on or in the vicinity of the Project APE that have been listed on the National Register of Historic Places or identified as National Register Eligible. The Project APE is located to the north of the boundaries of the Groveville Mill Historic District, and south of the Matteawean State Hospital, both National Register Eligible Districts. No historic properties, either eligible or listed, are located within or adjacent to the boundaries of the Project APE.

E. NATIVE AMERICAN CONTEXT

During the Paleoindian period, mobile bands of hunter-gatherers occupied what is now New York State. These bands exploited the resources of the landscape by hunting game and gathering plants. Paleoindian sites have been in the upland regions a short distance from the Hudson River (Ritchie and Funk 1976). Frequently these sites are associated with sources of stone, as is the case with a site in Greene County where a quarry-workshop complex has been excavated. More frequently, the sites appear to have been temporary campsites located where it would be possible to watch for game as it moved across the landscape (Ritchie 1980).

With the lowering of the water table during the Archaic period, subsistence methods and technologies changed in response to climatic warming. This was accompanied by and an increase in vegetation density and diversity, changing faunal migrations and a change in sea levels (Sirkin 1977). The Archaic Period was likely a time of incipient sedentism among the inhabitants of the area. Changes in settlement and subsistence patterns that occurred during the Late Archaic period reflect an increased exploitation of coastal and riverine resources (Snow 1980). Ground stone food processing tools are more common, reflecting an increase in processed plant resources in the diet. Projectile points commonly found at Late Archaic sites include narrow stemmed, broad stemmed and side notched types (Snow 1980). The Laurentian Tradition of the Late Archaic is the most represented throughout New York State, and is subdivided into a series of phases: Vergennes, Vosburg, Sylvan Lake, River and Snook Kill. Ground stone tools appear, and steatite bowls are associated with the later part of this time period (Pretola and Freedman 2007).

The Woodland period is distinguished from the Archaic in part, by the use of ceramics. Horticulture, although practiced in other parts of North America at an earlier date, does not appear in the Hudson River Valley until c. 1000 AD (Funk 1976). The soil and moisture requirements for the cultivation of maize, beans, and squash created a marked change in the pattern of land use and the selection of locations for villages (Hart and Brumbach 2005). It was no longer necessary for the entire group to move from place to place following a seasonal round of migration fueled by fluctuating sources of food. Cord marked ceramics became common during the Middle Woodland period, and incised vessels, many with a collar area, are typical of Late Woodland cultures (Lavin et al 1993). Up to the time of Contact, two Algonquin-speaking Indian nations, referred to locally as the Wappinger and the Mohigan (Mahican), occupied the southern and northern sections of Dutchess County. These tribal people were sedentary, living in small permanent villages and growing crops such as maize and squash (Cronon 1983).

F. HISTORIC CONTEXT

Dutchess County, one of New York's original counties, was created in 1683 and at that time included all of Putnam County and part of Columbia County (Cronon 1983). The county was divided into thirteen patents, with the Rombout Patent being one of the earliest. Dutch settlement on the patents began in the late 1600s, with English Quakers from Rhode Island and Long Island moving into the eastern part of the county in the 1740s (Cronon 1983).

The Project APE 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. It was inherited by Catherine Brett, Francis Rombout's only child. Madam Brett and her husband built a house around 1709, which is listed on the National Register (Hasbrouck 1909).

Following her husband's death, Madam Brett was instrumental in developing the Beacon area. She established mills along the major waterways, and encouraged settlers from western Long Island to settle in the region. Among the early families to purchase land from Madame Brett were the Van Wyck, Swartwout, Wiltse, Hasbrouck, DuBois and Verplanck families (Hasbrouck 1909).

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 (Hasbrouck 1909). The Project APE 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", currently Route 52, ran on the high ground north of the creek.

The Project APE was part of the former Matteawan State Hospital, known currently as the Fishkill Correctional Facility. In 1886, a legislative commission recommended the purchase of the 246-acre Dates Farm in the village of Matteawan for $25,000, or just over $100 per acre (correctionshistory.org).

This facility was constructed during period of reform to better treat and serve mentally ill inmates separately from other inmates. As the state Asylums were overcrowded, Matteawan State Hospital was intended to house inmates and patients who were too dangerous for hospital institutions, and too ill for prisons such as Sing-Sing Prison (NR Eligibility Form). Matteawan was a working institution that provided routines and occupations for its residents. It included extensive acreage up to 700 acres (280 ha) that were devoted to vegetable and fruit

cultivation, a dairy farm, a piggery and pastureland for the animals. Barns and other farm buildings were built down the hill from the asylum (correctionshistory.org).

The Matteawan farm was closed in the mid-1960s, a period where the facility transformed itself many times. This transformation was due in part to new court legislation, but also in part due to several tragic events at the hospital. By 1977, the facility that would become the present day Fishkill Correctional facility was established (correctionshistory.org). The Fishkill Correctional facility was considerably smaller in size than the original 700-acre state hospital. Parts of its property were appropriated for the Beacon Correctional Facility for women and Downstate Correctional, a reception and classification center which opened in 1979 (correctionshistory.org).

CARTOGRAPHIC RESEARCH

HVCRC 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 APE. These maps are included in this report, with the boundaries of the Project APE 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 APE 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 APE.

Figure 3: 1850 J.C. Sidney Map *of Dutchess County, New York*. (Source: Library of Congress) Scale: 1''=1880'.

The earliest map examined is the 1850 J.C. Sidney *Map of Dutchess County, New York*. The Project APE is shown to the north of Fishkill Creek at the southern extent of the hamlet of Glenham. The Project APE is located on interior land, to the east of the Dates Farm. A hill is shown north of the property, on land owned by J. VanVoorhes.

Figure 4: 1867 Beers, F.W. *Atlas of New York and Vicinity Town of Fishkill Dutchess County*. (Source: David Rumsey Cartography Associates) Scale: 1"=940'.

The 1867 Beers Map shows the Project APE wot the northwest of Groveville Mills (woolen factory) on unoccupied land. To the southwest of the Project APE is the village of Matteawan, which has become densely populated. To the southeast is the A.C. Rogers farm, which was subdivided in 1843 and sold to A. T Stewart, who built the Groveville Mills complex (Hasbrouck 1909).

Figure 5: 1891 Beers Atlas *of the Hudson River New York City to Troy*. (Source: David Rumsey Cartography Associates) Scale: 1"=1500'.

By 1891, there have been significant changes in the vicinity of the Project APE. Matteawan State Hospital, shown as the Asylum for Insane Criminals has been constructed to the north of the Project APE. To the south, is a residence owned by Mrs. Boyce. To the west of the Project APE is L. Thompsons "Day Farm". The hamlet of Matteawan has expanded considerably along both sides of Fishkill Creek.

Figure 6: 1903 Newburgh USGS Topographical Quadrangles. (Source: USGS.gov) Scale: 1"=1880'.

The USGS topographical maps depict the locations of roads, structures and landscape features; however, they do not indicate property landowners. This map indicates that there are no structures within the vicinity of the Project APE. This map shows the Asylum to the northeast of the project boundaries. There is no indication of the boundaries of the State Hospital shown on this map.

Figure 7: 1956 / 1981 Wappingers Falls Topographical Maps. 7.5 Minute Series (Source: USGS.gov) Scale: 1"=1500'.

The 1956 topographical map shows updates (in purple) that were taken from aerial images in 1981. The Matteawan State Hospital is now Fishkill Correctional Facility. This map also shows the fence line that bounds the correctional facility property. This fence line, shown as a black dashed line and includes the Project APE. The topographical map indicates that the majority of the Project APE has been cleared, and that by the 1980s De Soto Avenue is under construction.

AERIAL REVIEW

To track the evolution of the structures within the Project APE, a series of aerial images have been examined and are included in this report

Figure 8: 1936 Aerial Image. Dutchess County, New York. (Source: Dutchess County Parcel Access) Scale: 1''=270'.

The 1936 aerial image shows the Project APE as wooded and bordered by open agricultural fields. To the south, De Soto Avenue has not been constructed.

Figure 9: 1970 Aerial Image. Dutchess County, New York. (Source: Dutchess County Parcel Access) Scale: 1"=360'.

The 1970 aerial image shows that the northern part of the APE has been maintained as cleared land. To the south, residential structure have been built along DeSoto Avenue.

Figure 10: 2004 Aerial Image. Dutchess County, New York. (Source: Dutchess County Parcel Access) Scale: 1"=270'.

The 2004 aerial image shows that portions of the parcel have been graded and disturbed. This disturbed area, along the southern and northeastern boundary, is the result of the construction of a proposed road. On August 7 2019, Mr. Coulter, a longtime resident on DeSoto Avenue informed the principal investigator that a road had been partially constructed through the area. In addition, water lines had been installed, as evidenced by the presence of a fire hydrant adjacent to the southern property boundary. Mr. Coulter also stated that the roadway had been dramatically built up, and that at one time the entire landscape was at the same elevation as the property at 11 DeSoto Avenue. He also indicated that the housing lot at 37 Conklin Street had once been at the same elevation, a difference of nearly 10' (3.04 m) but was filled in prior to the construction of the residence (Personal Communication, Beth Selig 8/7/2019).

Photo 7: View to the south from within the Project APE toward 37 Conklin Street.

Photo 8: View to the southeast along the southern boundary of the Project APE. This location has been disturbed by the prior construction activities.

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. The project's location, a short distance from Fishkill Creek, and previously identified archaeological sites, combined with the fact that undisturbed, and level terrain exists within this Project APE, makes this landscape moderate to highly sensitive for precontact cultural resources.

Historic Sensitivity

Careful examination of the historic and topographical maps available indicates that the Project APE has been agricultural land for a significant portion of the nineteenth and twentieth centuries. No residential structures are shown within the project boundaries, which was part of the Matteawan State Hospital farm. Disturbance has taken place within the Project APE, with the partial construction of roads along the eastern and southern boundaries, and the installation of a drainage culvert in the center. Given the fact that nineteenth century structures are not located within or adjacent to the Project APE, and the amount of prior disturbance the historic sensitivity is considered low.

H. Summary and Recommendations

The use history and environmental conditions present on the Beacon Views Project Parcel indicates that the area is sensitive for precontact cultural resources. It is therefore recommended that a Phase 1B Archaeological Field Reconnaissance Survey be undertaken on those undisturbed areas within the Project APE that have been assessed to have the potential to yield cultural resources.

II. PHASE 1B ARCHAEOLOGICAL FIELD RECONNAISSANCE SURVEY

I. ARCHAEOLOGICAL SURVEY METHODOLOGY

The results of the Phase 1A confirmed that the Project APE is located in an area of precontact period activity. In addition, the landscape closely conforms to an ecological model that indicates that the level, undisturbed portions of the Project APE are moderate to highly sensitive for precontact cultural materials. Phase 1B field investigations took place from August 5 to August 7, 2019, under the supervision of Beth Selig, MA, RPA.

Areas selected for subsurface testing were identified during an intensive walkover inspection, which evaluated the landscape to determine areas of prior disturbance, slopes in excess of 12% grade, saturated or wet soils and document evidence of former land usage. Shovel tests were excavated at intervals of 50' (15m) along transects conforming to the land surface and the boundaries of the Project APE. The locations of the tests and disturbed areas were recorded on a scaled map that shows surveyed borders and the locations of the various structures or features identified (Field Reconnaissance Map).

Shovel tests (STs), approximately 45 cm in diameter, were spaced 50 feet apart and excavated at least 10 cm into sterile subsoil, unless impeded by rocks or other obstructions. This subsurface testing strategy was applied in areas of undisturbed soils and that were well drained and did not contain surface water. All soils excavated from shovel tests were screened through 0.25-inch hardware cloth. Shovel test profiles were recorded on standard field forms, which included stratigraphic depths, Munsell soil color, texture and inclusions, disturbances and artifacts (Appendix A). The presence of clearly modern materials, such as plastic fragments, modern bottle glass fragments, or twentieth-century architectural materials were noted on field forms, but HVCRC does not generally collect these materials for analysis or inclusion in the artifact assemblage. Had precontact period artifacts been recovered from shovel tests they would have been bagged, and labeled with standard project provenience information. Following completion of the archaeological fieldwork, all recovered materials would be washed, identified, inventoried and re-bagged in labeled clean 4-mil archival quality plastic bags. Any recovered artifacts would have been identified and described based on material type and standard descriptive characteristics and included in an artifact inventory.

J. ARCHAEOLOGICAL SURVEY RESULTS

Field investigations began with a comprehensive walkover of the project parcel. During the walkover inspection, the field team noted a fire hydrant along the southern boundary, a drainage culvert in the central portion of the APE, near the western boundary, and large piles of rock and concrete near the eastern boundary. The piles of rock and concrete are associated with a built up area where new road construction took place in 2003. Mr. Coulter stated that the roads were partially constructed as part of a plan to develop the parcel (personal communication Beth Selig 8/7/2019).

The project parcel is bordered by a chain-link fence topped with barbed wire. This fence line corresponds to the boundary of the former Matteawan State Hospital. The landscape is characterized by overgrown downed trees, dense briars and tall weeds. Within the wetland area, the vegetation is sparse, and the wet mucky soil is very dark. Tree roots are visible on the ground surface within the wetland area. At the time of the field investigations, the boundaries of the wetland had been recently demarcated. These flagged boundaries appeared to extend beyond the marked boundaries of the field reconnaissance map, therefore the transects terminated at the flagged wetland boundaries.

Field investigations began in the western portion of the project parcel, at the top of a high knoll. A total of fifteen shovel test were completed in this area of the Project APE. The field team progressed east and south across the Project APE. Transect (TR) 4 was completed along a level terrace bounded by slopes in excess of 12% grade. The soils encountered consisted of a dark yellowish brown silty loam overlying a yellowish brown silty loam.

Transects 5 through 13 tested the southern part of the APE. These transects began along a fence line and progressed south terminating at the flagged wetland boundaries, or the property boundary. A total of fifty-nine shovel tests were completed in the southern portion of the APE. The soils encountered consisted primarily of a dark yellowish brown silty loam overlying a yellowish brown silty loam and silty clay loam. The soils adjacent to the flagged wetland boundary consisted of a thin layer of black humic loam overlying a gray brown clay. Along the southeastern and eastern boundary, the shovel tests encountered areas of profound disturbance associated with grading and filling. The soils consisted of a yellowish brown fill that contained bits of concrete or asphalt. The ground surface was marked with piles of concrete, rock and asphalt pieces, and compacted fill.

K. Conclusions and Recommendations

In June of 2019, Hudson Valley Cultural Resource Consultants completed a Phase 1A Literature Search and Sensitivity Assessment and Phase 1B Archaeological Field Reconnaissance Survey of the proposed the Beacon Views Project, in the City of Beacon, Dutchess County, New York. The Project Area of Potential Effect (APE) includes ±8.6 acres (3.48 h) of woodland. The field survey covered the entirety of the parcel, excepting the areas of slope and the flagged wetland as well as areas of saturated soils.

A total of seventy-nine shovel tests were completed within the Project APE. No significant cultural material was identified during the Phase 1 Cultural Resource Survey. Therefore, the proposed undertaking will not affect any potentially significant cultural resources. In the opinion of HVCRC that no additional cultural resources investigations are warranted for the proposed Project. These recommendations are subject to concurrence by the New York State Office of Parks, Recreation and Historic Preservation.

Photo 9: The Project APE is overgrown with vegetation and the ground surface is covered with downed trees. View to the northeast.

Photo 10: A large ceramic drainage pipe was identified in the central portion of the APE, draining into the wetland area. View to the north.

Photo 11: The landscape next to the north of the pipe, at the base of the slope has been built up and leveled. View to the east.

Photo 12: The landscape at the base of the slope appears to have been artificially leveled. View to the east.

Photo 13: Transect 4 tested a level area at the base of the slope. View to the west.

Photo 14: The fence line defined the northeastern parcel boundary, and served as a baseline for Transects 5 through 13. View to the west.

HUDSON VALLEY
Cultural Resource Consultants, Ltd.

Figure 11: Beacon Views Project
Phase 1B Field Reconnaissance Map
Scale 1" = 80'.

LEGEND

- ST — Sterile Shovel Test Location
- ST — Planned Shovel Test Location: Not Excavated
- 1 — Photographic View
- Subject Property Boundaries
- Area of Potential Effect (APE)

Photo 15: Piles of concrete and asphalt are located within the disturbed area, along the eastern boundary of the parcel. View of a pile on Transect 6.

Photo 16: The landscape in the eastern portion of the parcel is much higher than the ground surface to the west. View to the south along TR 5.

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Appendix A: shovel test records

Transect	ST	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material	Comments
TR 1	1	1	0-7	0-18	10YR5/4	Yellow brown silty loam, terminated at root obstruction	NCM	root obstruction at 7"
	2	1	0-11	0-28	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	11-13	28-32	10YR5/4	Yellow brown silty loam, terminated at root obstruction	NCM	root obstruction at 13"
	3	1	0-8	0-20	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	8-13	20-33	10YR5/4	Yellow brown silty loam	NCM	
	4	1	0-9	0-23	10YR4/4	Dark yellowish brown silty loam, terminated at root obstruction	NCM	root obstruction at 9"
	5	1	0-9	0-23	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	9-13	23-33	10YR5/4	Yellow brown silty loam	NCM	
TR 2	6	1	0-13	0-33	10YR4/4	Dark yellowish brown silty loam with gravel and cobbles	NCM	
		2	13-17	33-44	10YR5/4	Yellow brown silty loam with gravel and cobbles	NCM	
	7	1	0-10	0-26	10YR4/4	Dark yellowish brown silty loam with gravel and cobbles	NCM	
		2	10-14	26-36	10YR5/4	Yellow brown silty loam with gravel and cobbles	NCM	
	8	1	0-11	0-27	10YR4/4	Dark yellowish brown silty loam with gravel and cobbles, terminated at rock obstruction	NCM	rock at 11"
	9	1	0-4	0-11	10YR4/4	Dark yellowish brown silty loam, terminated at rock obstruction	NCM	rock at 4"
	10	1	0-9	0-22	10YR4/4	Dark yellowish brown silty loam, terminated at root obstruction	NCM	root obstruction at 9"

Transect	ST	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material	Comments
TR 3	11	1	0-4	0-10	10YR2/1	Black silty loam	NCM	
		2	4-6	10-15	10YR7/2	Light gray silty loam	NCM	
		3	6-8	15-20	10YR4/4	Dark yellowish brown silty loam	NCM	
		4	8-14	20-35	10YR5/4	Yellow brown silty loam	NCM	
	12	1	0-9	0-23	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	9-13	23-33	10YR5/4	Yellow brown silty loam	NCM	
	13	1	0-9	0-23	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	9-14	23-35	10YR5/4	Yellow brown silty loam	NCM	
	14	1	0-7	0-18	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	7-11	18-28	10YR5/4	Yellow brown silty loam	NCM	
	15	1	0-12	0-30	10YR4/4	Dark yellowish brown silty loam	NCM	soil is wet
		2	12-14	30-35	10YR5/4	Yellow brown silty loam	NCM	soil is wet
TR 4	16					Not Excavated: Slope> 15%		
	17	1	0-15	0-38	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	15-19	38-48	10YR6/8	Brownish yellow silty loam	NCM	
	18	1	0-12	0-30	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	12-16	30-40	10YR6/8	Brownish yellow silty loam	NCM	

Transect	ST	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material	Comments
	19	1	0-12	0-30	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	12-16	30-40	10YR5/4	Yellow brown silty loam	NCM	
	20	1	0-8	0-20	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	8-12	20-30	10YR5/4	Yellow brown silty loam	NCM	
TR 5	21					Not Excavated: Slope >15%		
	22	1	0-2	0-6	10YR3/4	Dark yellowish brown silty loam	NCM	ST in base of gully
		2	2-9	6-24	10YR6/8	Brownish yellow gravel fill	NCM	
	23	1	0-4	0-10	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	4-6	10-15	10YR6/8	Brownish yellow silty loam	NCM	
	24	1	0-28	0-72	10YR6/8	Brownish yellow gravel fill, terminated at rock obstruction	NCM	rock at 28"
	25	1	0-4	0-10	10YR6/8	Brownish yellow gravel fill, terminated at rock obstruction	NCM	rock at 4"
	26					Not Excavated: Disturbed		Area graded and filled
	27	1	0-4	0-10	10YR3/2	Very dark grayish brown silty loam	tennis ball (discarded)	
		2	4-11	10-27	10YR6/8	Brownish yellow gravel fill	cement (discarded)	
	28					Not Excavated: Disturbed		Area graded and filled
	29					Not Excavated: Disturbed		Area graded and filled
	30	1	0-12	0-30	10YR6/8	Brownish yellow gravel fill, terminated at rock obstruction	NCM	rock at 12"

Transect	ST	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material	Comments
TR 6	31					Not Excavated: Slope >15%		
	32	1	0-3	0-8	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	3-8	8-20	10YR6/8	Brownish yellow silty loam	NCM	
	33	1	0-9	0-23	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	9-12	23-30	10YR6/8	Brownish yellow silty loam	NCM	
	34	1	0-1	0-3	10YR2/1	Black humic loam	NCM	no A horizon
		2	1-7	3-18	10YR6/8	Brownish yellow silty loam	NCM	
	35	1	0-1	0-2	10YR2/1	Black humic loam	NCM	no A horizon
		2	1-8	2-20	10YR6/8	Brownish yellow silty clay loam	NCM	
	36	1	0-1	0-3	10YR2/1	Black humic loam	NCM	
		2	1-7	3-18	10YR6/8	Brownish yellow gravel fill, terminated at concrete	NCM	concrete at 7"
	37					Not Excavated: Disturbed		Area graded and filled
	38					Not Excavated: Disturbed		Area graded and filled
	39					Not Excavated: Disturbed		Area graded and filled
	40	1	0-4	0-9	10YR6/8	Brownish yellow gravel fill	NCM	no A horizon
	41	1	0-3	0-7	10YR6/8	Brownish yellow gravel fill	NCM	no A horizon
TR 7	42					Not Excavated: Slope> 15%		

Transect	ST	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material	Comments
	43	1	0-8	0-20	10YR4/4	Dark yellowish brown silty loam with cobbles, terminated at rock obstruction	NCM	rock at 8"
	44	1	0-5	0-13	10YR4/4	Dark yellowish brown silty loam, terminated at root obstruction	NCM	root obstruction at 5"
	45	1	0-4	0-10	10YR4/4	Dark yellowish brown silty loam, terminated at root obstruction	NCM	root obstruction at 5"
	46	1	0-5	0-13	10YR4/4	Dark yellowish brown silty loam, terminated at rock obstruction	NCM	rock at 5"
	47	1	0-12	0-30	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	12-16	30-40	10YR5/4	Yellow brown silty loam	NCM	Transect terminated at wetland
TR 8	48					Not Excavated: Slope >15%		
	49	1	0-11	0-29	10YR4/2	Dark grayish brown clay, terminated at rock obstruction	NCM	rock at 11"
	50	1	0-7	0-19	10YR5/4	Yellow brown silty loam with cobbles, terminated at rock obstruction	NCM	rock at 7"
	51	1	0-9	0-24	10YR4/4 & 10YR4/2	Dark yellowish brown silty clay loam and dark grayish brown silty clay loam	NCM	
		2	9-13	24-34	10YR5/4	Yellow brown silty clay loam	NCM	
	52	1	0-13	0-32	10YR4/4 and 10YR5/4	Dark yellowish brown silty clay loam and yellow brown brown silty clay loam	NCM	
		2	13-18	32-45	10YR6/8	Brownish yellow silty clay loam	NCM	
	53	1	0-4	0-11	10YR7/2	Light gray clay	NCM	Transect terminated at wetland
TR 9	54					Not Excavated: Slope >15%		

Transect	ST	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material	Comments
	55	1	0-8	0-20	10YR4/2	Dark grayish brown silty loam, terminated at rock obstruction	NCM	rock at 8"
	56	1	0-13	0-33	10YR4/2	Dark grayish brown silty loam with cobbles	NCM	
		2	13-17	33-43	10YR5/4	Yellow brown silty clay	NCM	
	57	1	0-5	0-12	10YR4/2	Dark grayish brown silty loam, terminated at rock obstruction	NCM	rock at 5"
	58	1	0-5	0-13	10YR4/2	Dark grayish brown silty loam, terminated at root obstruction	NCM	root obstruction at 5"
	59	1	0-11	0-28	10YR4/2	Dark grayish brown silty clay	NCM	
		2	11-15	28-38	10YR5/1	Gray silty clay	NCM	Transect terminated at wetland
TR 10	60	1	0-6	0-15	10YR4/4	Dark yellowish brown silty clay loam with channery	NCM	
		2	6-12	15-30	10YR5/4	Yellow brown silty clay loam with channery	NCM	
	61	1	0-7	0-19	10YR4/4	Dark yellowish brown silty clay loam with channery	NCM	
		2	7-11	19-29	10YR5/4	Yellow brown silty clay loam with channery	NCM	
	62	1	0-12	0-30	10YR4/4	Dark yellowish brown silty clay loam, terminated at rock obstruction	NCM	rock at 12"
	63	1	0-4	0-9	10YR4/2	Dark grayish brown clay, terminated at rock obstruction	NCM	rock at 4"
	64	1	0-7	0-19	10YR5/4	Yellow brown clay, terminated at rock obstruction	NCM	rock at 7"
TR 11	65	1	0-8	0-20	10YR3/4	Dark yellowish brown silty loam, terminated at root obstruction	NCM	root obstruction at 8"
	66	1	0-4	0-11	10YR3/1	Very dark gray brown silt with cobbles, terminated at root obstruction	NCM	root obstruction at 4"

Transect	ST	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material	Comments
	67	1	0-6	0-16	10YR3/1	Very dark gray brown silt with cobbles, terminated at root obstruction	NCM	root obstruction at 6"
	68	1	0-10	0-26	10YR6/1	Gray silty loam	NCM	
		2	10-15	26-38	10YR4/4	Dark yellowish brown silty loam	NCM	
	69	1	0-11	0-27	10YR3/2	Very dark grayish brown clay	NCM	
		2	11-15	27-38	10YR4/1	Dark gray clay	NCM	Transect terminated at wetland
TR 12	70	1	0-5	0-12	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	5-12	12-30	10YR5/4	Yellow brown silty loam	NCM	
	71	1	0-11	0-28	10YR4/4	Dark yellowish brown silty loam	NCM	
		2	11-13	28-32	10YR5/4	Yellow brown silty loam, terminated at rock obstruction	NCM	rock at 13"
	72	1	0-12	0-30	10YR4/4	Dark yellowish brown silty clay loam, terminated at root obstruction	NCM	root at 12"
	73	1	0-11	0-28	10YR4/4	Dark yellowish brown silty clay loam	NCM	
		2	11-15	28-38	10YR5/4	Yellow brown silty clay loam	NCM	
	74					Not Excavated: STP in Wetland		
TR 13	75	1	0-2	0-6	10YR2/1	Black humic loam	NCM	
		2	2-14	6-35	10YR5/4	Yellow brown silty loam with gravel, terminated at rock obstruction	NCM	rock at 14"

Transect	ST	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material	Comments
	76	1	0-11	0-28	10YR2/1	Black humic loam	NCM	
		2	11-12	28-30	10YR5/4	Yellow brown silty loam, terminated at rock obstruction	NCM	rock at 12"
	77	1	0-10	0-25	10YR6/1	Gray silty loam	NCM	
	78	1	0-1	0-2	10YR2/1	Black humic loam	NCM	
		2	1-18	2-45	10YR4/2	Dark grayish brown silty clay loam	NCM	
	79	1	0-1	0-1	10YR2/1	Black humic loam	NCM	
		2	1-11	1-29	10YR5/2	Gray brown clay	NCM	

APPLICATION FOR SITE PLAN APPROVAL

Submit to Planning Board Secretary, One Municipal Plaza, Suite One, Beacon, New York 12508

IDENTIFICATION OF APPLICANT

Name: Beacon Views LLC

Address: 500 River Avenue, Suite 145

Lakewood, New Jersey 08701

Signature:

Date: 8-22-19

Phone: (203)-313-9412

(For Official Use Only)	Date	Initials
Application & Fee Rec'd		
Initial Review		
PB Public Hearing		
Sent to City Council		
City Council Workshop		
City Council Public Hearing		
City Council Approve/Disapprove		

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: Cuddy + Feder LLP

Address: 300 Westage Business Center, Suite 380

Fishkill, New York 12524

Phone: (914) 761-1300

Fax: (914) 761-5372

Email address: tpalmer@cuddyfeder.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: Conklin Street, Beacon, New York 12508

Tax Map Designation: 331123

Land Area: 8.6 Acres Zoning District(s) RD-5

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: Residential Townhouse Development

Gross Non-Residential Floor Space: Existing 0 Proposed 0

TOTAL: 0

Dwelling Units (by type): Existing 0 Proposed Condominum Units

TOTAL: Condominum Units

ITEMS TO ACCOMPANY THIS APPLICATION

a. Five (5) **folded** copies and One (1) digital copy of a site location sketch showing the location of the subject property and the proposed development with respect to neighboring properties and developments.

b. Five (5) **folded** copies and One (1) digital copy of the proposed site development plan, consisting of sheets, showing the required information as set forth on the back of this form and other such information as deemed necessary by the City Council or the Planning Board to determine and provide for the property enforcement of the Zoning Ordinance.

c. Five (5) **folded** copies and One (1) digital copy of additional sketches, renderings or other information.

d. An application fee, payable to the City of Beacon, computed per the attached fee schedule.

E An initial escrow amount, payable to the City of Beacon, as set forth in the attached fee schedule.

INFORMATION TO BE SHOWN ON SITE LOCATION SKETCH

a. Property lines, zoning district boundaries and special district boundaries affecting all adjoining streets and properties, including properties located on the opposite sides of adjoining streets.
b. Any reservations, easements or other areas of public or special use which affect the subject property.
c. Section, block and lot numbers written on the subject property and all adjoining properties, including the names of the record owners of such adjoining properties.

INFORMATION TO BE SHOWN ON THE SITE DEVELOPMENT PLAN

a. Title of development, date and revision dates if any, north point, scale, name and address of record owner of property, and of the licensed engineer, architect, landscape architect, or surveyor preparing the site plan.
b. Existing and proposed contours at a maximum vertical interval of two (2) feet.
c. Location and identification of natural features including rock outcrops, wooded areas, single trees with a caliper of six (6) or more inches measured four (4) feet above existing grade, water bodies, water courses, wetlands, soil types, etc.
d. Location and dimensions of all existing and proposed buildings, retaining walls, fences, septic fields, etc.
e. Finished floor level elevations and heights of all existing and proposed buildings.
ff. Location, design, elevations, and pavement and curbing specifications, including pavement markings, of all existing and proposed sidewalks, and parking and truck loading areas, including access and egress drives thereto.
g. Existing pavement and elevations of abutting streets, and proposed modifications.
h. Location, type and design of all existing and proposed storm drainage facilities, including computation of present and estimated future runoff of the entire tributary watershed, at a maximum density permitted under existing zoning, based on a 100 year storm.
ii. Location and design of all existing and proposed water supply and sewage disposal facilities.
jj. Location of all existing and proposed power and telephone lines and equipment, including that located within the adjoining street right-of-way. All such lines and equipment must be installed underground.
k. Estimate of earth work, including type and quantities of material to be imported to or removed from the site.
ll. Detailed landscape plan, including the type, size, and location of materials to be used.
m. Location, size, type, power, direction, shielding, and hours of operation of all existing and proposed lighting facilities.
n. Location, size, type, and design of all existing and proposed business and directional signs.
o. Written dimensions shall be used wherever possible.
p. Signature and seal of licensed professional preparing the plan shall appear on each sheet.
q. Statement of approval, in blank, as follows:

Approved by Resolution of the Beacon Planning Board
on the _____day of _____, 20_____
subject to all conditions as stated therein

_____ _____
Chairman, City Planning Board **Date**

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: Highlands At Beacon LLC

If owned by a corporation, partnership or organization, please list names of persons holding over 5% interest.
Moshe Ziv

List all properties in the City of Beacon that you hold a 5% interest in:
331123

Applicant Address: Beacon Views LLC, 500 River Avenue, Suite 145, Lakewood, New Jersey 08701

Project Address: Conklin Street, Beacon New York 12508

Project Tax Grid # 331123

Type of Application Residential Townhouse Development

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, Moshe Ziv, 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

HIGHLANDS AT BEACON LLC

By: _____

Signature of Owner (Moshe Ziv)

Managing Member

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
SITE PLAN SPECIFICATION FORM

Name of Application: Beacon Views Townhouse Development

PLEASE INDICATE WHETHER THE SITE PLAN DRAWINGS SHOW THE SUBJECT INFORMATION BY PLACING A CHECK MARK IN THE APPROPRIATE BOXES BELOW.		
	YES	**NO**
The site plan shall be clearly marked "Site Plan", it shall be prepared by a legally certified individual or firm, such as a Registered Architect or Professional Engineer, and it shall contain the following information:	✓	
LEGAL DATA		
Name and address of the owner of record.	✓	
Name and address of the applicant (if other than the owner).	✓	
Name and address of person, firm or organization preparing the plan.	✓	
Date, north arrow, and written and graphic scale.	✓	
NATURAL FEATURES		
Existing contours with intervals of two (2) feet, referred to a datum satisfactory to the Planning Board.	✓	
Approximate boundaries of any areas subject to flooding or stormwater overflows.	✓	
Location of existing watercourses, wetlands, wooded areas, rock outcrops, isolated trees with a diameter of eight (8) inches or more measured three (3) feet above the base of the trunk, and any other significant existing natural features.	✓	
EXISTING STRUCTURES, UTILITIES, ETC.		
Outlines of all structures and the location of all uses not requiring structures. Paved areas, sidewalks, and vehicular access between the site and public streets.	✓	
Locations, dimensions, grades, and flow direction of any existing sewers, culverts, water lines, as well as other underground and above ground utilities within and adjacent to the property.	✓	
Other existing development, including fences, retaining walls, landscaping, and screening.	✓	
Sufficient description or information to define precisely the boundaries of the property.	✓	
The owners of all adjoining lands as shown on the latest tax records.	✓	
The locations, names, and existing widths of adjacent streets and curb lines.	✓	
Location, width, and purpose of all existing and proposed easements, setbacks, reservations, and areas dedicated to private or public use within or adjacent to the properties.	✓	

PROPOSED DEVELOPMENT	YES	NO
The location, use and design of proposed buildings or structural improvements.	✓	
The location and design of all uses not requiring structures, such as outdoor storage (if permitted), and off-street parking and unloading areas.	✓	
Any proposed division of buildings into units of separate occupancy.	✓	
The location, direction, power, and time of use for any proposed outdoor lighting.	✓	
The location and plans for any outdoor signs.	✓	
The location, arrangement, size(s) and materials of proposed means of ingress and egress, including sidewalks, driveways, or other paved areas.	✓	
Proposed screening and other landscaping including a planting plan and schedule prepared by a qualified individual or firm.	✓	
The location, sizes and connection of all proposed water lines, valves, and hydrants and all storm drainage and sewer lines, culverts, drains, etc.	✓	
Proposed easements, deed restrictions, or covenants and a notation of any areas to be dedicated to the City.		✓
Any contemplated public improvements on or adjoining the property.		✓
Any proposed new grades, indicating clearly how such grades will meet existing grades of adjacent properties or the street.	✓	
Elevations of all proposed principal or accessory structures.	✓	
Any proposed fences or retaining walls.	✓	
MISCELLANEOUS		
A location map showing the applicant's entire property and adjacent properties and streets, at a convenient scale.	✓	
Erosion and sedimentation control measures.	✓	
A schedule indicating how the proposal complies with all pertinent zoning standards, including parking and loading requirements.	✓	
An indication of proposed hours of operation.		✓
If the site plan only indicates a first stage, a supplementary plan shall indicate ultimate development.		✓

For all items marked "NO" above, please explain below why the required information has not been provided:

**Please see attached project narrative in connection with this Application Form **

Applicant/Sponsor Name: Beacon Views LLC

Signature: [signature]

Date: 8/10/12

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 person(s))

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 223-62 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: Beacon Views LLC

Address of Applicant: 500 River Avenue, Suite 145, Lakewood, New Jersey 08701

Telephone Contact Information: (203) 313-9412

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.**
Highlands at Beacon LLC	Ziv Related Companies 287 Church Street, Pine Plains, NY 12567		Deed dated March 29, 2007	Recorded in Dutchess County Clerk's Office on June 19, 2007

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.

***Copy of Contract Enclosed with Application Form**

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**

***Copy of Contract Enclosed with Application Form**

I, Joseph Kahn being first duly sworn, according to law, deposes and says that the statements made herein are true, accurate, and complete.

BEACON VIEWS LLC

(Print) By: Joseph Kahn

(Signature) [signature]

4200669.v1

APPLICATION FOR SUBDIVISION APPROVAL

Submit to Planning Board Secretary, One Municipal Plaza, Suite One, Beacon, New York 12508

IDENTIFICATION OF APPLICANT

Name: Beacon Views LLC

Address: 500 River Avenue, Suite 145

Lakewood, New Jersey 08701

Signature: [signature]

Date: 8/2/19

Phone: (203) 313-9412

(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: Cuddy + Feder LLP

Address: 300 Westage Business Center, Suite 380

Fishkill, New York 12524

Phone: (914) 761-1300

Fax: (914) 761-5372

Email address: tpalmer@cuddyfeder.com

IDENTIFICATION OF SUBJECT PROPERTY:

Subdivision name or identifying title:
Residential Townhouse Development

Street which property abuts: Conklin Street, Beacon, New York 12508

Current Tax Map Designation: 331123

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 8.6 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: Highlands At Beacon LLC

If owned by a corporation, partnership or organization, please list names of persons holding over 5% interest.
Moshe Ziv

List all properties in the City of Beacon that you hold a 5% interest in:
331123

Applicant Address: Beacon Views LLC, 500 River Avenue, Suite 145, Lakewood, New Jersey 08701

Project Address: Conklin Street, Beacon New York 12508

Project Tax Grid # 331123

Type of Application Residential Townhouse Development

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, Moshe Ziv, 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

HIGHLANDS AT BEACON LLC

By: _____

Signature of Owner (Moshe Ziv)

Managing Member

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: Beacon Views Townhouse Development

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:	✓	
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.	✓	
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.	✓	
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.	✓	
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.	✓	
The names of existing streets or private roads and proposed names for new streets or private roads.	✓	
The proposed arrangement of lots, including identifying numbers and approximate area and dimensions of each.	✓	
Location, size and nature of any area proposed to be reserved for park purposes.	✓	
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.	✓	
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.	N/A	
Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board.		

*Additional Details Forthcoming

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.		
The proposed system for the provision of water supply and fire protection facilities, sewage disposal, stormwater drainage, and other utility services.		
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.		
Location of all existing and proposed monuments and other subdivision improvements.		
Such additional information as may be required by this chapter, the Zoning chapter, or the Planning Board.		

*Forthcoming

CITY OF BEACON
FINAL SUBDIVISION PLAT
AND CONSTRUCTION PLANS SPECIFICATION FORM

Name of Application: **Beacon Views Townhouse Development**

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.		
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.		
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.		
The names of all existing and proposed streets and private roads.		
The locations of all water bodies and watercourses.		
The location of all existing buildings, including identification of all buildings to be removed as a condition of plat approval.		
The total acreage included in the entire subdivision, and the identification number and acreage of all lots and land reservations within the proposed subdivision.		
Location of all existing and proposed monuments.		
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.		
Notations explaining any drainage, sight slope, street widening, park area or other reservations or easements, including any self-imposed restrictions or covenants.		
Endorsement of approval by the Dutchess County Health Department.		
Plan for the provisional delivery of mail, as approved by the local postmaster.		
Endorsement of the owner as follows: "Approved for filing: _____ _____" Owner Date		

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.		
Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board.		
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.		

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.		

*Forthcoming

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: _____ Owner Date and _____ Planning Board Chairman 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:

_____

Please see attached project narrative in connection with this Application Form

_____

_____

_____

_____

_____

Applicant/Sponsor Name: Beacon Views LLC

Signature: _____

Date: 8/21/19

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: Beacon Views LLC

Address of Applicant: 500 River Avenue, Suite 145, Lakewood, New Jersey 08701

Telephone Contact Information: (203) 313-9412

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.
Highlands at Beacon LLC	Ziv Related Companies 287 Church Street, Pine Plains, NY 12567		Deed dated March 29, 2007	Recorded in Dutchess County Clerk's Office on June 19, 2007

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.

***Copy of Contract Enclosed with Application Form**

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.

[X] **YES** [ ] **NO**

***Copy of Contract Enclosed with Application Form**

I, Yosef Kahn, being first duly sworn, according to law, deposes and says that the statements made herein are true, accurate, and complete.

BEACON VIEWS LLC
(Print) By: Yosef Kahn

(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 223-62 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, JOIN VENTURE OR OTHER BUSINESS ENTITY, EXCEPT A CORPORATION:

Name of Entity	Address of Entity
Place where such business entity was created	Official Registrar's or Clerk's office where the documents and papers creating entity were filed
Date such business entity or partnership was created	Telephone Contact Information

IF AFFIANT IS A CORPORATION:

Name of Entity Highlands At Beacon LLC	Telephone Contact Information
Principal Place of Business of Entity New York	Place and date of incorporation May 4, 2006, New York (Dutchess County)
Method of Incorporation Domestic Limited Liability Company	Official place where the documents and papers of incorporation were filed NYS Dept. of State

SECTION B. List all persons, officers, limited or general partners, directors, members, shareholders, managers, and any others with any interest 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
Moshe Ziv	287 Church Street, Pine Plains, NY 12567		Managing Member
H.D.P.I., LLC	Feldman & Associates 33 East 33RD ST STE 802 New York, NY 10016		50% ownership 2/3 Vote Single Member Moseh Ziv
GAMLA LLC			50% ownership Single Member GAMLA LTD

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.
Highlands at Beacon LLC	Ziv Related Companies 287 Church Street, Pine Plains, NY 12567		Deed dated March 29, 2007	Recorded in Dutchess County Clerk's Office on June 19, 2007

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
Highlands At Beacon LLC	Ziv Related Companies 287 Church Street, Pine Plains, NY

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.

Applicant is the 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.

***Copy of Contract Enclosed with Application Form**

SECTION J.

1. When the record owner or contract vendee is a corporation, the following additional information shall be submitted:

Name of the Corporation Beacon Views LLC	Telephone Contact Information (203) 313-9412
Principal Business Address 500 River Avenue, Suite 145, Lakewood, NJ 08701	Place and Date of Incorporation April 2, 2019, New York (Dutchess County)
Method of Incorporation Domestic Limited Liability Company	Official place where the documents and papers of incorporation were filed NYS Dept. of State

2. Please provide the following information for every incorporator, officer, director and shareholder of the corporation.

Name	Residence or business address	Telephone number
Yosef Kahn	500 River Ave., Suite 145, Lakewood, NJ	(732) 597-2046

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**

***Copy of Contract Enclosed with Application Form**

I, Yosef Kahn being first duly sworn, according to law, deposes and says that I am (Title) Managing Member, an active and qualified member of the Beacon Views 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.

BEACON VIEWS LLC

(Print) By: Joseph Kahn

(Signature)

Revised 6.7.19

CONTRACT OF SALE
VACANT LAND

This AGREEMENT ("Agreement" or "Contract") made the 2nd day of ~~May~~ July, 2019 between Highland at Beacon, LLC, a domestic limited liability company with offices at 2647 Church Street, Pine Plains, New York 12567 (hereinafter referred to as "Seller") and YK Group LLC, or its assigns, having an address at 500 River Avenue, Lakewood, New Jersey 08701, (hereinafter referred to as "Purchaser" or "Buyer").

W I T N E S S E T H:

IT IS HEREBY AGREED THAT Seller shall sell, and Purchaser shall purchase the within described premises on the following terms and conditions:

1. Real Property:

1.1 Upon and subject to the terms and conditions herein contained, Seller agrees to sell and convey to Purchaser, and Purchaser agrees to purchase from Seller, all that certain parcel of land located in the City of Beacon, County of Dutchess and State of New York consisting of approximately 8.5 acres located on 100 Conklin Avenue and bearing Tax Grid No. 130200-6056-60-3331123-0000. The Property includes (i) all tenements, hereditaments, appurtenances, easements, covenants, permits, approvals, escrows and other rights arising from or appertaining to the land; (ii) all structures, fixtures, systems, improvements, topsoil, trees, shrubbery and landscaping situated on, in or under or used in connection with the land; (iii) all agreements that are in force and effect and benefit the Property.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals the day and year first above written.

ATTEST:

By: _____

Highland at Beacon, LLC, *Seller*

By: _____

Moshe Zur as managing member

WITNESS:

_____

John C. Reilly

YK Group LLC, *Buyer*

By: _____

Yosef Kahn, Manager

As to Paragraph 4.6 personally:

_____

Moshe Zur, Individually

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals the day and year first above written.

ATTEST:

By: _____

Highland at Beacon, LLC, *Seller*

By: _____

Moshe Zur its managing member

WITNESS:

_____

John C. Reilly

YK Group LLC, *Buyer*

By: _____

Yosef Kahn, Manager

As to Paragraph 4.6 personally:

_____

Moshe Zur, Individually

ASSIGNMENT OF CONTRACT

This Assignment of Contract is made on July 10th, 2019 between YK Group, LLC, hereinafter referred to as "Assignor" and Beacon Views, LLC hereinafter referred to as "Assignee".

1. Assignor has executed a Contract of Sale on July 10th, 2019, for the Purchase of all that certain parcel of land located in the Town of Beacon, County of Duchess and State of New York consisting of approximately 8.5 acres acres located at 100 Conklin Avenue and bearing Tax Grid No. 130200-6056-60-3331123-0000.

2. Assignor, for good and valuable consideration, receipt of which is hereby acknowledged, hereby assigns to Assignee, all right, title and interest to the above described Agreement.

3. Assignee hereby agrees to assume all terms and conditions of the Agreement between Seller and Assignor.

Assignor: YK Group, LLC

By: _____

Name: Joseph Kahn

Assignee: Beacon Views, LLC

By: _____

Name: AMROM WEISS

Dutchess County Clerk Recording Page

Record & Return To :

CORBALLY GARTLAND & RAPPLEYEA
35 MARKET ST

POUGHKEEPSIE, NY 12601-

Date Recorded : 11/19/2013
Time Recorded : 4:12:00

Document # : 02 2013 6208

Received From : CORBALLY GARTLAND & RAPPLEYEA

Grantor: SAINT FRANCIS HOSPITAL
Grantee : HIGHLANDS AT BEACON LLC

Recorded In : Deed
Instrument Type : CORR

Tax District : City of Beacon

Examined and Charged As Follows :

Recording Charge :	$131.00
Transfer Tax Amount :	$0.00
Transfer Tax Number :	#1903
Red Hook Transfer Tax :	
E & A Form: N	
TP-584 : Y	

Number of Pages : 17

*** Do Not Detach This Page
*** This Is Not A Bill

J07/4290
J13/5939

County Clerk By : cth / ____
Receipt # : R64173
Batch Record : D84

Bradford Kendall
County Clerk

0220136208

sarah Doc #: 0220136208 Printed Page 1 of 17

CORRECTION ACCESS EASEMENT AND MAINTENANCE AGREEMENT

THIS CORRECTION ACCESS EASEMENT AND MAINTENANCE AGREEMENT (the "Agreement"), made as of October 29, 2013, by and between SAINT FRANCIS' HOSPITAL, POUGHKEEPSIE, NEW YORK, a New York not-for-profit corporation, with offices at 241 North Road, Poughkeepsie, New York 12601 (the "Hospital" or "the party of the first part") and HIGHLANDS AT BEACON LLC, a New York limited liability company, with an address of c/o Mr. Moshe Ziv, 2000 Broadway Suite 17-B, New York, New York 10023 ("HOB" or "the party of the second part").

WHEREAS, St. Francis Healthcare Foundation, Inc. (the "Foundation") and HOB heretofore entered into a contract of sale whereby the Foundation sold to HOB and HOB purchased certain real property from the Foundation located in the City of Beacon, County of Dutchess and State of New York (the "Foundation Property"); and

WHEREAS, the Foundation Property is adjacent to lands owned by the Hospital (the "Hospital Property"); and

WHEREAS, the approvals obtained by HOB with respect to the Foundation Property include a requirement that access be obtained by HOB over the Hospital Property to Delavan Avenue in the City of Beacon, New York; and

WHEREAS, transfer of title of the Foundation Property from the Foundation to HOB took place on March 29, 2007 and simultaneous therewith the Foundation caused the Hospital to grant HOB an access easement over the Hospital Property (the "Original Easement Agreement"); and

WHEREAS, the Original Easement Agreement was recorded in the Dutchess County Clerk's Office on June 19, 2007 as Document No. 02-2007-4290; and

WHEREAS, the Hospital and HOB have determined that the extent and purposes of the easement was not fully described in the Original Easement Agreement; and

WHEREAS, HOB and the Hospital desire to enter into this correction easement agreement both to correct the description of the real property affected thereby and to clarify the purposes for which the easement is granted.

NOW THEREFORE, in consideration of the mutual covenants and promise contained herein, the Hospital and HOB agree as follows

1. The Hospital hereby grants and conveys in perpetuity to HOB, its successors and assigns, an easement (the "Easement") for access purposes by pedestrians and vehicles over and across the Hospital Property described in Schedule A hereto and for utility purposes related solely to the performance of the obligations of HOB set forth in Exhibit A, annexed hereto and made a part hereof. HOB agrees to complete any improvements to the Easement strictly in accordance with the terms and conditions of that certain contract of sale between the Foundation,

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the Hospital and HOB dated May 16, 2006 (the "**Contract**"). For the sake of clarity, those terms and conditions are set forth on Exhibit A hereto.

2. During the term of this Agreement and as long as the Easement exists, HOB will pay the Hospital a maintenance fee based on the total cost of road maintenance and repair to Hastings Drive (aside from Capital Improvements defined as any repair in excess of $5,000 unless such Capital Improvement is within the shared area of the existing roadway on the Hospital property known as "Hastings Drive" - Hastings Drive being that portion of the easement described on Schedule A hereto delineated as such) divided by the percentage of the shared road and sidewalk area between the parties. The maintenance fee will be shared equally between Hospital and HOB. For example, if the total cost for the year is $50,000 and the shared roadway and sidewalk make up 20% of total roadway system, then, each party is responsible for 10% of the total maintenance budget or $5,000. HOB will post a $7,000 escrow with the Hospital at time of closing for the first year. The Hospital will provide an accounting of the maintenance within thirty (30) days of the calendar year end and any differences will be adjusted between the parties. After the first year, the Hospital will bill HOB on a quarterly basis. Any disputes arising from this clause shall be referred to an arbitrator.

Anything contained in this Paragraph 2 or elsewhere in this Easement Agreement to the contrary notwithstanding, at such time as this Easement shall cease to be a means of access to and from the Foundation Property, the obligation of HOB to make maintenance payments and repair payments shall cease provided that HOB has restored that portion of the Hospital Property affected by this Easement to the reasonably comparable condition that existed prior to grant hereof.

3. The Hospital agrees, provided that the payments set forth in the preceding section have been made, to maintain and repair that portion of the Easement which is presently known as Hastings Drive.

4. This grant of easement will run with the land and will be binding on and will inure to the benefit of the parties hereto, their heirs, successors, and assigns.

5. Any notice or report required under this Agreement will be sent to the parties agent hereunder at the address given after the signature of each, unless such address is changed by written notice to each person concerned, in which event the change of address given will be used for the sending of such notice or report. Any required notice will be made by certified mail, properly addressed and postage prepaid.

6. Each of the parties hereby indemnifies and holds the other harmless from any and all liability for injury to himself or herself, their employees, agents, invitees or damage to each others property when such injury or damage results from, arises out of, or is attributable to any maintenance or repair undertaken pursuant to this Agreement.

7. The party of the second part recognizes that the party of the first part is a religious corporation or an affiliate of a religious corporation operated under the auspices of the Roman Catholic Church and that the premises are identified with it by reason of the party of the first

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part's long continued ownership thereof. The party of the second part accordingly recognizes and agrees that any violation of any of the covenants in clauses (i), (ii) and (iii) below would be seriously damaging and harmful to the reputation and standing of the party of the first part as such a religious corporation.

(i) The party of the second part covenants that it shall not permit or conduct any obscene performances in violation of Section 235.00 of the New York Penal Code on the premises or permit them to be used for any obscene or pornographic purposes or activities including, without limitation, the sale or distribution of any obscene or pornographic material. The terms "obscene", "material" and "performances" shall be defined for purposes of this covenant as they are defined in Section 235.00 of the New York Penal Code.

(ii) The party of the second part covenants that it shall not use, permit or suffer the premises to be used or occupied for the purposes of performing any abortion or euthanasia procedure or providing any counseling or advice recommending abortions or euthanasia or place any signs or advertising on or about said premises that promote abortion or euthanasia.

(iii) The party of the second part covenants that it shall not use, permit or suffer the premises to be used or occupied for purposes of astrology or fortune telling or as a night club, bar or other similar establishment.

(iv) The covenants in (i), (ii) and (iii) shall run with the land and shall bind the party of the second part and the heirs, legal representatives, successors and assigns of the party of the second part; and any violation of any of such covenants shall entitle the party of the first part and its successors and assigns to a permanent injunction in any court of competent jurisdiction in the State of New York enforcing said covenant or covenants."

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8. This Agreement has been executed and delivered by the Hospital and HOB for the purpose of correcting the description and purposes of the Easement in the original access easement and maintenance agreement between the Hospital and HOB dated March 29, 2007 and recorded on June 19, 2007 as Document No. 02-2007-4290 in the Dutchess County Clerk's Office.

9. This Agreement may be executed in one or more counterparts, each of which shall constitute an original and all of which shall constitute one agreement.

This Agreement is being re-recorded for the purpose of including the Schedule A referred to herein that was erroneously omitted from the Correction Access Easement and Maintenance Agreement made as of October 29, 2013 between St. Francis Hospital, Poughkeepsie, New York and Highlands of Beacon LLC recorded on November 4, 2013 at Document No. 02-2013-5939.

[CONTINUED AND EXECUTED ON THE FOLLOWING PAGE]

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SCHEDULE A

ALL that certain piece or parcel of land lying and being in the City of Beacon, County of Dutchess and State of New York and more particularly described as follows:

BEGINNING at a point in the easterly line of Delavan Avenue as shown on a map entitled "Final Subdivision plat for St. Francis Hospital" filed March 16, 1999 as map no. 10751 at the intersection of the division line between parcels I and II as shown on said filed map 10751; thence from said point of beginning along the easterly line of Delavan Avenue N 21° 45' 00" W 77.23 feet to a point; thence through lands of the grantor herein the following courses N 27° 18' 15" E 113.64 feet to a point of curvature; thence along a curve to the right having a radius of 325.00 feet a distance of 189.43 feet to a point of tangency; thence N 60° 42' 00" E 123.64 feet and N 57° 35' 00" E 64.64 feet to a point of curvature; thence along a curve to the left having a radius of 1,180.00 feet a distance of 262.58 feet to a point of compound curvature; thence along a curve to the left having a radius of 141.20 feet a distance of 115.92 feet to a point of compound curvature; thence along a curve to the left having a radius of 40.00 feet a distance of 36.40 feet to a point of nontangency; thence N 35° 39' 29" E 50.00 feet to a point on a curve through which a radial bears N 35° 39' 29" E; thence along a curve to the right having a radius of 90.00 feet a distance of 81.90 feet to the northwesterly corner of parcel II as shown on said filed map no. 10751; thence continuing along the northwesterly line of said parcel II following a curve to the right having a radius of 191.20 feet a distance of 156.97 feet to a point of compound curvature; thence continuing along said northwesterly line of parcel II as shown on said filed map no. 10751 following a curve to the right having a radius of 1,230.00 feet a distance of 273.71 feet to a point of tangency; thence S 57° 35' 00" 66.00 feet to a point; thence through lands of St. Francis Hospital, Poughkeepsie, New York herein the following courses: S 60° 42' 00" W 125 feet to a point of curvature; thence along a curve to the left having a radius of 275 feet a distance of 160.29 feet to a point of tangency; thence S 27° 18' 15" W 97.58 feet and S 20° 10' 54" W 67.18 feet to the point and place of beginning.

[The foregoing being a portion of Hastings Drive.]

AND ALSO ALL that certain piece or parcel of land lying and being in the City of Beacon, County of Dutchess and State of New York and more particularly described as follows:

BEGINNING at a point at the intersection of the division line between parcel I and parcel II as shown on a map entitled "Final Subdivision Plat for St. Francis Hospital" filed March 16, 1999 as map no. 10751 with the westerly line of Lot 2 as shown on a map entitled "Resubdivision (Lot Line Realignment) Plat for Hudson Valley Property Rentals, Inc." filed August 11, 1999 as map no. 10853; thence from said point of beginning along the northerly line of said parcel II as shown on said filed map no. 10751 S 87° 47' 20" W 388.58 feet to a point on a curve through which a radial bears N 87° 47' 36" E; thence through lands of the grantor herein along a curve to the left having a radius of 90.00 feet a distance of 81.90 feet to a point of nontangency through which a radial bears N 35° 39' 29" E; thence continuing through lands of the grantor herein N 41° 42' 31" E 379.00 feet to a point in the westerly line of said Lot 2 as shown on filed map no. 10853; thence along same S 27° 12' 40" E 379.62 feet to the point and place of beginning.

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EXHIBIT A

For the purposes of this Exhibit, references to the "Purchaser" shall mean Highlands at Beacon LLC, its successors and assigns and references to the "Seller" shall mean St. Francis' Hospital, Poughkeepsie, New York, in its capacity as owner of the Hospital property and its successor and assigns

ADDITIONAL OBLIGATIONS OF PURCHASER: As a condition to the grant of the Access Easement, Purchaser agrees to the following terms and conditions, all to be performed at its sole cost and expense:

- The Parties agree that except as otherwise provided herein, the construction of the Access Easement shall be in accordance with the work letter annexed hereto as **Exhibit K** (Exhibit A-1 hereto).

- Purchaser shall widen the existing Hospital roadway ("**Hastings Drive**" - Hastings Drive being that internal roadway on the Hospital Property which is depicted on **Exhibit A-2** hereto) to a completed roadway width of at least twenty eight (28) feet, which includes the raised sidewalk. Purchaser shall make all necessary repairs to the bed of Hastings Drive prior to widening. Areas of existing significant pavement deterioration shall be replaced to the subbase (full depth replacement). These areas will be jointly selected by the Hospital and Purchaser. The sub-base shall be inspected and approved by the Hospital prior to the installation of the binder layer of pavement. Purchaser shall install underdrains and appropriate catch basins to drain the subbase material of Hastings Drive prior to the installation of pavement. A 3" (compacted measurement) binder course of asphalt shall be installed on the widened portion of Hastings Drive and in areas of full depth replacement. A final 1-1/2" (compacted measurement) T&L layer of asphalt wearing course shall be applied over Hastings Drive (from the intersection of Hastings Drive with Delavan Avenue to the proposed entrance to the improvements to be constructed on the Property). This final application of pavement shall be installed once construction of the proposed development is complete. The final pavement will be crowned in accordance with standard roadway construction. A minimum of a 10-ton, steel wheel, vibratory will be used to roll and compact the final application of asphalt. Epoxy striping will be applied to channelize the traffic flow in accordance with standard NYSDOT MUTCD demarcations.

- Purchaser shall provide appropriate site lighting, landscaping and utilities as reasonably agreed to by the parties in plans drawn up by the firm of Liscum, McCormack, VanVoorhis LLP ("**LMV**") or other accepted firm referred by LMV along the full length of the roadway improvements to Delavan Avenue. Purchaser shall install landscaping and/or a fence on the Hospital's side of Hastings Drive at the turn off to the Property so that the Hospital's loading dock is screened from view from the Access Easement. The landscaping and/or fence shall be subject to Seller's and Hospital's prior approval, not to be unreasonably withheld. Purchaser shall also install landscaping along the roadway installed on the Access Easement which landscaping shall be subject to Seller's and Hospital's prior approval, not to be unreasonably withheld.

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- Purchaser shall install a sidewalk from Delavan Avenue to the improvements on the Property, along the southeastern side of the road. The sidewalk is to be a flat surface sidewalk with a 3 foot buffer with curbing: 4 inch depth of concrete, 3 inch depth of crushed stone, on top of sub-base. Purchaser shall install appropriate drainage for curbing as required by applicable codes or regulations. Seller and Hospital shall approve the location and the surface material of the pathway prior to its installation.

- Purchaser shall install a raised concrete curb/island at the point of entrance to the improvements on the Property to Hastings Drive to prevent drivers from making right-hand turns onto the that portion of Hastings Drive on the Hospital Property. The intent is to prevent traffic from the Property from traveling to the rear parking area behind the main hospital building.

- Purchaser shall install and connect four (4) light poles on Hastings Drive at locations determined by the Hospital, which poles shall be similar to those currently existing on Hastings Drive. Purchaser shall install a separate meter for the electric service to such poles. The Seller shall have the right to approve the type of electric poles to be installed by Purchaser, which approval shall not be unreasonably withheld. Electricity for the lights on the Hospital's portion of Hastings Drive will be paid for by the Hospital while the electricity for any lighting on the Access Easement beyond the Hastings Drive or the Property will be paid for by Purchaser. Purchaser shall responsible for providing and installing lighting bases, poles, and luminares and for running power to the light fixtures.

- Purchaser agrees that the Access Easement shall contain an ongoing maintenance agreement provision for the update of Hastings Drive as follows: A "maintenance fee" based on the total cost of Hospital road maintenance and repair (aside from Capital Improvements defined as any repair in excess of $5,000 unless such Capital Improvement is within the shared area) divided by the percentage of the shared road and sidewalk area between the parties. The maintenance fee will be shared equally between Hospital and Purchaser. For example, if the total cost for the year is $50,000 and the shared roadway and sidewalk make up 20% of total roadway system; then, each party is responsible for 10% of the total maintenance budget or $5,000. The Purchaser will post a $7,000 escrow with the Hospital at time of closing for the first year. The Hospital will provide an accounting of the maintenance within 30 days of the calendar year end and any differences will be adjusted between the parties. After the first year, the Hospital will bill Purchaser on a quarterly basis. Any disputes arising from this clause shall be referred to an arbitrator. The maintenance fee includes snow removal for the sidewalk from Delavan Avenue to the entrance of the Property.

- Purchaser agrees to use its reasonable best efforts to have all work outlined in this Section 1A completed by December 31, 2015; provided, however, any extension of the Closing under the Contract will extend by a like number of days the period of time allotted for completion of the work outlined in Section 1A. In the event of Purchaser's failure to complete said work by such date, Purchaser will post a completion bond for a reasonable amount to complete improvements and Seller will grant an automatic

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extension of ninety (90) days. If work is not completed by the end of the extension period, Seller or Hospital has the right but not obligation to use the bond proceeds to complete the work to the specifications of the mutually approved plans.

In performing the foregoing work, Purchaser may, upon reasonable notice to Seller and Hospital and during normal business hours, temporarily enter the Hospital Property for such purposes. Purchaser agrees to make every reasonable effort to keep such disturbance to a minimum so as not to interfere with the Hospital's activities. Purchaser shall promptly restore the surface of the Hospital Property disturbed by the foregoing work to substantially the same condition that existed prior to Purchaser's entry. Purchaser shall keep the Hospital Property free from liens arising out of such activities. If any mechanic's lien shall be filed against the Property arising out of such activities, Purchaser shall have thirty (30) days thereafter, at Purchaser's sole cost and expense, to cause such lien to be discharged, by payment or by filing the bond for such purpose required by Law. Purchaser shall indemnify and hold Seller harmless from and defend Seller against any claims by third parties of liability, demands or expenses for personal injury (including loss of life) or property damage which arise directly out of entry activity on the Hospital Property by Purchaser's employees, contractors, agents or invitees in connection with the work but shall exclude patients or other individuals being transported to or from the Hospital Property. Purchaser shall ensure that its contractors performing work as outlined in Section 1A entering upon the Hospital Property will carry proper liability insurance, as specified below.

Purchaser shall, at Purchaser's sole expense, keep and maintain a policy of commercial public liability insurance which shall include coverage for Purchaser's actions upon the Hospital Property during period of performance of the foregoing work, as well as of the indemnity agreement set forth above. This insurance policy shall name Seller and the Hospital as an additional insured and afford protection in limits of not less than $1,000,000.00 for bodily injury or death in any one accident, and not less that $500,000.00 for property damage. All insurance shall be effected under standard form policies, issued by insurers of recognized responsibility authorized to do business in the State of New York and having a national rating of A-9 or better. Purchaser will deliver to Seller (c/o Mr. Jason Barlow) within ten (10) days after the Effective Date, certificates of this insurance policy and, not less than thirty (30) days prior to the expiration of the policy, a certificate of the new policy accompanied by evidence reasonably satisfactory to Seller of payment of premiums therefor. Purchaser covenants, and this insurance policy shall include, an agreement by the insurer that the policy shall not be canceled prior to the Closing or earlier termination of this Contract.

Purchaser shall perform all of the foregoing work, at its sole cost and expense, in conformance with all applicable local, state and federal laws, ordinances and regulations. In furtherance thereof, Purchaser agrees to save and hold Seller and/or Hospital harmless from any loss or claim relating to damage to any wetlands (federal or state) on the Hospital Property directly related to the construction of the foregoing improvements as well as in connection with the use of the Access Easement. Upon written request by Seller or Hospital, Purchaser shall, at Purchaser's sole cost and expense, defend and/or

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assist with any matter referred in this paragraph (if requested by Seller and/or Hospital, in the name of Seller and/or Hospital) by attorneys and other professionals approved by the Seller and/or Hospital if such claim is related to Purchaser work and/or negligence in performance of its work related to the foregoing improvements. Notwithstanding the foregoing, Seller or Hospital may, in their sole and absolute discretion, engage their own attorneys and other professionals to defend or assist them, and, at the option of Seller and/or Hospital, their attorneys shall control the resolution of any claim or proceeding. Upon demand, Purchaser shall pay or, in the sole and absolute discretion of the Seller and/or Hospital, reimburse, the Seller and/or Hospital for the payment of reasonable fees and disbursements of attorneys, engineers, environmental consultants, laboratories and other professionals in connection therewith.

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IN WITNESS WHEREOF, the parties hereto have signed this Agreement as of the date appearing above.

SAINT FRANCIS' HOSPITAL
POUGHKEEPSIE, NEW YORK

By: _____
Name: Arthur A. Nizza
Title: CEO

Address: 241 North Road
Poughkeepsie, New York 12601

HIGHLANDS AT BEACON LLC

By: _____
Name: _____
Title: _____

Address: c/o John C. Reilly, Esq.
2847 Church Street
Pine Plains, New York 12567

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IN WITNESS WHEREOF, the parties hereto have signed this Agreement as of the date appearing above.

SAINT FRANCIS' HOSPITAL
POUGHKEEPSIE, NEW YORK

By:_____
Name: _____
Title: _____

Address: 241 North Road
Poughkeepsie, New York 12601

HIGHLANDS AT BEACON LLC

By:_____
Name: Moshe Zaid
Title: Manager

Address: c/o John C. Reilly, Esq.
2847 Church Street
Pine Plains, New York 12567

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State of New York)
) ss.:
County of Dutchess)

On the 18th day of November, 2013 before me, the undersigned, personally appeared Arthur A. Nizza, 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 he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.

Lori A Scianna
Notary Public

LORI A SCIANNA
Notary Public - State of New York
NO. 01SC5045642
Qualified in Dutchess County
My Comm. Expires June 26, 2015

State of New York)
) ss.:
County of Dutchess)

On the _____ day of _____, 2013 before me, the undersigned, personally appeared _____, 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 he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

State of New York)
) ss.:
County of Dutchess)

On the _____ day of _____, 2013 before me, the undersigned, personally appeared _____, 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 he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

State of New York)
) ss.:
County of Dutchess)

On the 18th day of November, 2013 before me, the undersigned, personally appeared Moyte Tu, 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 he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

JOHN C REILLY
NOTARY PUBLIC STATE OF NEW YORK
DUTCHESS COUNTY
LIC. #02RE6183076
COMM. EXP. 03-10-2017

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INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

November 24, 2004

Mr. Mark Day, P.E.
M A. Day Engineering, P.C.
Summerlin Plaza
942 Route 376, Suite 213
Wappingers Falls, New York 12590

RE: St. Francis Hospital and Beacon Community Foundation
City of Beacon

Dear Mr. Day:

Thank you for meeting with me today to discuss the improvements which would be made on the property of St. Francis Hospital in support of the access agreement for the proposed Beacon Community Foundation Senior Housing project. The following is our summary of the improvements which would be made on the St. Francis Hospital property and constructed by Beacon Community Foundation as part of their project:

1. The new access drive to the Beacon Community Foundation project would connect to the easterly end of the hospital loop road. The access drive's intersection with the hospital loop road would be configured not to permit a right turn onto the hospital loop road. This new access drive would include appropriate provisions for vehicular ingress/egress, pedestrian access, site lighting, landscaping, and utilities.
2. Evergreen plantings would be placed on the inside grassed island of the hospital loop road in the vicinity of the proposed intersection with the new access drive. The plantings would screen the loading area of the hospital from the access drive.
3. The existing hospital road from Delavan Avenue running along the front of the hospital to the point of its intersection with the new access drive would be improved as follows:
   - Areas of significant pavement deterioration would be removed to the subbase (full depth replacement). The subbase in these areas would be checked and supplemented as required. A 3" thick layer of binder asphalt pavement would be placed in the full depth replacement areas. Any groundwater conditions revealed during this work would necessitate installation of underdrains.
   - The balance of the subject section of the hospital road would be improved with a true and leveling course of asphalt binder pavement, an average of 1½" thick.
   - The subject section of the hospital road would be widened to provide two 11-foot travel lanes and a 6-foot pedestrian/bike lane providing a uniform width of 28 feet.
   - The subject section of hospital road would be topcoated with 1 ½" of asphalt topcourse pavement. The 6-foot pedestrian/bike lane would be appropriately striped or textured to distinguish it from the vehicle travel lanes.

3 Garrett Place, Carmel, New York 10512 (845) 225-0690 Fax (845) 225-9717
www.insite-eng.com

112404md.doc

EXHIBIT A-1

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4. Additional site lighting (currently estimated at 4 poles and fixtures) would be added along the hospital road to supplement existing hospital site lighting. The Beacon Community Foundation would be responsible for the installation of the site lighting bases, poles, and luminaire. It is understood that the hospital would be responsible for running power and controlling the lighting along with their existing site lighting.

We trust the above information accurately reflects our discussions and would request your confirmation of the same.

Should you have any questions or comments regarding this information, please feel free to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By: _____
Jeffrey J. Contelmo, P.E.
Principal Engineer

JJC/amh

cc: Carl Lodes, Esq., Putnam Community Foundation
Mark Furmasoff, Transitional Builders
Mike McCormack, AIA, LMV

Insite File No. 03191.100

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EXHIBIT A-2

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INSITE
ENGINEERING, SURVEYING &
LANDSCAPE ARCHITECTURE, P.C.

PRELIMINARY WATER & WASTEWATER ENGINEERING REPORT

For

Beacon Views
City of Beacon, New York

August 27, 2019

Prepared By

Insite Engineering, Surveying & Landscape Architecture, P.C.
3 Garrett Place
Carmel, New York 10512

PAGE

1.0 INTRODUCTION 1

2.0 WATER AND WASTEWATER DESIGN FLOWS 1

3.0 PROPOSED WATER CONNECTION TO CITY OF BEACON SYSTEM 2
3.1 System Characteristics 2
3.2 Service Connection 2

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1.0 INTRODUCTION

The Beacon Views project is located on a parcel adjacent to Conklin Street and Hastings Drive. The subject property is located in the City's RD-5 District and is identified as Tax Map No. 6055-03-331123. The applicant, Beacon Views, LLC wishes to construct nine buildings containing 42 townhomes.

The project is located in the City of Beacon Water and Sewer area. Water will be provided by an 8" diameter watermain extension off the adjacent 12" diameter main through the property, with proposed individual water service line connections to each proposed building. The proposed watermain will connect to the 12" diameter existing watermain located in the easement along the east side of the parcel.

Sewer will be provided with an 8" diameter gravity main through the site that will collect service connections from each unit. The 8" diameter gravity main will discharge to a proposed sewer pump station that will discharge to the existing city sewer system on Conklin Street.

2.0 PROJECT DESIGN FLOWS AND ANTICIPATED FLOWS

Design maximum daily wastewater flows for the proposed project, Beacon Views, are based on the hydraulic loading rates given in the New York State Department of Environmental Conservation (NYSDEC) publication *Design Standards for Intermediate Sized Wastewater Treatment Works – 2014* (DEC 14). The design maximum daily water use is a conservative design flow on which the water infrastructure will be designed. This value does not represent the average daily flow which is expected to be substantially less.

The following table calculates the hydraulic loading rates and the design flow rates (gallons per day or gpd) for the proposed project.

Table 1: Beacon Views Project Design Maximum Daily Flow Rate

Proposed Use	Hydraulic Loading Rate	Design Maximum Daily Flow (gpd)
42 –Three Bedroom Townhome	330 gpd/dwelling	13,860
Total		**13,860**

The anticipated design average daily flows for the project are expected to be significantly less than the design maximum daily design flow. The design maximum daily flows represent conservative flows to ensure that the proposed sewer infrastructure is designed with an ample factor of safety. The anticipated average daily flows are based on occupancy rates and measured data for water use. Statistical data (obtained from *Rutgers University, Center for Urban Policy Research*, *Residential Demographic Multipliers*, June 2006) for the average number of occupants in rental units (based on number of bedrooms) was used to calculate the expected number of residents anticipated for the project as shown in the table below. Data from the American Water Works Association (AWWA) shows that the average in home water use is 69 gpd per person. This number is reduced to 45 gpd per person when water saving fixtures are used, which is the case for this project.

Table 2: Design Average Daily Flow

Proposed Use	Occupancy Rate	Total Anticipated Residents	Water Use Per Resident (gpd)	Water Use (gpd)
42 –Three Bedroom Townhome	3.0 people/unit	126	45	5,670
Total Anticipated Water Use (gpd)				**5,670**

As demonstrated above, through the use of water saving fixtures as required by current building code, a design maximum flow of 13,860 gpd is proposed for the project, while the design average daily flows are anticipated to be substantially less 5,670 gpd.

The peak hourly flow is calculated using a peaking factor that is based on the population of the subject project. A peaking factor of four will be used for the project based on Figure 1 from *Recommended Standards for Wastewater Facilities* (RRWW).

Peak Hourly Domestic Flow

13,860 gpd ÷ (24 hr/day) ÷ (60 min/hr) = 9.6 gallons per minute (gpm)

Peak Hourly Flow = 9.6 gpm x 4 = 38.4 gpm

Although the anticipated flows (design average daily flow) for the project are lower than the design maximum daily flows, the design maximum daily flows are used for the design of the system. This provides an additional factor of safety in the proposed design.

3.0 PROPOSED WATER CONNECTION TO THE CITY OF BEACON SYSTEM

3.1 System Characteristics

Based on review of existing system with the City of Beacon Water and Sewer Department there is an existing 12” diameter water main located in the easement that runs along the northeast portion of the subject parcel. The dynamics of the system in the project area are not yet known and will be addressed as the project advances.

3.2 Proposed Water Service Connection

The existing watermain which the project proposes to connect to is located in existing easement which bounds the project site to the east. As previously discussed, based on available mapping subsequent discussions with the City of Beacon Water and Sewer Department the existing watermain is 12-inch diameter pipe. The project proposes one (1) 8” diameter DIP watermain extension from the existing 12” diameter watermain. The water service lines to the buildings will be sized for each of the residential building units.

Two (2) centrally located fire hydrants are proposed throughout the proposed development. All hydrants will be manufactured by Mueller as required by the City.

Restrained joint connections will be provided at all pipe bends. Upon completion of the water service installation pressure testing, disinfection, and flushing will be performed in accordance with AWWA standards.

RSWW recommends that the normal working pressure not be below 35 psi, and both the RSWW and the *American Water Works Association* (AWWA) M 31 recommend that a minimum of 20 psi be maintained at all points in the water distribution system during fire flows.

4.0 PROPOSED WASTEWATER CONNECTION TO THE CITY OF BEACON SYSTEM

Sanitary sewer connection for the Beacon Views will be provided via force main connection to the gravity sewer system located east of the project site on Conklin Street.

An onsite sewer main will collect wastewater flows from each of the 42 townhomes and convey to an onsite sewer main, and then to an onsite pump station. A sewer service line will connect each building to the onsite sewer main. The proposed onsite gravity sewer main will be 8” PVC SDR 35. From the pump station, a sewer force main will convey the wastewater flows from the project site to the existing sewer manhole on the corner of Conklin Street and De Soto Avenue. Wastewater flow from each building will be conveyed by 4" diameter PVC SDR 35 sewer service lines. The service connections will be installed with a minimum slope of ¼” per foot slope meeting the requirements of DEC14. A sewer force main will connect to the existing city sewer system on Conklin Street, east of the project site. All PVC pipe will contain rubber push on gaskets at pipe connections. Cleanouts will be provided on each sewer service connection just outside of each building. Upon installation of the sewer mains will be tested with low pressure air tests in conformance with ASTM F1417-92 and the sewer manholes shall be vacuum tested

in conformance with ASTM 1244-02, per the notes on the project plans. As stated above all sewer service lines will be 4" PVC SDR 35 at a minimum of 2% slope.

2nd Floor Plan

Scale: $\frac{1}{8}$" = 1'-0"

1st Floor Plan

Scale: $\frac{1}{8}$" = 1'-0"

Lower Level Plan

Scale: $\frac{1}{8}$" = 1'-0"

REVISIONS:			
NO.	DATE	DESCRIPTION	BY

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 1 of 3 - Floor Plans: 5 Unit Building Group

Beacon Views Townhouse Development

Beacon, New York
Scale: As Noted
August 27, 2019

Owner:
Beacon Views LLC
500 River Avenue, Suite 145
Lakewood, New Jersey 08701

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site/Civil Engineer & Surveyor:
Insite Engineering, Surveying & Landscape Architecture, P.C.
3 Garrett Place
Carmel, New York 10512

2nd Floor Plan

Scale: $\frac{1}{8}$" = 1'-0"

1st Floor Plan

Scale: $\frac{1}{8}$" = 1'-0"

Lower Level Plan

Scale: $\frac{1}{8}$" = 1'-0"

REVISIONS:			
NO.	DATE	DESCRIPTION	BY

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 2 of 3 - Floor Plans: 4 Unit Building Group

Beacon Views Townhouse Development

Beacon, New York
Scale: As Noted
August 27, 2019

Owner:
Beacon Views LLC
500 River Avenue, Suite 145
Lakewood, New Jersey 08701

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site/Civil Engineer & Surveyor:
Insite Engineering, Surveying & Landscape Architecture, P.C.
3 Garrett Place
Carmel, New York 10512

Rear View

Side View

Front View

REVISIONS:			
NO.	DATE	DESCRIPTION	BY

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 3 - Renderings

Owner:
Beacon Views LLC
500 River Avenue, Suite 145
Lakewood, New Jersey 08701

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site/Civil Engineer & Surveyor:
Insite Engineering, Surveying & Landscape Architecture, P.C.
3 Garrett Place
Carmel, New York 10512

Beacon Views Townhouse Development

Beacon, New York
Scale: As Noted
August 27, 2019

BEACON VIEWS

HASTINGS DRIVE / CONKLIN STREET
CITY OF BEACON, NY

LOCATION MAP SCALE: 1" = 500'±

Applicant:
Beacon Views, LLC
500 River Avenue, Suite 145
Wakefield, NJ 08701

Record Owner:
Highlands at Beacon, LLC
2847 Church Street
Pine Plains, NY 12567

Site Data:
Tax Map No.: 6055-03-331123
Total Lot Area: 8.55 AC.

General Notes:

1. Property line shown on these plans is based upon a map entitled "Boundary and Topographic Survey of Property prepared for Beacon Community Foundation, Inc.", dated March 22, 2005 as prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.
2. Topography shown on these plans are based upon aerial photography dated April 14, 2003 and is photogrametrically compiled. Elevations shown hereon conform to the North American Vertical Datum of 1988 (N.A.V.D. 1988) as derived by GPS observation. The contour interval is 2'.
3. Site features and topography at the boundary of the access and stormwater easement where it meets Hastings Drive were field located on August 8, 2019 by Insite Engineering, Surveying & Landscape Architecture, P.C.
4. The existing wetland limit line as shown on these plans is based on a field delineation performed by Ecological Solutions, LLC on April 15, 2019 and survey located by Insite Engineering, Surveying & Landscape Architecture, P.C. The area of the wetland on the subject property is 2.55 acres.

SITE PLAN DRAWING LIST

DRAWING NO.	DRAWING NAME	SHEET NO.
CS-1	COVER SHEET	1
EX-1	EXISTING CONDITIONS & REMOVALS PLAN	2
SP-1	LAYOUT & LANDSCAPE PLAN	3
SP-2	GRADING, DRAINAGE & UTILITIES PLAN	4
SP-3	EROSION & SEDIMENT CONTROL PLAN	5
LP-1	LIGHTING PLAN	6
D-1	DETAILS	7
D-2	DETAILS	8
D-3	DETAILS	9
D-4	DETAILS	10
D-5	DETAILS	11

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

Site Plan

Approved by resolution of the Beacon Planning Board on the --th day of XXX , 2019.

Chairman, City Planning Board Date

NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING:
COVER SHEET

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	8-27-19	DRAWN BY	J.F.R.	CS-1	1 / 11
SCALE	1" = 100'	CHECKED BY	A.D.T.		

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LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING CHAIN LINK FENCE
- EXISTING EDGE OF PAVEMENT
- EXISTING WETLAND
- WL A23 — WL A24 EXISTING WETLAND FLAG
- EXISTING TREE LINE
- 190 EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- × 215.1 EXISTING SPOT GRADE
- EXISTING ITEMS TO BE REMOVED

UNIT DENSITY CALCULATIONS (RD-5)

Based on note "q" of Chapter 223-17c Schedule of Regulations for Residential Districts

Total Parcel (8.55 acres)	= 372,438 SF±
Wetland	= 111,078 SF±
Slopes 25% or Greater	= 8,500 SF±
Buildable Area	= 252,860 SF
Permitted Units @ 5,000 SF per Unit	= 50 Units
Proposed Units	= 42 Units

GRAPHIC SCALE

0 20 40 80

(IN FEET)
1 inch = 40 ft.

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(845) 225-9717 fax
www.insite-eng.com

PROJECT:
BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING:
EXISTING CONDITIONS & REMOVALS PLAN

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	8-27-19	DRAWN BY	J.F.R.	EX-1	2 / 11
SCALE	1" = 40'	CHECKED BY	A.D.T.		

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RD-5 ZONE REQUIREMENTS:

	Required/Permitted:	Provided:
Minimum Lot Area:	5,000 SF	372,438 SF±
Minimum Lot Width:	50'	440'±
Minimum Lot Depth:	100'	848'±
Minimum Yard Setbacks:		
Front:	30'	227'
Minimum Side:	10'	11'
Total of 2:	20'	N/A
Rear:	25'	35'
Minimum Distance Between Buildings on the Same Lot:	30'	30'
Maximum Building Height:	3 Stories or 35'	Less than 35'
Minimum Building Height:	1 Story and 12'	More than 12'
Maximum Building Coverage		
Multi-family:	20%	10.9%
Other uses:	30%	0.1%
Maximum No. of Dwelling Units per Building	16	5

PARKING REQUIREMENTS:

2 per Dwelling Unit + .25 Spaces per Bedroom	= 84 Spaces
Garage Spaces	= 84 Spaces
Driveway Spaces	= 60 Spaces
Visitor Spaces	= 13 Spaces
	= 157 Spaces Provided

RECREATION AREAS SUMMARY

Required SF @ 2,000 for First 20 Units Required 100 SF for Each Additional Unit	= 4,200 SF Required
Gazebo Area	= 1,800 SF
Hillside Passive Recreation Area	= 2,400
	= 4,200 SF Provided

LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING CHAIN LINK FENCE
- EXISTING EDGE OF PAVEMENT
- EXISTING WETLAND
- WL A23 / WL A24 — EXISTING WETLAND FLAG
- EXISTING TREE LINE
- PROPOSED BUILDING
- 9 — PROPOSED # OF STALLS TO BE STRIPED
- PROPOSED CONCRETE CURB
- PROPOSED EDGE OF SIDEWALK
- PROPOSED RETAINING WALL
- PROPOSED PAINTED STOPBAR
- 1 — PROPOSED SINGLE POLE SIGN
- PROPOSED GUIDE RAIL
- PROPOSED POST MOUNTED LIGHT
- PROPOSED DOOR LOCATION
- OHD — PROPOSED OVERHEAD DOOR LOCATION
- PROPOSED LANDSCAPING

PLANT LIST

QTY.	KEY	BOTANICAL/COMMON NAME	SIZE	ROOT
		SHADE TREES		
AR	AR	Acer rubrum / Swamp Maple	20'-30' HT.	B&B
QP	QP	Quercus palustris / Pin Oak	20'-30' HT.	B&B
		EVERGREEN TREES		
PG	PG	Picea glauca / White Spruce	20'-30' HT.	B&B
PS	PS	Pinus strobus / White Pine	20'-30' HT.	B&B
		FLOWERING TREES		
BN	BN	Betula nigra / River Birch	3'-4' HT.	#2 CONT./24" O.C.
CC	CC	Cercis canadensis / Eastern Redbud	3'-4' HT.	#2 CONT./24" O.C.
		SHRUBS		
BG	BG	Buxus 'Green Gem' / Green Gem Boxwood	.5'-1' HT.	#1 CONT./18" O.C.
BM	BM	Buxus 'Green Mountain' / Green Mountain Boxwood	.5'-1' HT.	#1 CONT./18" O.C.
CS	CS	Cornus sericea / Red Twig Dogwood	.5'-1' HT.	#1 CONT./18" O.C.
IV	IV	Itea virginica / Virginia Sweetspire	.5'-1' HT.	#1 CONT./18" O.C.
		PERENNIALS/GROUND COVERS		
AC	AC	Aquilegia canadensis / Columbine	.5'-1' HT.	#1 CONT./18" O.C.
BA	BA	Baptisia australis / Blue False Indigo	.5'-1' HT.	#1 CONT./18" O.C.
EP	EP	Echinacea purpurea / Purple Coneflower	.5'-1' HT.	#1 CONT./18" O.C.
MV	MV	Mertensia virginica / Virginia Bluebells	.5'-1' HT.	#1 CONT./18" O.C.
OS	OS	Osmunda regalis / Royal Fern	.5'-1' HT.	#1 CONT./18" O.C.

SIGN DATA TABLE

LOCATION NO.	TEXT	M.U.T.C.D. NUMBER	SIZE OF SIGN (s.f.)	DESCRIPTION
1	STOP	R1-1C	30" x 30"	White on Red
2	NO RIGHT TURN	X	12" x 18"	Red on White
3	NO PARKING FIRE LANE	R7-1	12" x 18"	Red on White

GRAPHIC SCALE

0 20 40 80

(IN FEET)
1 inch = 40 ft.

NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING:
LAYOUT & LANDSCAPE PLAN

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	8-27-19	DRAWN BY	J.F.R.	SP-1	3 / 11
SCALE	1" = 40'	CHECKED BY	A.D.T.		

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LEGEND

	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING CHAIN LINK FENCE
	EXISTING EDGE OF PAVEMENT
	EXISTING WETLAND
WL A23 — WL A24	EXISTING WETLAND FLAG
190	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
× 215.1	EXISTING SPOT GRADE
W	EXISTING 12"ø WATER MAIN
190	PROPOSED 10' CONTOUR
	PROPOSED 2' CONTOUR
×188.8 ×188.8	PROPOSED SPOT ELEVATION
TW 187.8 BW 184.0	PROPOSED TOP OF WALL & BOTTOM OF WALL ELEVATIONS
	PROPOSED SEWER MANHOLE
	PROPOSED DRAINAGE MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED OUTLET STRUCTURE
	PROPOSED END SECTION
GV	PROPOSED WATER GATE VALVE
	PROPOSED FIRE HYDRANT
	PROPOSED HDPE DRAINAGE PIPE
	PROPOSED 8"ø PVC SDR 35 SEWER MAIN
FM	PROPOSED 2"ø PVC SDR 21 SEWER FORCE MAIN
W	PROPOSED 8"ø DIP WATER MAIN
	PROPOSED GRASS SWALE

PERMANENT STORMWATER FACILITIES MAINTENANCE SCHEDULE

PRACTICE/FACILITY	MONTHLY	AFTER MAJOR STORM EVENTS	BI-ANNUALLY	YEARLY	EVERY 5 to 10 YEARS
GRASS & RIP RAP SWALES	Ensure contributing areas clean of debris, no evidence of erosion, & mowing performed.	Inspect for erosion, soil permeability & evidence of flow going around structures.	–	Inspect & clean accumulated sediment.	–
INFILTRATION UNITS	–	Confirm infiltrators dewater within 40 hours	Inspect & clean	Inspect outlet structures & remove accumulated sediment.	Clean isolator row per manufactures recommendations
SUBSURFACE STORMWATER COLLECTION SYSTEMS	–	–	Inspect & clean	Inspect, clean, repair and/or replace structures. Remove debris.	–
DEEP SUMP CATCH BASINS	–	–	Inspect for damage to frame and grate, and pipe inlets/outlets. Clean accumulated sediment in sump.	–	–
INFILTRATION BASINS, SEDIMENTATION BASIN	Inspect first few months after construction for eroding soils & slumpage & repair immediately	Inspect orifices, inlets & outlets for clogging, eroding soils on the basin berm & embankments, & sources of erosion; & stabilize and/or repair immediately.	Mow berms and exterior embankments Remove debris & litter from basins & outlet structures. Remove Sediment if accumulated greater than an 1"	–	Inspect for & remove accumulated sediment

Note: The party responsible for implementation of the maintenance schedule during and after construction is:
Beacon Views, LLC
500 River Avenue, Suite 145
Wakefield, NJ 08701
or any future owner/operator

GRAPHIC SCALE
0 20 40 80
(IN FEET)
1 inch = 40 ft.

NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING:
GRADING & UTILITIES PLAN

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	8-27-19	DRAWN BY	J.F.R.	SP-2	4 / 11
SCALE	1" = 40'	CHECKED BY	A.D.T.		

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LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING CHAIN LINK FENCE
- EXISTING EDGE OF PAVEMENT
- EXISTING WETLAND
- EXISTING WETLAND FLAG
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING SPOT GRADE
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED TOP OF WALL & BOTTOM OF WALL ELEVATIONS
- PROPOSED SEWER MANHOLE
- PROPOSED DRAINAGE MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED OUTLET STRUCTURE
- PROPOSED END SECTION
- PROPOSED WATER GATE VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED HDPE DRAINAGE PIPE
- PROPOSED 8"ø PVC SDR 35 SEWER MAIN
- PROPOSED 2"ø PVC SDR 21 SEWER FORCE MAIN
- PROPOSED 8"ø DIP WATER MAIN
- PROPOSED GRASS SWALE
- PROPOSED SILT FENCE
- PROPOSED CONSTRUCTION FENCE
- PROPOSED STONE RIP-RAP
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED STONE CHECK DAM
- PROPOSED TEMPORARY DIVERSION SWALE
- PROPOSED TEMPORARY SOIL STOCKPILE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED EROSION CONTROL BLANKET
- PROPOSED DRAINAGE STRUCTURE W/ INLET PROTECTION

GRAPHIC SCALE

0 20 40 80

(IN FEET)
1 inch = 40 ft.

NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING:
EROSION & SEDIMENT CONTROL PLAN

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	8-27-19	DRAWN BY	J.F.R.	SP-3	5 / 11
SCALE	1" = 40'	CHECKED BY	A.D.T.		

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

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LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING CHAIN LINK FENCE
- EXISTING EDGE OF PAVEMENT
- EXISTING WETLAND
- EXISTING WETLAND FLAG
- EXISTING TREE LINE
- PROPOSED BUILDING
- PROPOSED # OF STALLS TO BE STRIPED
- PROPOSED CONCRETE CURB
- PROPOSED EDGE OF SIDEWALK
- PROPOSED RETAINING WALL
- PROPOSED PAINTED STOPBAR
- PROPOSED SINGLE POLE SIGN
- PROPOSED GUIDE RAIL
- PROPOSED POST MOUNTED LIGHT
- PROPOSED DOOR LOCATION
- PROPOSED OVERHEAD DOOR LOCATION
- PROPOSED LANDSCAPING

LIGHT CONTOUR LEGEND

0.1	0.10 Foot Candles
0.5	0.50 Foot Candles
1	1.00 Foot Candles
2	2.00 Foot Candles

* Photometric calculations shown on plan are in foot candles.

LIGHTING NOTES:

1. All lighting shall be as noted on the plan or approved equal.
2. Style and finish of all luminaires to be selected by owner and approved by the Planning Board.
3. Pole mounted lights will be on photocells and will run from dusk to dawn.
4. Building design shall include building mounted lighting and under canopy lighting, which is not depicted on this plan.

LUMINAIRE SCHEDULE

Symbol	Qty	Catalog Number	Description	Lamp	Mounting Height
✱	10	AUCL2 P50 30K AS BK L4 5 HSS	Utility Arlington FCO LED 2, P50, 3000K, Type 4 Optic with House Side Shield	LED	12' – 0"

HOLOPHANE®
LEADER IN LIGHTING SOLUTIONS

AUCL2

Utility Arlington Series Luminaire Full Cutoff LED2

Mechanical
- Heavy grade A360 cast aluminum (< 1% copper)
- Tool-less access with a spring-loaded latch
- Hidden hinge door allowing the door to swing open and remain open
- Optional internal or external NEMA twist lock photocontrol receptacle. Housing contains a tempered glass window to allow light to reach the cell for internal versions.
- Mount to slip-fitter that will accept 3" high by 2-7/8" to 3-1/8" O.D. pole tenon
- Decorative top cover contains stainless steel hinge which secures entry the LED optical chamber
- Polyester power coat paint to ensure maximum durability
- Finish meets 5,000-hour salt spray testing
- Holophane and RAL Classic finishes.

Electrical
- All surge protection meets ANSI/IEEE C62.41.2 10kV/10kA.
- Standard SPD meets 10kV/5kA per ANSI C136.2-2015.
- 20KV Option meets 20kV/10kA per ANSI C136.2-2015.
- Quick disconnect connectors for ease of installation and maintenance.
- Three pole terminal block is standard, with optional prewired leads for ease of installation
- LED drivers meet maximum total harmonic distortion (THD) of 20%, >0.90 Power Factor and are ROHS compliant. Minimum operating temperature is -40C. Electronic driver has an estimated minimum life of 100,000 hours at 25°C.

Optical
- IP65 rated optical compartment
- LED circuit board located in the top cover
- Asymmetric or Symmetric full cutoff distributions
- 2700K, 3000K, 4000K, and 5000K CCT
- 70CRI Standard

Control Options
- Field Adjustable Output (AO) module - Onboard device that adjusts the light output and input wattage to meet site specific requirements. The AO module is preset at the factory to position number 8 (see chart).
- Wireless remote control for monitoring performance and/or maintenance of the system – ROAM
- Factory Programmed Driver (FPDxx) - Customize lumen output prior to manufacturing and still enables control leads so other options can also be used
- Long Life Photocontrols (PCEL) - 20 Year Life
- 3 and 7 pin photocontrol receptacles internally (P3, P7) or externally (P3E, P7E) mounted
- Part-night dimming (PND) enables luminaire to monitor and adjust 50% lumens based on season and geographic location, 8-day rolling average

Testing/Compliance
- UL 1598 - Wet Locations Safety Listing
- Suitable for ambient temperatures -40°C to 40°C
- Designlights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check with the DLC Qualified Products List at www.designlights.org/QPL for updated list

Manufacturing
- Manufactured in Crawfordsville, Indiana, ARRA compliant
- 100% electrical testing on all luminaires before shipment
- Ten (10) years minimum experience in manufacturing LED based products

Warranty
5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_Conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25°C
Specifications subject to change without notice.

LED · cULus LISTED · DLC · IP RATED

GRAPHIC SCALE
0 20 40 80
(IN FEET)
1 inch = 40 ft.

NO.	DATE	REVISION	BY

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(845) 225-9717 fax
www.insite-eng.com

PROJECT: BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING: LIGHTING PLAN

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	8-27-19	DRAWN BY	J.F.R.	LP-1	6 / 11
SCALE	1" = 40'	CHECKED BY	A.D.T.		

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LIGHT POLE BASE DETAIL

(N.T.S.)

NOTE:

1. MIN. SLOPE SHALL BE 1.00% FOR PARKING LOT.
2. CROWNED ROADWAYS SHALL MAINTAIN A 2.00% CROWN IN DIRECTION SHOWN ON PLAN.
3. PAVEMENT LOCATED WITHIN THE NYS ROUTE 9D RIGHT-OF-WAY SHALL HAVE 1 ½" ASPHALT CONCRETE (NYSDOT ITEM 402.126102 SUPERPAVE), 2 ½" ASPHALT CONCRETE (NYSDOT ITEM 402.196902 SUPERPAVE), 3 ½" ASPHALT CONCRETE (NYSDOT ITEM 402.376902) AND 12" BASE (NYSDOT ITEM 304.11).

SITE PAVEMENT DETAIL

(N.T.S.)

CONCRETE SIDEWALK DETAIL

(N.T.S.)

NOTES:

1. ALL WOOD TO BE SEASONED NO.1 DOUGLAS FIR, SOUTHERN PINE OR OTHER APPROVED STRUCTURAL LUMBER.
2. ALL WOOD TO BE TREATED WITH AN APPROVED WOOD PRESERVATIVE SUITABLE FOR INSTALLATION IN AND ADJACENT TO GROUND SURFACES.

WOOD GUIDE RAIL DETAIL

(N.T.S.)

CONCRETE CURB DETAIL

(N.T.S.)

NOTE: INSTALLATION TO CONFORM WITH CURRENT NYSDOT STANDARDS AND SPECIFICATIONS.

PAINTED STOP BAR DETAIL

(N.T.S.)

SIDEWALK CURB RAMP

(N.T.S.)

SIDEWALK CURB RAMP

(N.T.S.)

NOTE: FOR HANDICAP PARKING SIGNAGE, SIGNS SHALL BE INSTALLED AT A CLEAR HEIGHT OF BETWEEN 5'-0" AND 7'-0" ABOVE GRADE OF PARKING SPACE AND SUCH THAT SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.

TRAFFIC SIGN DETAIL

(N.T.S.)

TRUNCATED DOME DETAIL

(N.T.S.)

TRUNCATED DOME DETECTABLE WARNING FIELD NOTES:

1. The detectable warning field shall consist of raised truncated domes with a nominal diameter of 0.9 inches, a nominal height of 0.2 inches, and a nominal spacing of 2.35 inches on center in accordance with the most recent version of ANSI ICC A117.1.
2. The details provided are not drawn to scale. The quantity of domes depicted on the detectable warning field (the domes and the entire 24 inch level surface) is for illustration only.
3. The size of the detectable warning field shall be 24 inches in the direction of travel and shall extend the full width of the curb ramp or flush surface, exclusive of side flares.
4. Detectable warnings shall be located so that the edge of the warning field nearest to the roadway or street surface is 6 inches to 9 inches from the edge of the roadway/street, or from the front of the dropped curb, where a dropped curb continues across the bottom of the sidewalk curb ramp.
5. Domes shall be aligned on a square grid in the predominant direction of travel.
6. The detectable warning field shall be yellow.

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PROJECT:

BEACON VIEWS

CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING:

DETAILS

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	8-27-19	DRAWN BY	J.F.R.	D-1	7 / 11
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NOTES:

1. STRIP VEGETATION AND ORGANIC SOIL FROM WALL AND GEOSYNTHETIC ALIGNMENT.
2. BENCH CUT ALL EXCAVATED SLOPES.
3. DO NOT OVER EXCAVATE UNLESS DIRECTED BY SITE ENGINEER TO REMOVE UNSUITABLE SOIL.
4. SITE ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN STANDARDS AND PARAMETERS.
5. LEVELING PAD SHALL CONSIST OF COMPACTED COARSE SAND OR CRUSHED GRAVEL, 6" THICK MIN.
6. CONTRACTOR MAY OPT FOR A LEAN CONCRETE PAD. CONCRETE PAD SHALL BE UNREINFORCED, 3" THICK MAXIMUM.
7. MINIMUM EMBEDMENT OF WALL BELOW FINISH GRADE SHALL BE 6".
8. FOR UNITS TO BE EMBEDDED, COMPACT FILL IN FRONT OF UNITS AT THE SAME TIME FILL BEHIND UNITS IS COMPACTED.
9. DRAINAGE AGGREGATE SHALL BE INSTALLED DIRECTLY BEHIND THE WALL WITHIN 12" OF THE TOP OF THE WALL. DRAINAGE AGGREGATE SHALL NOT EXTEND BELOW FINAL GRADE IN FRONT OF WALL.
10. COMPACTION SHALL BE TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY.(ASTM D-698).
11. COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF TESTS SHALL BE DETERMINED BY THE SITE SOILS ENGINEER.
12. COMPACTION WITHIN 3 FT. OF WALL SHALL BE LIMITED TO HAND OPERATED EQUIPMENT.
13. GEOSYNTHETIC SHALL BE PLACED WITH STRONGEST DIRECTION PERPENDICULAR TO WALL. FOLLOW GEOSYNTHETIC MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.
14. CONTRACTOR SHALL DIRECT SURFACE RUNOFF TO AVOID DAMAGING WALL WHILE UNDER CONSTRUCTION.
15. ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT, OR TURF SHALL BE INSTALLED IMMEDIATELY AFTER WALL IS COMPLETED.
16. FOLLOW APPLICABLE PROVISIONS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.
17. MODULAR BLOCK RETAINING WALL AT STEPS TO BE INSTALLED VERTICALLY (NO BATTER)
18. MODULAR BLOCK RETAINING WALL MANUFACTURER TO SUPPLY CONSTRUCTION DETAILS OF WALL SIGNED AND SEALED BY AN ENGINEER LICENSED IN THE STATE OF NEW YORK.

MODULAR BLOCK RETAINING WALL DETAIL

(N.T.S.)

NOTE:
PROVIDE STAKING AND GUYING FOR TREES PLANTED ON SLOPES GREATER THAN 3H:1V, IN EXPOSED, WINDY AREAS AND AS SPECIFIED BY LANDSCAPE ARCHITECT. GUY WIRES AND STAKES SHALL BE REMOVED WITHIN TWELVE (12) MONTHS OF PLANTING.

- TWO (2) STRANDS NO. 12 GAUGE GALVANIZED ANNEALED STEEL WIRE TWISTED IN NEW RUBBER HOSE.
- TWO (2) STRANDS, DOUBLE WRAPPED AND TWISTED.
- TRUNK FLARE TO BE COMPLETELY EXPOSED. SET 1" TO 2" ABOVE ESTABLISHED FINISH GRADE.
- PROVIDE 3" LAYER OF MULCH AS SPECIFIED OVER ENTIRE WATERING SAUCER AT ALL TREE PITS OR OVER ENTIRE TREE BED. DO NOT PLACE MULCH WITHIN 3" OF TRUNK.
- FORM 4" HIGH TOPSOIL LIP AROUND EACH TREE PIT TO FORM WATERING SAUCER.
- TOPSOIL MIX BACKFILL.
- CUT AND REMOVE BINDING FROM TRUNK AND FROM AROUND AS MUCH OF BALL AS POSSIBLE. CUT AND REMOVE BURLAP AT UPPER 1/3 OF ROOT BALL. IF SYNTHETIC WRAP IS USED, REMOVE COMPLETELY.
- SIT ROOT BALL ON EXISTING UNDISTURBED SOIL OR ON COMPACTED SUBGRADE. DO NOT DIG DEEPER THAN THE DEPTH OF ROOT BALL.
- CEDAR STAKES, MIN. 3" DIA., LENGTH VARIES. 3 STAKES @ 120 DEG. PER MAJOR TREE. STAKES SHALL CLEAR ROOT BALL.

TREE PLANTING DETAIL

(N.T.S.)

PERENNIAL / ORNAMENTAL GRASS PLANTING DETAIL

(N.T.S.)

NOTE:
PROVIDE STAKING AND GUYING FOR TREES PLANTED ON SLOPES GREATER THAN 3H:1V, IN EXPOSED, WINDY AREAS AND AS SPECIFIED BY LANDSCAPE ARCHITECT. GUY WIRES AND STAKES SHALL BE REMOVED WITHIN TWELVE MONTHS OF PLANTING.

EVERGREEN TREE PLANTING DETAIL

(N.T.S.)

NOTE:
CONTRACTOR SHALL HAVE OPTION OF PLANTING SHRUBS IN INDIVIDUAL PITS AS SHOWN OR IN UNINTERRUPTED EXCAVATION FOR ENTIRE BED. IN EITHER CASE BACKFILL WITH TOPSOIL MIX AS SPECIFIED.

SHRUB PLANTING DETAIL

(N.T.S.)

GENERAL SITE SEEDING NOTES:

1. All proposed seeded areas to receive 4" min. depth of topsoil. Soil amendments and fertilizer application rates shall be determined based on specific testing of topsoil material.
2. Upon final grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation cover in combination with suitable mulch as follows:
   - select seed mixture per drawings and seeding notes.
   - fertilizer applied at the manufacturer's recommended rate using Lesco 10-0-18 (no phosphorous) fertilizer or equivalent.
   - mulch: salt hay or small grain straw applied at a rate of 90 lbs./1000 s.f. or 2 tons/acre, to be applied and anchored according to New York State Standards and Specifications for Erosion and Sediment Control, August 2005.
   - If the season prevents the establishment of a permanent vegetation cover, the disturbed areas will be mulched with straw or equivalent.
3. The seed mixes as specified on these drawings are as follows:
   A. Seed Mix for lawn areas and mow strip along roads at a rate of 100 lbs. per acre:

Kentucky Bluegrass	20%
Creeping Red Fescue	40%
Perennial Ryegrass	20%
Annual Ryegrass	20%

   B. Seed Mix for Wildflower Meadow areas and SSTS area as shown on the drawings at a rate of 15 lbs. per acre:
      Low-Growing Wildflower & Grass Mix (ERNMX-156) from Ernst Conservation Seeds of Meadville, PA.
   C. Seed Mix for Meadow areas as shown on the drawings, including tops of berms and backslopes of embankments of stormwater basins at a rate of 25 lbs. per acre:
      New England Conservation/Wildlife Mix from New England Wetland Plants, Inc. of Amherst, MA.
   D. Seed Mix #2 for areas as shown on the drawings and slope areas 2:1 at a rate of 35 lbs. per acre:
      New England Erosion Control/Restoration Mix (for Dry Sites) from New England Wetland Plants, Inc. of Amherst, MA.
   E. Seed Mix for Wildflower areas as shown on the drawings at a rate of 23 lbs. per acre:
      New England Wildflower Mix from New England Wetland Plants, Inc. of Amherst, MA.
   F. Seed Mix for dry slopes along road sides as shown on the drawings at a rate of 35 lbs. per acre:
      New England Roadside Matrix Upland Seed Mix by New England Wetland Plants, Inc. of Amherst, MA.
   G. Seed Mix for wet meadows and low areas along road side as shown on drawings at a rate of 35 lbs. per acre:
      New England Roadside Matrix Wet Meadow Seed Mix by New England Wetland Plants, Inc. of Amherst, MA.
4. See Drawing D-X "Site Details" for Stormwater Basin seeding.

GENERAL PLANTING NOTES:

1. All proposed planting beds to receive a 12" min. depth of topsoil. Soil amendments and fertilizer application rates shall be determined based on specific testing of topsoil material.
2. Any new soils added will be amended as required by results of soil testing and placed using a method that will not cause compaction.
3. No fertilizer shall be added in stormwater basin plantings. Nutrient requirements to be met by incorporation of acceptable organic matter.
4. All plant material to be nursery grown.
5. Plants shall conform with ANSI Z60.1 American Standard for Nursery Stock in all ways including dimensions.
6. Plant material shall be taken from healthy nursery stock.
7. All plants shall be grown under climate conditions similar to those in the locality of the project.
8. Plants shall be planted in all locations designed on the plan or as staked in the field by the Landscape Architect.
9. The location and layout of landscape plants shown on the site plan shall take precedence in any discrepancies between the quantities of plants shown on the plans and the quantity of plants in the Plant List.
10. Provide a 3" layer of shredded pine bark mulch (or as specified) over entire watering saucer at all tree pits or over entire planting bed. Do not place mulch within 3" of tree or shrub trunks.
11. All landscape plantings shall be maintained in a healthy condition at all times. Any dead or diseased plants shall immediately be replaced "in kind" by the contractor (during warranty period) or project owner.
12. See Drawing D-X "Site Details" for Stormwater Basin plantings.

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PROJECT:
BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING:
DETAILS

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	8-27-19	DRAWN BY	J.F.R.	D-2	8 / 11
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CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD

FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

SILT FENCE DETAIL

(N.T.S.)

NOTES:
1. INSTALL BARRIER AS SHOWN TO PREVENT COMPACTION OF SOIL AROUND ROOTS BY CONSTRUCTION EQUIPMENT.
2. OPTIONAL: 2" X 6" WOOD FRAMING BUILT AS SQUARE AROUND TREE, AS ALTERNATIVE.

TREE PROTECTION DETAIL

(N.T.S.)

TREE PROTECTION NOTES:

1. Trees to be preserved in proximity to disturbance areas shall be marked in the field by the Landscape Architect prior to start of construction.
2. Install tree protection measures prior to start of site clearing & construction.
3. No construction equipment shall be parked and no earth or construction materials shall be stockpiled or stored under the canopy of trees to be preserved.
4. During tree removal operations associated with construction, do not damage adjacent trees to remain. Lower limbs and tree trunks, do not drop them.
5. Carefully tie back any tree branches that conflict with construction equipment.
6. Where trenching for utilities is required within a root zone, tunneling under and around roots shall be by hand digging. If roots 3" or larger are encountered immediately adjacent to the location of new construction and relocation is not practical, the roots shall be hand pruned under the supervision of a Certified Arborist or Landscape Architect to 6" back from the new construction limit. All exposed roots to receive appropriate treatment prior to backfilling.
7. If tree protection fencing to protect the root zone is not possible, six to eight inches of wood chip mulch and 3/4 inch plywood shall be placed over the entire affected root zone area to prevent soil compaction.
8. Any tree damaged during construction activities must be immediately repaired by a qualified arborist at no additional cost to the owner.

NOTES:

1. AREA CHOSEN FOR STOCKPILE LOCATION SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE IMMEDIATELY SEEDED WITH K31 PERENNIAL TALL FESCUE.
4. ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED ON THE DOWNGRADIENT SIDE.

TEMPORARY SOIL STOCKPILE DETAIL

(N.T.S.)

INSTALLATION NOTES

1. STONE SIZE – USE 3" STONE
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.)
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 OCCUR.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS 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 RIGHT OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. 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

(N.T.S.)

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL EXCAVATION WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY, AND STABILIZE WITH PERMANENT SEEDING
5. MAXIMUM DRAINAGE AREA = 1 ACRE

EXCAVATED DROP INLET PROTECTION DETAIL

(N.T.S.)

REQUIRED EROSION CONTROL SWPPP CONTENTS:

Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-15-002), all Stormwater Pollution Prevention Plan's (SWPPP) shall include erosion and sediment control practices designed in conformance with the most current version of the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." Where erosion and sediment control practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of required SWPPP components is provided in accordance with Part III.B.1a-1 of General Permit GP-0-15-002:

a. Background information: The subject project consists of the construction of (9) townhome buildings with appurtenances and utilities.

b. Site map / construction drawing: These plans serve to satisfy this SWPPP requirement.

c. Description of the soils present at the site: Onsite soils located within the proposed limits of disturbance consist of Bernardston Silt Loam (BaB), Canandagua Silt Loam (Ca), and Nassau-Cardigan Complex (NwC) as identified on the Soil Conservation Service Websoil Survey. These soil types belong to the Hydrologic Soil Group "C/D" and "D".

d. Construction phasing plan / sequence of operations: The Construction Sequence and phasing found on these plans provide the required phasing. A Construction Sequence and Erosion and Sediment Control Maintenance Schedule has been provided. The Sedimentation and Erosion Control Notes contained hereon outline a general sequence of operations for the proposed project. In general all erosion and sediment control facilities shall be installed prior to commencement with land disturbing activities, and areas of disturbance shall be limited to the shortest period of time as practicable.

e. Description of erosion and sediment control practices: This plan, and details / notes shown hereon serve to satisfy this SWPPP requirement.

f. Temporary and permanent soil stabilization plan: The Sedimentation and Erosion Control Notes and Details provided heron identify temporary and permanent stabilization measures to be employed with respect to specific elements of the project, and at the various stages of development.

g. Site map / construction drawing: This plan set serves to satisfy this SWPPP requirement.

h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices: The details, Erosion and Sediment Control Notes, and Erosion and Sediment Control Maintenance Schedule serve to satisfy this SWPPP requirement.

i. An inspection schedule: Inspections are to be performed twice weekly and by a qualified professional as required by the General Permit GP-0-15-002. In addition the NYSDEC Trained Contractor shall perform additional inspections as cited in the Erosion and Sediment Control Notes.

j. A description of pollution prevention measures that will be used to control litter, construction chemicals and construction debris: In general, all construction litter / debris shall be collected and removed from the site. The general contractor shall supply either waste barrels or dumpster for proper waste disposal. Any construction chemicals utilized during construction shall either be removed from site daily by the contractor or stored in a structurally sound and weatherproof building. No hazardous waste shall be disposed of onsite, and shall ultimately be disposed of in accordance with all federal, state and local regulations. Material Safety Data Sheets (MSDS), material inventory, and emergency contact numbers shall be maintained by the general contractor for all construction chemicals utilized onsite. Finally, temporary sanitary facilities (portable toilets) shall be provided onsite during the entire length of construction, and inspected weekly for evidence of leaking holding tanks.

k. A description and location of any stormwater discharges associated with industrial activity other than construction at the site: There are no known industrial stormwater discharges present or proposed at the site.

l. Identification of any elements of the design that are not in conformance with the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." All proposed elements of this SWPPP have been designed in accordance with the "New York Standards and Specifications for Erosion and Sediment Control."

	SWALE A (< 5 AC.)	SWALE B (5-10 AC.)
C	1'	1'
D	4'	6'

CROSS SECTION

PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.
9. STABILIZATION SHALL BE AS PER THE CHART BELOW:

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	A (5 AC. OR LESS)	B (5-10 AC.)
1	0.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE OR EXCELSIOR
3	5.1-8.0%	SEED WITH JUTE OR EXCELSIOR; SOD	LINED RIP-RAP 4-8" RECYCLED CONCRETE EQUIVALENT
4	8.1-20%	LINED 4-8" RIP-RAP	ENGINEERED DESIGN

TEMPORARY SWALE DETAIL

(N.T.S.)

REQUIRED POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS:

1. Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-15-002), all construction projects needing post-construction stormwater management practices shall prepare a SWPPP that also includes practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual ("Design Manual"). Where post-construction stormwater management practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of SWPPP components is provided in accordance with Part III.B.2a-g and III.B.3:

a. Identification of all post-construction stormwater management practices to be constructed as part of the project; This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.

b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice; This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.

A Stormwater Modeling and Analysis Report including pre-development conditions, post-development conditions, the results of the stormwater modeling, a summary table demonstrating that each practice has been designed in conformance with the sizing criteria, identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required. The required analysis will be provided in a Preliminary Stormwater Pollution Prevention Plan.

c. Soil testing results and locations. This SWPPP requirement will be provided in the Preliminary Stormwater Pollution Prevention Plan.

d. Infiltration testing results. This SWPPP requirement will be provided in the Preliminary Stormwater Pollution Prevention Plan.

e. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice. The Permanent Stormwater Facilities Maintenance Schedule provided on these plans serves to satisfy this requirement.

2. Enhanced Phosphorus Removal Standards – Beginning on September 30, 2008, all construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the most current version of the technical standard, New York Stormwater Management Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a – 2.f above: These standards do not apply to the subject project.

EROSION & SEDIMENT CONTROL NOTES:

1. The Erosion and Sediment Control Plan is only to be referred to for the installation of erosion and sediment control measures. For all other construction related activities, including, but not limited to, grading and utilities, refer to the appropriate drawings.
2. Each contractor or subcontractor responsible for soil disturbance shall have a NYSDEC trained contractor onsite during soil disturbing activities. The NYSDEC trained contractor will be responsible to comply with the stormwater pollution prevention plan and for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction. The NYSDEC trained contractor shall sign a certification statement required by GP-0-15-002.
3. All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.
4. Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unprotected soil shall be exposed at any one time, unless prior authorization is granted by the MS4.
5. When land is exposed during development, the exposure shall be kept to the shortest practical period of time, but in no case more than 7 days after the construction activity in that portion of the site has ceased. Disturbance shall be minimized in the areas required to perform construction.
6. All construction vehicles shall be kept clear of the watercourses and wetland control areas outside the areas of proposed development. Silt fence and orange construction fence shall be installed in the areas where the grading is in close proximity of the watercourses or wetland control areas.
7. The stabilized construction entrance and silt fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork.
8. All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded with a rye grass mixture having a quick germination time.
9. Any graded areas not subject to further disturbance or construction traffic shall, within 7 days of final grading, receive permanent vegetation cover in combination with a suitable mulch. Refer to "Site Seeding Notes" for additional detail and application rate.
10. Grass seed mix may be applied by either mechanical or hydroseeding methods. Turf establishment shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1".
11. Cut or fill (all) slopes steeper than 3:1 shall be stabilized immediately after grading with a rolled erosion control product (RECP) such as, Curlex I Single Net Erosion Control Blanket, or approved equal.
12. Paved roadways shall be kept clean at all times.
13. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
14. All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
15. Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.
16. Erosion and sediment control measures shall be inspected and maintained on a daily basis by the NYSDEC Trained Contractor. to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the site engineer.
17. Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the trained contractor or site engineer.
18. Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.
19. All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.
20. The NYSDEC Trained Contractor shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.
21. As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer and the Town Engineer shall be installed by the contractor.
22. Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.
23. After completion of the site improvements, the owner will assume responsibility for maintenance of the access drive, parking lot, drainage system and stormwater facilities. Each spring the paved areas shall be cleaned to remove the winter accumulation of traction sand. After this is completed all drain inlet and catch basin sumps should be cleaned. All pipes should be checked for debris and blockage and cleaned as required. During the cleaning process, the drain inlets, catch basins and pipes should be inspected for structural integrity and overall condition. Repairs and/or replacements should be made as required.
24. Inspection of the stormwater basin should be performed every 6 months and after large storm events. These inspections should, at a minimum, check the outlet pipes for blockage and the general overall integrity of the basin and appurtenances.
25. Maintain basin vegetation including removal of trees and replacement of vegetation that should die. Remove any litter which accumulates as necessary. Typically, the accumulated silt will be required to be removed every 10 to 20 years. Any accumulated silt shall be removed from the stormwater basins once the site has been stabilized.
26. Refer to the Stormwater Pollution Prevention Plan for additional details regarding long-term maintenance of the storm drainage facilities.

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

MONITORING REQUIREMENTS				MAINTENANCE REQUIREMENTS	
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	–	Inspect	Inspect	Clean/Replace	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	–	Inspect	Clean/Replace Stone and Fabric	Remove
DUST CONTROL	Inspect	–	Inspect	Mulching/ Spraying Water	N/A
*VEGETATIVE ESTABLISHMENT	–	Inspect	Inspect	Water/Reseed/ Remulch	Reseed to 80% Coverage
INLET PROTECTION	–	Inspect	Inspect	Clean/Repair/ Replace	Remove
SOIL STOCKPILES	–	Inspect	Inspect	Mulching/ Silt Fence Repair	Remove
SWALES	–	Inspect	Inspect	Clean/Mulch/ Repair	Mow Permanent Grass/Replace/ Repair Rip Rap
CHECK DAMS	–	Inspect	Inspect	Clean/Replace Stones/Repair	Clean/Replace Stones/Repair
CONCRETE DRAINAGE STRUCTURES	–	Inspect	Inspect	Clean Sumps/ Remove Debris/ Repair/Replace	Clean Sumps/ Remove Debris/ Repair/Replace
DRAINAGE PIPES	–	Inspect	Inspect	Clean/Repair	Clean/Repair
ROAD & PAVEMENT	–	Inspect	Inspect	Clean	Clean

* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas area permanently stabilized.

Note: The party responsible for implementation of the maintenance schedule during and after construction is:

BEACON VIEWS, LLC
500 RIVER AVENUE
WAKEFIELD, NEW JERSEY 08701

and/or the current owner(s) of the subject property.

SOIL RESTORATION REQUIREMENTS[1,2]

(ONSITE SOILS WITHIN THE LIMIT OF DISTURBANCE BELONG TO THE HYDROLOGIC SOIL GROUP (HSG) C/D)

TYPE OF SOIL DISTURBANCE	SOIL RESTORATION REQUIREMENT		COMMENTS/EXAMPLES
No soil disturbance	Restoration not permitted		Preservation of Natural Features
Minimal soil disturbance	Restoration not required		Clearing and grubbing
Areas where topsoil is stripped only on change in grade	~~HSG A & B~~ ~~Apply 6" of topsoil.~~	HSG C & D Aerate[1] and apply 6" of topsoil	Protect area from any ongoing construction activities
Areas of cut or fill	~~HSG A & B~~ ~~Aerate and apply 6" of topsoil~~	HSG C & D Apply full Soil Restoration[4]	
Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls.)	Apply full Soil Restoration[3] (de-compaction and compost enhancement)[1]		
Areas where runoff reduction and/or infiltration practices are applied	Restoration not required, but may be applied for appropriate practices.		Keep construction equipment from crossing these areas. To protect newly installed practices from any ongoing construction activities construction a single phase operation fence area.
~~Redevelopment projects~~	~~Soil restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area.~~		

1. Table taken from Chapter 5 of the "New York State Stormwater Management Design Manual"
2. Items struck out on the table are items that are not applicable to this project.
3. Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which functions like a mini-subsoiler.
4. Per "Deep Ripping and Decompaction, DEC 2008"
5. During periods of relatively low to moderate subsoil moisture, the disturbed soils are returned to rough grade and the following Soil Restoration steps applied:
   - 5.1. Apply 3 inches of compost over subsoil.
   - 5.2. Till compost into subsoil to a depth of at least 12 inches using a cat-mounted ripper, tractor-mounted disc, or tiller, mixing, and circulating air and compost into subsoils.
   - 5.3. Rock-pick until uplifted stone/rock materials of four inches and larger size area cleaned off the site.
   - 5.4. Apply topsoil to a depth of 6 inches.
   - 5.5. Vegetate as required by Erosion & Sediment Control Note #9.
   - 5.6. Tilling should not be performed within the drip line of any existing trees or over any utility installations that are within 24 inches of the surface
6. Compost shall be aged, from plant derived materials, free of viable weed seeds, have no visible free water or dust produced when handling, pass through a half inch screen and have a pH suitable to grow desired plants.

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NO.	DATE	REVISION	BY

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PROJECT:
BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING:
DETAILS

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
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SCALE	AS NOTED	CHECKED BY	A.D.T.		

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SEWER TESTING PROCEDURES

TESTS FOR NON-PRESSURE PIPELINES FOR TRANSPORT OF SEWAGE

The leakage shall be determined by exfiltration, infiltration or low pressure air.

A. Exfiltration Testing

1. Exfiltration tests shall be made by filling a section of pipeline with water and measuring the quantity of leakage.
2. The head of water at the beginning of the test shall be at least 2 feet above the highest pipe within the section being tested.
   a. Should groundwater be present within the section being tested, the head of water for the test shall be 2 feet above the hydraulic gradient of the groundwater.
   b. Should the requirement of 2 feet of water above the highest pipe subject any joint at the lower end of the test section to a differential head of greater than 11.5 feet, another method of testing shall be employed.

B. Infiltration Testing

1. Infiltration tests will be allowed only when the water table gauges determine the groundwater level to be 2 feet or more above the highest pipe of the section being tested.
2. Infiltration test shall be made by measuring the quantity of water leaking into a section of pipeline.
3. Measurement of the infiltration shall be by means of a calibrated weir constructed at the outlet of the section being tested.

C. Allowable Leakage for Non-Pressure Pipelines

1. The allowable leakage (exfiltration or infiltration) for non-pressure pipelines shall not exceed the following in gallons per 24 hours per inch of diameter per 1000 feet of pipe:

Type of Pipe	Leakage
Ductile iron – mechanical or push-on joints	100
Polyvinyl chloride, thermal plastic or fiberglass with rubber joints	100
Cast iron soil pipe	0

2. Regardless of the above allowable leakage, any spurting leaks detected shall be permanently stopped.

D. Low Pressure Air Testing

1. Air testing for acceptance shall not be performed until the backfilling has been completed.
2. Low pressure air tests shall conform to ASTM F1417-92, Section 8.2.2, Time-Pressure Drop Method for a 0.5 psi drop, except as specified herein and shall not be limited to type or size of pipe.
3. All sections of pipelines shall be cleaned and flushed prior to testing.
4. The air test shall be based on the starting pressure of 3.5 to 4.0 psi gauge. The time allowed for the 0.5 psi drop in pressure, measured in seconds, will be computed based on the size and length of the test section by the Engineer.
   a. When groundwater is present, the average test pressure of 3 psig shall be above any back pressure due to the groundwater level.
   b. The maximum pressure allowed under any condition in air testing shall be 10 psig. The maximum groundwater level for air testing is 13 feet above the top of the pipe.
5. The equipment required for air testing shall be furnished by the Contractor and shall include the necessary compressor, valves, gauges and plugs to allow for the monitoring of the pressure, release of pressure and a separable test gauge.
   a. The test gauge shall be sized to allow for the measuring of the 0.5 psig loss allowed during the test period and shall be on a separate line to the test section.

E. Deflection Testing

1. Deflection testing shall be performed 30 days after backfilling. The test shall be made by passing a ball or cylinder no less then 95% of the pipe diameter through the pipe. The test shall be performed without mechanical pulling devices.

F. Manhole Testing

1. General
   a. Each manhole shall be tested by vacuum testing.
2. Vacuum testing shall be performed after backfilling in accordance with the latest revision of ASTM C1244-11 as follows:
   a. The test head shall be placed at the top of the manhole in accordance with the manufacturer's recommendations.
   b. A vacuum of 10 in. of mercury shall be drawn on the manhole, the valve on the vacuum line of the test head closed, and the vacuum pump shut off. The time shall be measured for the vacuum to drop to 9 in. of mercury.
   c. The manhole shall pass if the time for the vacuum reading to drop from 10 in. of mercury to 9 in. of mercury meets or exceeds the values indicated below:

Minimum Test Times for Various Manhole Diameters in Seconds:

Depth (ft)	Diameter (inches) 48	60
	Time (seconds)	
8 or less	20	26
10	25	33
12	30	39
14	35	46
16	40	52
18	45	59
20	50	65

   d. If the manhole fails the initial test, necessary repairs shall be made by an approved method. The manhole shall then be retested until a satisfactory test is obtained.

Dutchess County Department of Health Notes:

Standard Notes for Projects with Central Water & Sewer

1. The design, construction and installation shall be in accordance with this plan and generally accepted standards in effect at the time of construction which include:
   - "New York State Design Standards for Intermediate Sized Wastewater Treatment Systems", NYSDEC
   - "Recommended Standards for Sewage Treatment Works, (Ten States)."
   - "Recommended Standards for Water Works, (Ten States)."
   - "New York State Department of Health and Dutchess County Environmental Health Services Division policies, procedures and standards."
   - "Dutchess County and New York State Sanitary Codes."
   - "Dutchess County Environmental Health Services Division Certificate of Approval letter."
2. This plan is approved as meeting the appropriate and applied technical standards, guidelines, policies and procedures for arrangement of sewage disposal and water supply facilities.
3. Upon completion of the facilities, the finished works shall be inspected, tested, and certified complete to the DC EHSD by the New York State licensed Professional Engineer supervising construction. No part of the facilities shall be placed into service until accepted by the DC EHSD.
4. Approval of any plan(s) or amendment thereto shall be valid for a period of five (5) years from the date of approval. Following the expiration of said approval, the plan(s) shall be re-submitted to the Commissioner of Health for consideration for re-approval. Re-submission or revised submission of plans and/or associated documents shall be subject to compliance with the technical standards, guidelines, policies and procedures in effect at the time of the re-submission.
5. No cellar, footing, floor, garage, cooler or roof drains shall be discharged into the sewage collection system.
6. All buildings shall be constructed at an elevation high enough to ensure gravity flow to the sewage collection system.
7. All required Erosion & Sediment Control and Stormwater Pollution Prevention Water Quality & Quantity Control structures, permanent and temporary, are shown on the plans.
8. The DC EHSD shall be notified sixty days prior to any change in use; use changes may require re-approval by the DC EHSD.
9. No buildings are to be occupied and the new water system shall not be placed into service, until a "Completed Works Approval" is issued under section 5-1.22(d) of Part 5 of the New York State Sanitary Code (10NYCRR5).
10. No buildings are to be occupied and the new wastewater collection system shall not be placed into service until, a "Certificate of Construction Compliance" is issued under section 19.7 of Article 19 of the Dutchess County Sanitary Code.
11. All service lines are the responsibility of the owner up to the property line. The water and sewer companies shall be responsible for all valves and pipes which are not on the owner's property.
12. The retaining wall / slope stabilization details shown on the project plans are not certified for structural integrity by the DC EHSD.
13. The undersigned owners of the property hereon state that they are familiar with this map, its contents and its legends and hereby consent to all said terms and conditions as stated hereon.

_____ Owner Signature _____ Date

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SANITARY SEWER / SANITARY SERVICE LINE TRENCH DETAIL

(N.T.S.)

SANITARY MANHOLE DETAIL

(N.T.S.)

MANHOLE TROUGH DETAIL

(N.T.S.)

NOTE: THE WATER TRENCH SHALL BE COMPLETELY BACKFILLED WITH NYSDOT ITEM 304.12 WITHIN THE NYSDOT RIGHT OF WAY

WATERMAIN/SERVICE LINE TRENCH DETAIL

(N.T.S.)

WATER LINE CROSSING UNDER SANITARY SEWER LINE OR STORM DRAIN LINE

NOTES:
1. WHEN 18" SEPARATION CANNOT BE MAINTAINED, THE WATER LINE SHALL BE ENCASED IN CONCRETE (SEE DETAIL) ONLY WITH PRIOR APPROVAL OF THE DESIGN ENGINEER AND DEPARTMENT OF HEALTH.
2. PROVIDE PIPE AND FITTING RESTRAINT AS REQUIRED.
3. THE 18" SEPARATION APPLIES TO WATER MAINS AND WATER SERVICE CONNECTIONS.

WATER LINE CROSSING DETAIL

(N.T.S.)

HYDRANT NOTES:
1. PUMPER OUTLET SHALL FACE STREET;
2. HOSE OUTLETS SHALL BE PARALLEL TO STREET.
3. 1-1/2" STONE SHALL BE PLACED AROUND THE HYDRANT FROM THE BOTTOM OF THE TRENCH, BUT AT LEAST 6" BELOW THE BASE OF THE HYDRANT TO 6" ABOVE THE WASTE OPENING AND TO A DISTANCE OF 12" AROUND THE ELBOW.
4. IF GROUND WATER IS ENCOUNTERED WITHIN 7' OF SURFACE, THEN HYDRANT DRAINS SHOULD BE PLUGGED. WHEN THE DRAINS ARE PLUGGED, THE BARRELS MUST BE PUMPED DRY AFTER USE DURING FREEZING WEATHER. WHERE HYDRANT DRAINS ARE NOT PLUGGED, A GRAVEL POCKET OR DRY WELL SHALL BE PROVIDED UNLESS THE NATURAL SOILS WILL PROVIDE ADEQUATE DRAINAGE. HYDRANT DRAINS SHALL NOT BE CONNECTED TO OR LOCATED WITHIN 10 FEET OF SANITARY SEWERS OR STORM DRAINS.

HYDRANT DETAIL

(N.T.S.)

THRUST BLOCK SCHEDULE										
PIPE SIZE	CAP/TEE		22 1/2°		45°		90°		W
	L	D	L	D	L	D	L	D	
6"	2'	1.5'	2'	1.5'	2'	1.5'	2'	1.5'	1.5'

THRUST BLOCK DETAILS

(N.T.S.)

DUCTILE IRON PIPE WATER TESTING PROCEDURES

TESTS ON PRESSURE PIPING FOR TRANSPORT OF WATER

A. Hydrostatic Pressure Test
Hydrostatic testing shall be performed in accordance with the revision of AWWA C600, Section 5.2, "Hydrostatic Testing".

1. Test pressure shall be as scheduled or, where no pressure is scheduled, shall be 150 psi, or 1.25 times the static operating pressure, whichever is higher.
2. Test pressure shall be held on the piping for a period of at least 2 hours, unless a longer period is requested by the Engineer.
3. The test medium shall be water.

B. Hydrostatic Leakage Test

1. The leakage test shall be conducted concurrently with the pressure test.
2. The rate of leakage shall be determined at 15-minute intervals by means of volumetric measurement of the makeup water added to maintain the test pressure. The test shall proceed until the rate of leakage has stabilized or is decreasing below an allowable value, for three consecutive 15-minute intervals. After this, the test pressure shall be maintained for at least another 15 minutes.
   a. At the completion of the test, the pressure shall be released at the furthermost point from the point of application.
3. All exposed piping shall be examined during the test and all leaks, defective material or joints shall be repaired or replaced before repeating the tests.
4. The allowable leakage will be determined by the following formula.

$$Q = \frac{LD\sqrt{P}}{148{,}000}$$

Where:
Q = quantity of makeup water, in gallons per hour
L = length of pipe tested, in feet
D = nominal diameter of the pipe, in inches
P = average test pressure during the hydrostatic test, in pounds per square inch (gauge)

5. Regardless of the above allowables, any visible leaks shall be permanently stopped.
6. The test medium shall be water.

C. Disinfection
Prior to placing the water main into service, the new pipe shall be cleaned and disinfected in accordance with the latest revision of AWWA C651, Section 4.4.3, "The Continuous Feed Method". The "Tablet Method" will not be accepted.

1. All work under this section shall be performed in the presence of the Design Engineer, and a representative of the public health authority having jurisdiction, as required.
2. Chlorination shall be scheduled such that sampling and flushing will be performed during normal daylight working hours. The contractor shall provide acceptable backflow prevention on all supply water to prevent any potential backflow contamination or cross connection.
3. Chlorination shall be by the use of a solution of water and liquid chlorine, calcium hypochlorite or sodium hypochlorite and the solution shall be contained in the pipe or structure as specified.
4. Prior to chlorination, all dirt and foreign matter shall be removed by a thorough cleaning and flushing of the pipeline or structure.
5. The chlorine solution shall be introduced to pipelines through corporation stops placed in the horizontal axis of the pipe, to structures by means of tubing extending directly into the structure, or other approved methods.
6. The application of the chlorine solution shall be by means of a controlled solution feed device. The rate of chlorine solution flow shall be in such proportion to the rate of water entering the pipe or structure that the resulting free chlorine residual shall be between 25 and 50 parts per million (PPM) or milligrams per liter (mg/l).
7. The chlorine treated water shall be retained in the pipe or structure at least 24 hours, unless otherwise directed. During the retention period, all valves and hydrants within the treated sections shall be operated.
8. The chlorine residual shall be not less than 10 PPM (or mg/l) at any point in the pipe or structure at the end of the 24-hour retention period.
9. When making repairs to, or when specified, structures and portions of pipelines shall be chlorinated by a concentrated chlorine solution containing not less than 200 PPM (mg/l) of free chlorine. The solution shall be applied with a brush or sprayed on the entire inner surface of the empty pipes or structures. The structures disinfected shall remain in contact with the strong chlorine solution for at least 30 minutes.
10. After the required retention of chlorinated water in the pipe or structures, they shall be thoroughly flushed until the replacement water shall, upon test, both chemically and bacteriological, be proven equal to water quality served by the public from the existing water supply system.
11. The disposal of chlorinated water from any pipe or structure shall be such that it will not cause damage to any vegetation, fish, or animal life.
12. The Contractor shall make all arrangements for the testing of water quality by an approved independent laboratory. Two acceptable bacteriological test, taken at least 24 hours apart, shall be collected from the new water main. At least 1 set of samples must be collected from every 1,000 LF of the new water main, plus one set from the end of the line and at least one set from each branch. The results for all tests shall be forwarded to the Design Engineer and the public health authority having jurisdiction.
13. All water quality requirements shall be fulfilled prior to the passage of any water through the new system to a public supply or the use of the new system.

TAPPING SLEEVE, VALVE, AND THRUST BLOCK DETAIL

(N.T.S.)

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PROJECT:
BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING:
DETAILS

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	8-27-19	DRAWN BY	J.F.R.	D-4	10 / 11
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EXTENDED DETENTION DRY PRETREATMENT BASIN 1.1 EDB OUTLET STRUCTURE (OS 1.1 EDB) DETAIL

(N.T.S.)

END SECTION DETAIL

(N.T.S.)

18" X 18" YARD DRAIN DETAIL

(N.T.S.)

CATCH BASIN DETAIL

(N.T.S.)

DRAINAGE LINE TRENCH DETAIL

(N.T.S.)

SIDE DRAIN INLET DETAIL

(N.T.S.)

(STRUCTURE AND GRATE TO BE DESIGNED FOR H-20 LOADING)

1.1 INF BASIN CONCRETE OUTLET WEIR AND RIP RAP EMERGENCY OVERFLOW DETAIL

(N.T.S.)

LEVEL SPREADER DETAIL

(N.T.S.)

DRAINAGE MANHOLE DETAIL

(N.T.S.)

STORMWATER INFILTRATION SYSTEM 1.2 INF (NYSDEC DESIGN I-4) DETAIL

(N.T.S.)

Notes:

A. Use a headloss K factor of 1.04 for hydraulic gradeline calculations
B. Sump depths shown are minimums. Additional depth can be added for site specific capacities
C. Multiple inlet pipes allowed
D. Drops allowed
E. Inlet invert elevations should be the same or higher than the outlet invert elevation. Inlet can be up to 12" lower than outlet if pretreatment area is omitted but 12" must be added to sump depth to maintain overall treatment volume
F. Solid Cover shown. HydroStorm can be designed with an inlet grate if required.
G. Oil capacities given are spill capacities. Oil should be removed from the unit once an oil depth of 2" or more is measured in the inner chamber
H. Sediment depths are maximum holding capacities and not recommended capacities for regular maintenance. Maintenance is recommended annually or once every 2 years.
I. Capacities are rounded down to nearest 5 gal or ft3
J. Base Extensions not provided on standard units. Extensions can be provided if required due to groundwater/buoyancy concerns at the request of the engineer of record

HydroStorm by Hydroworks, LLC
Patent Pending
www.hydroworks.com
888-290-7900

HydroStorm Dimensions / Capacities

Model	Diameter (ft) (9)	Sump Depth (ft) (11)	Inner Chamber (ft) (5)	Max. Pipe (in) (8)	Volume (gal)	Oil (gal)	Sediment (ft3)
HS 7	7	6	3.5	42	1725	410	140
HS 8	8	7	4	48	2630	615	220
HS 9	9	7.5	4.5	54	3565	850	295
HS 10	10	8	5	60	4700	1130	385
HS 12	12	9.5	6	72	8035	1875	665

HYDROWORKS HYDROSTORM HYDRODYNAMIC SEPARATOR DETAIL

(N.T.S.)

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INSITE
ENGINEERING, SURVEYING &
LANDSCAPE ARCHITECTURE, P.C.

PRELIMINARY STORMWATER POLLUTION PREVENTION PLAN

Prepared For

BEACON VIEWS

City of Beacon, New York

August 27, 2019

STATE OF NEW YORK
JEFFREY J. CONTELMO
061931
LICENSED PROFESSIONAL ENGINEER

Applicant Information:

Beacon Views, LLC
500 River Avenue
Wakefield, New Jersey 08701

Note: This report in conjunction with the project plans make up the complete Preliminary Stormwater Pollution Prevention Plan.

Prepared by:
Insite Engineering, Surveying & Landscape Architecture, P.C.
3 Garrett Place
Carmel, New York 10512

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FIGURES
Figure 1: Location Map
Figure 2: Pre-Development Drainage Map
Figure 3: Post-Development Drainage Map

1.0 INTRODUCTION

1.1 Project Description

The proposed project is located off of Conklin Street in the City of Beacon. The site is approximately 8.6 acres and is identified as Tax Map No. 6055-03-331123. The parcel is located in the RD-5 zoning district. The subject parcel and surroundings are shown on Figure 1. The project proposes nine (9) multi-family townhouse buildings and associated appurtenances. The primary access to the site will be off Hastings Drive, through the adjoining the former St. Francis Hospital property. An emergency access drive will be provided to the north, through the adjacent parcel. It is proposed to capture and treat the stormwater runoff associated with the proposed improvements.

1.2 Existing Stormwater Runoff Conditions

The subject project is located on one tax parcel off of Conklin Street, immediately north of Hastings Drive. The existing ground cover on the site is characterized as a mixture of woods and open grassed meadow areas. The property generally drains from north to south down to the onsite wetland.

The hydrologic soils groups for the project consists of C/D soils. The designations of the onsite soils located within the proposed limits of disturbance consist of Bernardston Silt Loam (BeB), Canandigua Silt Loam (Ca), and Nassau-Cardigan Complex (NwC) as identified on the Soil Conservation Service Web Soil Survey. The soils boundaries are shown on Figure 2 and 3 of this report.

As previously stated, the stormwater runoff from the existing property generally drains from north to south towards the existing onsite wetland. Approximately 20 acres of offsite stormwater runoff is conveyed through the subject property from offsite runoff. The analysis included in the project SWPPP utilizes one design line, within the onsite wetland, to assess the stormwater runoff from the property and any potential impacts from development to the existing natural resources on the property. The Pre-Development Drainage Map (Figure 2 of this report) shows the location of Design Line 1. The contributing area to Design Point 1 is identified as subcatchment PRE.

1.3 Proposed Stormwater Runoff Conditions

As previously stated, the proposed application includes the construction of nine (9) multi-family town house buildings, asphalt driveway, parking areas and associated appurtenances. Stormwater mitigation for the newly created impervious surfaces will be provided in the form of proposed stormwater management practices (SMP's) discussed further in later sections of this report. The proposed SMP's will be designed to capture and treat runoff from the impervious surfaces associated with the proposed buildings, driveway, parking areas and pedestrian walkways.

It is proposed to maintain the existing drainage patterns on the site to the maximum extent practical in the proposed condition to minimize the impact to the existing downstream wetland. Stormwater treatment for the subject project will be accomplished with several different practices including a hydrodynamic separator and extended detention basin for pretreatment, an infiltration basin and subsurface infiltration system. The stormwater management practices have been sized to capture and treat the Water Quality Volume from the developed area.

The stormwater runoff from the proposed development will be captured in a collection system and conveyed to the stormwater management practices. Pretreatment of the stormwater runoff will be provided with a hydrodynamic separator upstream of the proposed subsurface infiltration system and an extended detention basin upstream of the proposed infiltration basin. The extended detention basin has been designed to act as a flow splitter, discharging the water quality volume to the infiltration basin for

treatment, while detaining and bypassing the larger storm events. The contributing area to the extended detention basin and infiltration basin is shown as subcatchment 1.1S. A flow splitter is proposed upstream of the subsurface infiltration system to discharge the water quality volume to the practice for treatment and bypass the larger storm events. Pretreatment for the subsurface infiltration system will be provided by a hydrodynamic separator upstream of the practice and downstream of the flow splitter. The contributing area to the subsurface infiltration system is shown as subcatchment 1.2S. The subcatchments are shown in Figure 3 of this report.

As shown in the following sections of this report, the stormwater quality and quantity for the proposed development have been mitigated to the maximum extent practicable to minimize the impacts to the existing conditions of the downstream, onsite wetland. Additionally, an erosion and sediment control plan has been prepared in accordance with the *New York State Standards and Specifications for Erosion and Sediment Control* to protect the existing waterbodies and drainage features during construction activities and in the post development condition.

2.0 STORMWATER MANAGEMENT

The proposed stormwater management system for the Beacon Views has been designed to meet the requirements of local, city, and state stormwater ordinances and guidelines, including but not limited to those of the City of Beacon and the NYSDEC.

Since the subject project proposes the disturbance of more than one (1) acre, coverage under the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit No. GP-0-15-002 is required. In order to meet the requirements, set forth by this permit, the latest edition of the NYSDEC *New York State Stormwater Management Design Manual* (NYSSMDM) was referenced for the design of the proposed stormwater management system. The NYSSMDM specifies five design criteria that are discussed in detail below. They are Runoff Reduction Volume, Water Quality Volume, Stream Channel Protection Volume, Overbank Flood Control, and Extreme Flood Control. The first two of the requirements relates to treating water quality, while the later pertain to stormwater quantity (peak flow) attenuation.

To address stormwater quantity requirements of the NYSDEC, the “HydroCAD” Stormwater Modeling System,” by HydroCAD Software Solutions LLC in Tamworth, New Hampshire, was used to model and assess the peak stormwater flows for the subject project. HydroCAD is a computer aided design program for modeling the hydrology and hydraulics of stormwater runoff. It is based primarily on hydrology techniques developed by the United States Department of Agriculture, Soil Conservation Service (USDA, SCS) TR-20 method combined with standard hydraulic calculations. For details on the input data for the subcatchments and design storms, please refer to Appendices B and C.

The input requirements for the HydroCAD computer program are as follows:

Subcatchments (contributing watershed/sub-watersheds)

- Design storm rainfall in inches
- CN (runoff curve number) values which are based on soil type and land use/ground cover
- Tc (time of concentration) flow path information
- Watershed Area in Acres

Stormwater Basins

- Surface area at appropriate elevations
- Flood elevation
- Outlet structure information

The precipitation values and intensity duration frequency (IDF) curves for the 1-Year, 10-Year, 100-Year 24-hour design storm events and rainfall distribution curves utilized for this report were obtained from the information provided by Northeast Regional Climate Center (NRCC) and the Natural Resources Conservation Service (NRCS) which is available online at *www.precip.eas.cornell.edu.* The values provided for all design storms analyzed have been listed below.

Table 2.0.1 – Precipitation Values for Corresponding Design Storms

Design Storm	24-Hour Rainfall
1-Year	2.6”
10-Year	4.7”
100-Year	8.3”

The CN (runoff curve number) values utilized in this report were referenced from the USDA, SCS publication *Urban Hydrology for Small Watersheds*. The following is a summary of the various land uses/ground covers and their associated CN values utilized in this report.

Table 2.0.2 – Project Ground Cover and Associated Curve Numbers (CN)

Land Use/Ground Cover	CN Value
Woods, D Soil	77
Meadow, D Soil	78
>75% Grass Cover, D Soil	80
Impervious Surface	98

2.1 NYSDEC Runoff Reduction Volume, RR_v

The Runoff Reduction Volume (RR_v) criterion is intended to replicate pre-development hydrology by maintaining preconstruction infiltration, peak flow runoff, discharge volume, as well as minimizing concentrated stormwater flow. As stated in Chapter 4 of the Design Manual, RR_v may be treated with standard SMP’s with RR_v capacity sized in accordance with the Chapter 4/6 requirements, or with green infrastructure practices (GIP’s) sized in accordance with the requirements set forth in Chapter 5. Runoff reduction is achieved when runoff from a site is captured, directed to a SMP or a GIP, infiltrated to the ground, reused, or removed by evapotranspiration, so it does not contribute to the stormwater discharge from the site. The goal for each site is to reduce the entire WQ_v (100%) through the implementation of GIP’s and standard SMP’s with RR_v capacity. However, if 100% of the WQ_v cannot be reduced by applying a combination of green infrastructure techniques and standard SMP’s with RR_v capacity, “they must, at a minimum, reduce runoff from a percentage of the impervious area constructed as part of the project using the green infrastructure techniques and standard SMPs with RR_v capacity. In addition, the designer must provide justification in the SWPPP that evaluates each of the green infrastructure techniques listed in Table 3.2 and identify the specific site limitations that make application of the technique(s) infeasible.”

For a calculation of the Initial WQ_v / RR_v, the RR_v minimum, the RR_v / WQ_v required, and the RR_v provided, refer to Appendix A. In calculating the RR_v minimum, onsite soils belongs to the Hydrologic Soil Groups D. These soil groups have a specific reduction factor of 0.20. The table below summarizes the RR_v requirements for the site, as calculated in Appendix A. As can be seen in the following table the RR_v provided exceeds the WQv/RR_v required:

Table 2.1.1 Runoff Reduction Volume Summary

Drainage Area	Initial WQ_v / RR_v (c.f.)[1]	RR_v Minimum (c.f.)	WQ_v RR_v Required (Initial WQ_v / RR_v minus RR_v provided through GIP with Area Reduction) (c.f.)	RR_v Provided (c.f.)	Percentage of WQ_v Treated
1.1S	9,558	1,140	9,558	9,650	101%
1.2S	1,531	193	1,531	1,917	125%

[1] Refer to Appendix A for Initial WQ_v Calculations

As noted in the table above the project has provided greater than the RR_v requried. By implementing GIP's to the greatest extent practicable, and exceeding the RR_v required, the NYSDEC RR_v requirement has been addressed.

2.2 NYSDEC Water Quality Volume, WQ_v

The stormwater management practices have been designed in accordance with the *Performance Criteria* (Chapter 4) of the NYSSMDM. As outlined in Chapter 4, the WQv is the runoff volume produced during the 90% storm. The proposed infiltration practices have been designed to treat the WQv in accordance with the NYSSMDM. The following equation, per Chapter 4, was used to determine the water quality volume for the 90% storm for each of the contributing areas to the treatment practices:

The water quality volume shall be $WQ_v = \frac{(P)(R_v)(A)}{12}$

Where,

WQ_v = water quality volume (in acre-feet)
P = 90% Rainfall Event Number
R_v = 0.05 + 0.009(I), where I is percent impervious cover
A = site area in acres

The stormwater management practices have been designed in accordance with the *Performance Criteria* (Chapter 4) of the NYSSMDM. As outlined in Chapter 4, the WQv is the runoff volume produced during the 90% storm. The proposed infiltration practices have been designed to treat the WQv in accordance with the NYSSMDM. The equation above, per Chapter 4, was used to determine the water quality volume for the 90% storm for each of the contributing areas to the treatment practices:

Table 2.2.1 - Water Quality Volume Calculation Summary

Subcatchment	WQ_v[1] (cf)
1.1S	9,558
1.2S	1,531

[1] For detailed calculations see Appendix A

There are two infiltration practices (NYSDEC Design I-2 and I-4) proposed as part of the development of the site to meet both the WQv and RRv requirements as well as provide the necessary peak flow attenuation to satisfy the overbank and extreme overbank flood control requirements. The infiltration practices are designed as an offline practice with a flow splitter upstream of the practice. The infiltration practices are sized to treat the WQv from the contributing area. Testing has yet to be performed in the areas of the infiltration practices. As such the infiltration

rate used in the HydroCAD stormwater modeling of the infiltration practices was kept conservative to an infiltration rate of 1-inch per hour. Testing will be performed to confirm the design of the infiltration practices.

The infiltration practices are sized to treat at a minimum the peak WQv from the contributing areas, while allowing portions of larger storms to discharge from the infiltration practice through an overflow pipe or weir as allowed by the NYSSMDM. The overflow pipe and weir are set to allow the full WQv storage within the practices. The calculation of the WQv is performed per the methods of the NYSSMDM in Appendix A. Pretreatment has been provided for the proposed subsurface infiltration system in the form of a hydrodynamic separator. The peak flow for the 1-year storm was used to size the hydrodynamic separator used as pretreatment for the infiltration units. The data (including capacities) for the hydrodynamic separators are included in Appendix I. The table below summarizes the WQv-year peak flows and hydrodynamic separate flow rates.

Table 2.2.2 – Pretreatment Hydrodynamic Separator Summary

Subcatchment	WQv[1] Peak Flow (C.F.S).	Hydrodynamic Separator Model	Hydrodynamic Separator Capacity (C.F.S.)
1.2S	1.19	HydroStorm HS 5	1.37 CFS

[1] For detailed calculations see Appendix A

As noted in the table above the capacity of the hydrodynamic separator exceeds the calculated WQv peak flow. The hydrodynamic separator has an internal bypass capable of passing the flows from the contributing areas from the larger storm events.

Pretreatment for the proposed infiltration basin will be provided through a dry extended detention basin. The basin has been sized to provide greater than 24-hour extended detention of the center-of-mass of the 1-year, 24-hour storm event from the constributing area.

2.3 NYSDEC Stream Channel Protection Volume, CP_v

The Stream Channel Protection (CP_v) criterion is intended to protect stream channels from erosion and is accomplished by the 24-hour extended detention of the one-year, 24-hour storm event. As shown in Appendix C, the proposed stormwater management systems have been designed to fully infiltrate the stormwater runoff from the 1-year, 24-hour design storm, therefore the CPv has been met for the proposed areas of new development. It should also be noted that the extended detention basin (1.1 EDB) has been designed to provide greater than 24-hour extended detention of the center-of-mass of the 1-year, 24-hour storm event, therefore also meeting the CRv requirement.

2.4 NYSDEC Overbank Flood Control, Q_p, and Extreme Flood Control, Q_f

The Overbank Flood Control (Q_p) requirement is intended to prevent an increase in the frequency and magnitude of out-of-bank flooding events generated by urban development. Overbank control requires storage to attenuate the post-development 10-year, 24-hour peak discharge to pre-development rates. The Extreme Flood Control (Q_f) requirement is intended to prevent the increased risk of flood damage from large storm events, maintain the boundaries of the pre-development 100-year flood plain, and protect the physical integrity of stormwater management practices. Extreme flood control requires storage to attenuate the post-development 100-year, 24-hour peak discharge to pre-development rates. As shown in Table 2.4.1 attenuation for both the 10-year and 100-year 24-hour storms has been provided thus satisfying the Q_p and Q_f requirements. The following table summarizes the pre and post development peak flows expected for the proposed project.

Table 2.4.1– Pre and Post-Development Peak Flows

24-HOUR DESIGN STORM PEAK FLOWS (c.f.s.)				
	10-YEAR (Overbank Flood Control)		100-YEAR (Extreme Flood Control)	
	Pre	Post	Pre	Post
Design Line 1	43.1	43.0	93.6	92.0

As shown in the above table the peak flows discharging to the design line in the proposed condition have been mitigated to slightly below the existing condition levels. Since the rate of runoff in the proposed condition is less than the existing condition, the proposed onsite stormwater improvements will mitigate the potential impact of the peak flows downstream in the final condition.

3.0 STORMWATER CONVEYANCE SYSTEM

The stormwater collection and conveyance systems for the project will consist of catch basins, drain inlets, drainage manholes, swales and HDPE pipe. The system will be sized to collect and convey at minimum the 100-year, 1-hour design storm using the Rational Method. The Rational Method is a standard method used by engineers to develop flow rates for sizing collection systems. The Rational Method calculates flows based on a one-hour design storm. Calculations shall be provided in future reports.

4.0 EROSION AND SEDIMENT CONTROL

Erosion and sediment control should be accomplished by four basic principles: diversion of clean water, containment of sediment, treatment of dirty water, and stabilization of disturbed areas. Diversion of clean water should be accomplished with swales. This diverted water should be safely conveyed around the construction area as necessary and discharged downstream of the disturbed areas. Sediment should be contained with the use of silt fence at the toe of disturbed slopes and excavation of the temporary sediment basin. Disturbed areas should be permanently stabilized within 14 days of final grading to limit the required length of time that the temporary facilities must be utilized. The owner will be responsible for the maintenance of the temporary erosion control facilities.

4.1 Temporary Erosion and Sediment Control Facilities

Temporary erosion and sediment control facilities should be installed and maintained as required to reduce the impacts to off-site properties. The owner will be required to provide maintenance for the temporary erosion and sediment control facilities. In general, the following temporary methods and materials should be used to control erosion and sedimentation from the project site:

- Stabilized Construction Entrance
- Silt Fence Barriers
- Storm Drain Inlet Protection

A stabilized construction entrance should be installed at the entrance to the site as shown on the plan. The design drawings will include details to guide the contractor in the construction of this entrance. The intent of the stabilized construction entrance is to prevent the “tracking” of soil from the site. Dust control should be accomplished with water sprinkling trucks if required. During dry periods, sprinkler trucks should wet all exposed earth surfaces as required to prevent the transport of air-borne particles to adjoining areas.

Siltation barriers constructed of geosynthetic filter cloth should be installed at the toe of all disturbed slopes. The intent of these barriers is to contain silt and sediment at the source and inhibit its transport by stormwater runoff. The siltation barriers will also help reduce the rate of runoff by creating filters through which the stormwater must pass.

4.2 Permanent Erosion and Sediment Control Facilities

Permanent erosion and sediment control will be accomplished by diverting stormwater runoff from steep slopes, controlling/reducing stormwater runoff velocities and volumes, and vegetative and structural surface stabilization. All of the permanent facilities are relatively maintenance free and only require periodic inspections. The owner will provide maintenance for all the permanent erosion and sediment control facilities.

The temporary sediment trap shall be cleaned of all sediment and debris, and converted to an extended detention dry stormwater basin per the final elevations and dimensions, and stabilized with the vegetation as indicated on the project drawings. Riprap aprons will be used at the discharge end of all piped drainage systems. Runoff velocities will be reduced to levels that are non-erosive to the receiving waterbodies through use of these aprons.

Other than the buildings and paved surfaces, disturbed surfaces will be stabilized with vegetation. The vegetation will control stormwater runoff by preventing soil erosion, reducing runoff volume and velocities, and providing a filter medium. Permanent seeding should optimally be undertaken in the spring from March 21st through May 20th and in late summer from August 15th to October 15th.

5.0 IMPLEMENTATION, MAINTENANCE & GENERAL HOUSEKEEPING

5.1 Construction Phase

Details associated with the implementation and maintenance of the proposed stormwater facilities and erosion control measures during construction are shown on the project drawings. A Construction Sequence has been provided to guide the contractor in the installation of the erosion control measures as well as the site plan features. In accordance with NYSDEC SPDES General Permit GP-0-15-002 no phase will exceed the maximum of 5 acres of disturbance at any given time as less than 5 acres of disturbance is proposed. The erosion control plan includes associated details and notes to aid the contractor in implementing the plan.

During construction, a Site Log Book, Appendix E, is required to be kept per NYSDEC SPDES General Permit GP-0-15-002. Erosion and sediment control inspections are required to be conducted as necessary under coverage of the permit (minimum twice a week) and an updated logbook and a copy of the SWPPP is required to be kept on site for the duration of the construction activities. The Construction Site Log Book is an appendix taken from the *New York Standards and Specifications for Erosion and Sediment Control* (Blue Book).

In addition to the proposed erosion and sediment control facilities, the following good housekeeping best management practices shall be implemented to mitigate potential pollution during the construction phase of the project. The general contractor overseeing the day-to-day site operation shall be responsible for the good housekeeping best management practices included in the following general categories:

- Material Handling and Waste Management
- Establishment of Building Material Staging Areas
- Establishment of Washout Areas
- Proper Equipment Fueling and Maintenance Practices
- Spill Prevention and Control Plan

All construction waste materials shall be collected and removed from the site regularly by the general contractor. The general contractor shall supply waste barrels for proper disposal of waste materials. All personnel working on the site shall be instructed of the proper procedures for construction waste disposal.

Although it is not anticipated any hazardous waste materials will be utilized during construction, any hazardous waste materials shall be disposed of in accordance with federal, state, and local regulations. No hazardous waste shall be disposed of on-site. Hazardous waste materials shall be stored in appropriate and clearly marked containers and segregated from the other non-waste materials. All hazardous waste shall be stored in a structurally sound and sealed shipping containers located in the staging areas. Material safety data sheets, material inventory, and emergency contact numbers will be maintained in the office trailer. All personnel working on the site shall be instructed of the proper procedures for hazardous waste disposal.

Temporary sanitary facilities (portable toilets) shall be provided on site during the entire length of construction. The sanitary facilities shall be in an alternate area away from the construction activities on the site. The portable toilets shall be inspected weekly for evidence of leaking holding tanks.

All recyclables, including wood pallets, cardboard boxes, and all other recyclable construction scraps shall be disposed of in a designated recycling barrel provided by the contractor and removed from the site regularly. All personnel working on the site shall be instructed of the proper procedures for construction waste recycling.

All construction equipment and maintenance materials shall be stored in a designated staging area. Silt fence shall be installed down gradient of the construction staging area. Shipping containers shall be utilized to store hand tools, small parts, and other construction materials, not taken off site daily. Construction waste barrels, recycling barrels and if necessary hazardous waste containers shall be located within the limits of the construction staging area.

Throughout the construction of the project, several types of vehicles and equipment will be used on-site. Fueling of the equipment shall occur within the limits of the construction staging area. Fuel will be delivered to the site as needed, by the general contractor, or a party chosen by the general contractor. Only minor vehicle equipment maintenance shall occur on-site, all major maintenance shall be performed off-site. All equipment fluids generated from minor maintenance activities shall be disposed of into designated drums and stored in accordance with the hazardous waste storage as previously discussed.

Vehicles and equipment shall be inspected on each day of use. Any leak discovered shall be repaired immediately. All leaking equipment unable to be repaired shall be removed from the site. Ample supplies of absorbent, spill-cleanup materials, and spill kits shall be located in the construction staging area. All spills shall be cleaned up immediately upon discovery. Spent absorbent materials and rags shall be hauled off-site immediately after the spill is cleaned for disposal at a local landfill. All personnel working on the site shall be instructed of the proper procedures for spill prevention and control. Any spill large enough to discharge to surface water will be immediately reported to the local fire / police departments and the National Response Center 1-800-424-8802.

During the initial year of planting, the plants may require watering to germinate and establish. Note that several seedings may be required during the first year to completely establish vegetation on the site.

5.2 Long Term Maintenance Plan

Each spring the paved areas should be cleaned to remove the winter's accumulation of traction sand. After this is completed, all drain inlets sumps and the stormwater basins should be cleaned. All pipes should be checked for debris and blockages and cleaned as required. During the cleaning process, the drain inlets, catch basins, and pipes should be inspected for structural integrity and overall condition; repairs and/or replacement will be made as required.

The stormwater facilities for the subject project have been designed to minimize the required maintenance. This section discusses the minimum maintenance requirements to insure long-term performance of the stormwater facilities. Initially the stormwater facilities will require an increased

maintenance and inspection schedule until all portions of the site are stable. Generally, the stormwater facilities consist of either collection and conveyance components or treatment components.

The stormwater collection and conveyance system is composed of HDPE, drainage pipe and precast concrete drainage structures. The owner will assume the maintenance responsibilities for the drainage system. Minimal maintenance is typically required for these facilities. All pipes should be checked for debris and blockages and cleaned as required. All drain inlet sumps, including the sumps within the hydrodynamic separators, shall be inspected bi-annually and cleaned to removed deposited sediment. During the cleaning process, the pipes should be inspected for structural integrity and overall condition; repairs and/or replacement should be made as required. Additionally, the detention systems shall be checked for deposited sediment as well. Visual inspection of system through the inspection ports shall take place yearly, and the system shall be cleaned / jetted as necessary to remove deposited sediment.

The stormwater facilities have been designed to limit the routine maintenance requirements. Initially the filter will require regular maintenance until the permanent vegetation is established. Permanent vegetation is considered established when 80% of the final plant density is established. Vegetation should be inspected weekly during construction as part of coverage under NYSDEC SPDES General Permit GP-0-15-002 during construction and in the permanent condition. Damaged areas should be immediately re-seeded and re-mulched. The floor of the filter will be planted with a seed mixture that contains plants that are tolerant of occasional flooding. The seed mixtures contain several plant species that vary slightly in their needs for survival. It is expected that not all of the species will survive within the basin due to variations such as water, nutrients, and light. During the initial year of planting, the plants may require watering to germinate and become established. Note that several seedings may be required during the first year to completely establish vegetation within the basin. After the initial year of establishment, the filter does not need to be fertilized or watered. A natural selection process will occur over the first few years, such that the species within the seed mixture most suitable to the conditions will survive.

Refer to the Infiltration Trench and Basin Inspection & Maintenance checklist found in Appendix G of this report prepared for all portions of this project the requirements to insure long-term performance of all stormwater facilities

Refer to the Hydroworks Hydrostorm Operations & Maintenance Manual in Appendix H of this report for the manufacture maintenance requirements for the proposed hydrodynamic separator.

APPENDIX A

NYSDEC Water Quality Volume and Runoff Reduction Calculations

WQv Calculation Worksheet

Project: Beacon Views, LLC
Project #: 19131.100
Date: 8/16/2019

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The following calculation determines the water quality flow rate for the 90% Water Quality Event using the Small Storm Hydrology Method specified in Appendix B of the New York State Stormwater Management Design Manual.

Subcatchment ID: 1.1

1.Water Quality Volume $= WQ_v = \frac{P * R_v * A}{12}$

P = WQv 24-hour Rainfall Amount	=	1.4	in.
A = Subcatchment Area	=	141250	SF
Ai= Impervious Area within Subcatchment Area	=	82800	
I = Ai/A	=	58.6	%
Rv = 0.05 + 0.009 (I%)	=	0.58	
WQv = Water Quality Volume	=	9,558	CF

Subcatchment ID: 1.2

1.Water Quality Volume $= WQ_v = \frac{P * R_v * A}{12}$

P = WQv 24-hour Rainfall Amount	=	1.4	in.
A = Subcatchment Area	=	21160	SF
Ai= Impervious Area within Subcatchment Area	=	13350	
I = Ai/A	=	63.1	%
Rv = 0.05 + 0.009 (I%)	=	0.62	
WQv = Water Quality Volume	=	1,531	CF

RRv Calculation Worksheet - Infiltration Basin 1.1 INF

Project: Beacon Views, LLC
Project #: 19131.100
Date: 8/20/2019

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

1. RRv Initial = Water Quality Volume (WQv) *0.219 ac-ft* = *9,558 c.f.*
(refer to Water Quality Volume Calculation Sheet)

2. *RRv Minimum* = [(P) (Rv) (S) (Aic)] /12 where…

P = Rainfall (in.)	=	1.40	in.
Rv = 0.05 + 0.009 (59%)	=	0.59	
S = Hydrologic Soil Group Specific Reduction Factor	=	0.20	
[HSG A = 0.55] [HSG B = 0.40] [HSG C = 0.30] [HSG D = 0.20]			
Aic = Total area of new impervious cover	=	1.9	Acres
RRv Minimum	=	*1,140*	*c.f.*

3. *RRv Required* = RRv Initial - Green Infrastructure Practice (GIP) with Area Reduction

GIP with Area Reduction Applied in Project

5.3.1 Conservation of Natural Area	N/A		
5.3.2 Sheet Flow to Riparian Buffers or Filter Strips	N/A		
5.3.4 Tree Planting / Tree Box (37 trees at 100 s.f. per tree)			c.f.
5.3.5 Disconnection of Rooftop Runoff		-	
5.3.6 Stream Daylighting	N/A		
RRv Required(=WQv-RRV by area)(Refer to HydroCAD output in this Appendix)	=	9,558	c.f.

4. *RRv Provided*

GIP with Volume Reduction Applied in Project	WQv Treated (c.f.)	% of WQv Applied to *RRv Provided*	*RRv Provided (c.f.)*
5.3.3 Vegetated Open Swales		20%	0
[HSG A / B = 20%] [HSG C / D = 10%] {Modified HSG C - D = 15% - 12%]		10%	0
5.3.7 Rain Garden		40%	0
[No underdrains / Good Soils = 100%] [With underdrains / Poor Soils = 40%]			
5.3.8 Green Roof		100%	N/A
[RRv provided equals volume provided in Green Roof]			
5.3.9 Stormwater Planters		45%	N/A
[Infiltration Planters = 100%] [Flow Through HSG C = 45%] [Flow Though HSG D = 30%]			
5.3.10 Rain Tank / Cisterns		100%	N/A
5.3.11 Porous Pavement		100%	0
Infiltration Practice (Standard SMP)	9650	100%	9,650
Bioretention Practice (Standard SMP)		40%	0
[Without Underdrains HSG A/B = 80%] [With Underdrain HSG C\D = 40%]			
Dry Swale (Open Channel Practice) (Standard SMP)		20%	N/A
[HSG A/B = 40%] [HSG C/D = 20%]			
RRv Provided =			*9,650*

5. Summary

RRv Initial	=	9,558 c.f.	
RRv Required	=	9,558 c.f.	
RRv Minimum	=	1,140 c.f.	
RRv Provided	=	9,650 c.f.	
WQv Required for Downstream SMP	=	0 c.f.	(= RRv Required - RRv Provided)

Is RRv Provided greater than or equal to RRv Minimum? Yes

Refer to the " Analysis of Green Infrastructure Practices" contained in Appendix F for an explanation demonstrating the maximum RRv Provided has been achieved for the site.

RRv Calculation Worksheet - Infiltration System 1.2 INF

Project: Beacon Views, LLC
Project #: 19131.100
Date: 8/20/2019

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

1. RRv Initial = Water Quality Volume (WQv) *0.035 ac-ft* = *1,531 c.f.*
(refer to Water Quality Volume Calculation Sheet)

2. *RRv Minimum* = [(P) (Rv) (S) (Aic)] /12 where…

P = Rainfall (in.)	=	1.40	in.
Rv = 0.05 + 0.009 (63%)	=	0.62	
S = Hydrologic Soil Group Specific Reduction Factor	=	0.20	
[HSG A = 0.55] [HSG B = 0.40] [HSG C = 0.30] [HSG D = 0.20]			
Aic = Total area of new impervious cover	=	0.3	Acres
RRv Minimum	=	*193*	*c.f.*

3. *RRv Required* = RRv Initial - Green Infrastructure Practice (GIP) with Area Reduction

GIP with Area Reduction Applied in Project

5.3.1 Conservation of Natural Area		N/A	
5.3.2 Sheet Flow to Riparian Buffers or Filter Strips		N/A	
5.3.4 Tree Planting / Tree Box (37 trees at 100 s.f. per tree)			c.f.
5.3.5 Disconnection of Rooftop Runoff		-	
5.3.6 Stream Daylighting		N/A	
RRv Required(=WQv-RRV by area)(Refer to HydroCAD output in this Appendix)	=	1,531	c.f.

4. *RRv Provided*

GIP with Volume Reduction Applied in Project	WQv Treated (c.f.)	% of WQv Applied to *RRv Provided*	*RRv Provided (c.f.)*
5.3.3 Vegetated Open Swales		20%	0
[HSG A / B = 20%] [HSG C / D = 10%] {Modified HSG C - D = 15% - 12%]		10%	0
5.3.7 Rain Garden		40%	0
[No underdrains / Good Soils = 100%] [With underdrains / Poor Soils = 40%]			
5.3.8 Green Roof		100%	N/A
[RRv provided equals volume provided in Green Roof]			
5.3.9 Stormwater Planters		45%	N/A
[Infiltration Planters = 100%] [Flow Through HSG C = 45%] [Flow Though HSG D = 30%]			
5.3.10 Rain Tank / Cisterns		100%	N/A
5.3.11 Porous Pavement		100%	0
Infiltration Practice (Standard SMP)	1917	100%	1,917
Bioretention Practice (Standard SMP)		40%	0
[Without Underdrains HSG A/B = 80%] [With Underdrain HSG C\D = 40%]			
Dry Swale (Open Channel Practice) (Standard SMP)		20%	N/A
[HSG A/B = 40%] [HSG C/D = 20%]			
RRv Provided =			*1,917*

5. Summary

RRv Initial	=	1,531	c.f.	
RRv Required	=	1,531	c.f.	
RRv Minimum	=	193	c.f.	
RRv Provided	=	1,917	c.f.	
WQv Required for Downstream SMP	=	0	c.f.	(= RRv Required - RRv Provided)

Is RRv Provided greater than or equal to RRv Minimum? Yes

Refer to the " Analysis of Green Infrastructure Practices" contained in Appendix F for an explanation demonstrating the maximum RRv Provided has been achieved for the site.

APPENDIX B

Pre-Development Computer Data

Routing Diagram for Pre Development

Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C., Printed 8/26/2019

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Summary for Subcatchment PRE:

Runoff = 14.68 cfs @ 12.37 hrs, Volume= 1.558 af, Depth> 0.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 1-yr Rainfall=2.61"

Area (ac)	CN	Description
8.900	78	Meadow, non-grazed, HSG D
17.200	77	Woods, Good, HSG D
0.200	98	Paved parking, HSG D
26.300	77	Weighted Average
26.100		99.24% Pervious Area
0.200		0.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.16"
4.7	345	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.4	170	0.0800	1.98		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.6	340	0.1000	1.58		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
5.0	400	0.0700	1.32		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.6	1,355	Total			

Subcatchment PRE:

Summary for Subcatchment PRE:

Runoff = 43.11 cfs @ 12.36 hrs, Volume= 4.716 af, Depth> 2.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 10-yr Rainfall=4.70"

Area (ac)	CN	Description
8.900	78	Meadow, non-grazed, HSG D
17.200	77	Woods, Good, HSG D
0.200	98	Paved parking, HSG D
26.300	77	Weighted Average
26.100		99.24% Pervious Area
0.200		0.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.16"
4.7	345	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.4	170	0.0800	1.98		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.6	340	0.1000	1.58		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
5.0	400	0.0700	1.32		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.6	1,355	Total			

Subcatchment PRE:

Summary for Subcatchment PRE:

Runoff = 93.60 cfs @ 12.35 hrs, Volume= 11.266 af, Depth> 5.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 100-yr Rainfall=8.31"

Area (ac)	CN	Description
8.900	78	Meadow, non-grazed, HSG D
17.200	77	Woods, Good, HSG D
0.200	98	Paved parking, HSG D
26.300	77	Weighted Average
26.100		99.24% Pervious Area
0.200		0.76% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.16"
4.7	345	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.4	170	0.0800	1.98		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.6	340	0.1000	1.58		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
5.0	400	0.0700	1.32		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.6	1,355	Total			

Subcatchment PRE:

APPENDIX C

Post-Development Computer Data

Routing Diagram for Post Development

Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C., Printed 8/27/2019

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Summary for Subcatchment 1.0S:

Runoff = 13.57 cfs @ 12.37 hrs, Volume= 1.613 af, Depth= 0.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 1-yr Rainfall=2.61"

Area (ac)	CN	Description
8.900	78	Meadow, non-grazed, HSG D
13.400	77	Woods, Good, HSG D
0.200	98	Paved parking, HSG D
22.500	78	Weighted Average
22.300		99.11% Pervious Area
0.200		0.89% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.16"
4.7	345	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.4	170	0.0800	1.98		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.1	280	0.0900	1.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	225		7.50		**Direct Entry, Channel Flow**
0.0	36				**Direct Entry, Pipe Flow**
0.5	360		12.00		**Direct Entry, Channel Flow**
4.3	30	0.1000	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.16"
28.4	1,546	Total			

Subcatchment 1.0S:

Summary for Subcatchment 1.1S:

Runoff = 7.82 cfs @ 12.03 hrs, Volume= 0.448 af, Depth= 1.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 1-yr Rainfall=2.61"

Area (ac)	CN	Description
1.900	98	Paved parking, HSG D
1.400	80	>75% Grass cover, Good, HSG D
3.300	90	Weighted Average
1.400		42.42% Pervious Area
1.900		57.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1.1S:

Summary for Subcatchment 1.2S:

Runoff = 1.24 cfs @ 12.03 hrs, Volume= 0.071 af, Depth= 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 1-yr Rainfall=2.61"

Area (ac)	CN	Description
0.310	98	Paved parking, HSG D
0.190	80	>75% Grass cover, Good, HSG D
0.500	91	Weighted Average
0.190		38.00% Pervious Area
0.310		62.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1.2S:

Summary for Reach Design Line:

Inflow Area = 26.300 ac, 9.16% Impervious, Inflow Depth = 0.74" for 1-yr event
Inflow = 13.57 cfs @ 12.37 hrs, Volume= 1.613 af
Outflow = 13.57 cfs @ 12.37 hrs, Volume= 1.613 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Reach Design Line:

Summary for Pond 1.1 EDB:

Inflow Area = 3.300 ac, 57.58% Impervious, Inflow Depth = 1.63" for 1-yr event
Inflow = 7.82 cfs @ 12.03 hrs, Volume= 0.448 af
Outflow = 0.10 cfs @ 21.85 hrs, Volume= 0.447 af, Atten= 99%, Lag= 588.9 min
Primary = 0.10 cfs @ 21.85 hrs, Volume= 0.447 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 185.21' @ 21.85 hrs Surf.Area= 7,934 sf Storage= 14,267 cf

Plug-Flow detention time= 1,441.5 min calculated for 0.447 af (100% of inflow)
Center-of-Mass det. time= 1,440.8 min (2,262.8 - 822.0)

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	30,700 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	5,000	0	0
184.00	6,300	5,650	5,650
186.00	9,000	15,300	20,950
187.00	10,500	9,750	30,700

Device	Routing	Invert	Outlet Devices
#1	Primary	182.00'	**4.0" Round Culvert** L= 40.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 182.00' / 181.50' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf
#2	Device 1	182.00'	**1.5" Vert. Orifice/Grate** C= 0.600
#3	Secondary	183.00'	**24.0" Round Culvert** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.00' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#4	Device 3	185.50'	**8.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.10 cfs @ 21.85 hrs HW=185.21' (Free Discharge)
└─**1=Culvert** (Passes 0.10 cfs of 0.49 cfs potential flow)
  └─**2=Orifice/Grate** (Orifice Controls 0.10 cfs @ 8.54 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=183.00' (Free Discharge)
└─**3=Culvert** (Controls 0.00 cfs)
  └─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1.1 EDB:

Hydrograph
7.82 cfs
0.00 cfs
0.10 cfs
Inflow Area=3.300 ac
Peak Elev=185.21'
Storage=14,267 cf
Inflow
Outflow
Primary
Secondary
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 1.1 EDB:

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	5,000	0
183.05	5,065	252
183.10	5,130	506
183.15	5,195	765
183.20	5,260	1,026
183.25	5,325	1,291
183.30	5,390	1,559
183.35	5,455	1,830
183.40	5,520	2,104
183.45	5,585	2,382
183.50	5,650	2,663
183.55	5,715	2,947
183.60	5,780	3,234
183.65	5,845	3,525
183.70	5,910	3,818
183.75	5,975	4,116
183.80	6,040	4,416
183.85	6,105	4,720
183.90	6,170	5,027
183.95	6,235	5,337
184.00	6,300	5,650
184.05	6,368	5,967
184.10	6,435	6,287
184.15	6,503	6,610
184.20	6,570	6,937
184.25	6,638	7,267
184.30	6,705	7,601
184.35	6,772	7,938
184.40	6,840	8,278
184.45	6,907	8,622
184.50	6,975	8,969
184.55	7,043	9,319
184.60	7,110	9,673
184.65	7,178	10,030
184.70	7,245	10,391
184.75	7,313	10,755
184.80	7,380	11,122
184.85	7,447	11,493
184.90	7,515	11,867
184.95	7,582	12,244
185.00	7,650	12,625
185.05	7,718	13,009
185.10	7,785	13,397
185.15	7,853	13,788
185.20	7,920	14,182
185.25	7,988	14,580
185.30	8,055	14,981
185.35	8,122	15,385
185.40	8,190	15,793
185.45	8,257	16,204
185.50	8,325	16,619
185.55	8,393	17,037
185.60	8,460	17,458
185.65	8,528	17,883
185.70	8,595	18,311
185.75	8,663	18,742
185.80	8,730	19,177
185.85	8,797	19,615
185.90	8,865	20,057
185.95	8,932	20,502
186.00	9,000	20,950
186.05	9,075	21,402
186.10	9,150	21,857
186.15	9,225	22,317
186.20	9,300	22,780
186.25	9,375	23,247
186.30	9,450	23,718
186.35	9,525	24,192
186.40	9,600	24,670
186.45	9,675	25,152
186.50	9,750	25,638
186.55	9,825	26,127
186.60	9,900	26,620
186.65	9,975	27,117
186.70	10,050	27,617
186.75	10,125	28,122
186.80	10,200	28,630
186.85	10,275	29,142
186.90	10,350	29,658
186.95	10,425	30,177
187.00	**10,500**	**30,700**

Summary for Pond 1.1 INF:

Inflow Area = 3.300 ac, 57.58% Impervious, Inflow Depth > 1.62" for 1-yr event
Inflow = 0.10 cfs @ 21.85 hrs, Volume= 0.447 af
Outflow = 0.09 cfs @ 37.70 hrs, Volume= 0.446 af, Atten= 11%, Lag= 950.9 min
Discarded = 0.09 cfs @ 37.70 hrs, Volume= 0.446 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 180.26' @ 37.70 hrs Surf.Area= 4,029 sf Storage= 1,011 cf

Plug-Flow detention time= 109.5 min calculated for 0.446 af (100% of inflow)
Center-of-Mass det. time= 106.2 min (2,369.0 - 2,262.8)

Volume	Invert	Avail.Storage	Storage Description
#1	180.00'	16,150 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.00	3,750	0	0
182.00	5,900	9,650	9,650
183.00	7,100	6,500	16,150

Device	Routing	Invert	Outlet Devices
#1	Discarded	180.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	182.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir**
			Head (feet) 0.20 0.40 0.60 0.80 1.00
			Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.09 cfs @ 37.70 hrs HW=180.26' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=180.00' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1.1 INF:

Hydrograph
Inflow Area=3.300 ac
Peak Elev=180.26'
Storage=1,011 cf
0.10 cfs
0.09 cfs
0.00 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 1.1 INF:

Elevation (feet)	Surface (sq-ft)	Horizontal (sq-ft)	Storage (cubic-feet)
180.00	3,750	3,750	0
180.10	3,857	3,857	380
180.20	3,965	3,965	771
180.30	4,073	4,073	1,173
180.40	4,180	4,180	1,586
180.50	4,288	4,288	2,009
180.60	4,395	4,395	2,443
180.70	4,502	4,502	2,888
180.80	4,610	4,610	3,344
180.90	4,718	4,718	3,810
181.00	4,825	4,825	4,288
181.10	4,932	4,932	4,775
181.20	5,040	5,040	5,274
181.30	5,148	5,148	5,783
181.40	5,255	5,255	6,304
181.50	5,363	5,363	6,834
181.60	5,470	5,470	7,376
181.70	5,577	5,577	7,928
181.80	5,685	5,685	8,492
181.90	5,793	5,793	9,065
182.00	5,900	5,900	9,650
182.10	6,020	6,020	10,246
182.20	6,140	6,140	10,854
182.30	6,260	6,260	11,474
182.40	6,380	6,380	12,106
182.50	6,500	6,500	12,750
182.60	6,620	6,620	13,406
182.70	6,740	6,740	14,074
182.80	6,860	6,860	14,754
182.90	6,980	6,980	15,446
183.00	**7,100**	**7,100**	**16,150**

Summary for Pond 1.2 FS:

Inflow Area =	0.500 ac, 62.00% Impervious, Inflow Depth = 1.71" for 1-yr event				
Inflow =	1.24 cfs @	12.03 hrs,	Volume=	0.071 af	
Outflow =	1.24 cfs @	12.03 hrs,	Volume=	0.071 af,	Atten= 0%, Lag= 0.0 min
Primary =	1.24 cfs @	12.03 hrs,	Volume=	0.071 af	
Secondary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 187.27' @ 12.03 hrs
Flood Elev= 189.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	186.40'	**8.0" Round Culvert** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 186.40' / 185.80' S= 0.0300 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Secondary	186.40'	**12.0" Round Culvert** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 186.40' / 185.50' S= 0.0180 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	187.30'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=1.20 cfs @ 12.03 hrs HW=187.24' (Free Discharge)
└─**1=Culvert** (Inlet Controls 1.20 cfs @ 3.43 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=186.40' (Free Discharge)
└─**2=Culvert** (Controls 0.00 cfs)
  └─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1.2 FS:

Hydrograph
1.24 cfs
0.00 cfs
Inflow Area=0.500 ac
Peak Elev=187.27'
Inflow
Outflow
Primary
Secondary
Flow (cfs)
1
0
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72
Time (hours)

Stage-Area-Storage for Pond 1.2 FS:

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
186.40	**0**	187.44	0	188.48	0
186.42	0	187.46	0	188.50	0
186.44	0	187.48	0	188.52	0
186.46	0	187.50	0	188.54	0
186.48	0	187.52	0	188.56	0
186.50	0	187.54	0	188.58	0
186.52	0	187.56	0	188.60	0
186.54	0	187.58	0	188.62	0
186.56	0	187.60	0	188.64	0
186.58	0	187.62	0	188.66	0
186.60	0	187.64	0	188.68	0
186.62	0	187.66	0	188.70	0
186.64	0	187.68	0	188.72	0
186.66	0	187.70	0	188.74	0
186.68	0	187.72	0	188.76	0
186.70	0	187.74	0	188.78	0
186.72	0	187.76	0	188.80	0
186.74	0	187.78	0	188.82	0
186.76	0	187.80	0	188.84	0
186.78	0	187.82	0	188.86	0
186.80	0	187.84	0	188.88	0
186.82	0	187.86	0	188.90	0
186.84	0	187.88	0	188.92	0
186.86	0	187.90	0	188.94	0
186.88	0	187.92	0	188.96	0
186.90	0	187.94	0	188.98	0
186.92	0	187.96	0	189.00	0
186.94	0	187.98	0		
186.96	0	188.00	0		
186.98	0	188.02	0		
187.00	0	188.04	0		
187.02	0	188.06	0		
187.04	0	188.08	0		
187.06	0	188.10	0		
187.08	0	188.12	0		
187.10	0	188.14	0		
187.12	0	188.16	0		
187.14	0	188.18	0		
187.16	0	188.20	0		
187.18	0	188.22	0		
187.20	0	188.24	0		
187.22	0	188.26	0		
187.24	0	188.28	0		
187.26	0	188.30	0		
187.28	0	188.32	0		
187.30	0	188.34	0		
187.32	0	188.36	0		
187.34	0	188.38	0		
187.36	0	188.40	0		
187.38	0	188.42	0		
187.40	0	188.44	0		
187.42	0	188.46	0		

Summary for Pond 1.2 INF:

Inflow Area =	0.500 ac, 62.00% Impervious, Inflow Depth = 1.71" for 1-yr event				
Inflow =	1.24 cfs @	12.03 hrs,	Volume=	0.071 af	
Outflow =	0.03 cfs @	10.40 hrs,	Volume=	0.071 af,	Atten= 98%, Lag= 0.0 min
Discarded =	0.03 cfs @	10.40 hrs,	Volume=	0.071 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 185.66' @ 16.49 hrs Surf.Area= 0.028 ac Storage= 0.041 af

Plug-Flow detention time= 625.6 min calculated for 0.071 af (100% of inflow)
Center-of-Mass det. time= 625.5 min (1,442.3 - 816.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	183.50'	0.026 af	**39.50'W x 30.92'L x 3.50'H Field A** 0.098 af Overall - 0.034 af Embedded = 0.064 af x 40.0% Voids
#2A	184.00'	0.034 af	**ADS_StormTech SC-740** x 32 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 Row Length Adjustment= +0.44' x 6.45 sf x 8 rows
		0.060 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	183.50'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	185.80'	**8.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 185.80' / 185.50' S= 0.0300 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf

Discarded OutFlow Max=0.03 cfs @ 10.40 hrs HW=183.54' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=183.50' (Free Discharge)
└─**2=Culvert** (Controls 0.00 cfs)

Pond 1.2 INF:

Hydrograph
1.24 cfs
0.03 cfs
0.00 cfs
Inflow Area=0.500 ac
Peak Elev=185.66'
Storage=0.041 af
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)
0
1
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72

Stage-Area-Storage for Pond 1.2 INF:

Elevation (feet)	Horizontal (acres)	Storage (acre-feet)
183.50	**0.028**	0.000
183.55	0.028	0.001
183.60	0.028	0.001
183.65	0.028	0.002
183.70	0.028	0.002
183.75	0.028	0.003
183.80	0.028	0.003
183.85	0.028	0.004
183.90	0.028	0.004
183.95	0.028	0.005
184.00	0.028	0.006
184.05	0.028	0.007
184.10	0.028	0.008
184.15	0.028	0.009
184.20	0.028	0.010
184.25	0.028	0.011
184.30	0.028	0.012
184.35	0.028	0.014
184.40	0.028	0.015
184.45	0.028	0.016
184.50	0.028	0.017
184.55	0.028	0.018
184.60	0.028	0.019
184.65	0.028	0.020
184.70	0.028	0.021
184.75	0.028	0.023
184.80	0.028	0.024
184.85	0.028	0.025
184.90	0.028	0.026
184.95	0.028	0.027
185.00	0.028	0.028
185.05	0.028	0.029
185.10	0.028	0.030
185.15	0.028	0.031
185.20	0.028	0.032
185.25	0.028	0.033
185.30	0.028	0.034
185.35	0.028	0.035
185.40	0.028	0.036
185.45	0.028	0.037
185.50	0.028	0.038
185.55	0.028	0.039
185.60	0.028	0.040
185.65	0.028	0.041
185.70	0.028	0.042
185.75	0.028	0.043
185.80	0.028	0.044
185.85	0.028	0.045
185.90	0.028	0.046
185.95	0.028	0.046
186.00	0.028	0.047
186.05	0.028	0.048
186.10	0.028	0.049
186.15	0.028	0.050
186.20	0.028	0.050
186.25	0.028	0.051
186.30	0.028	0.052
186.35	0.028	0.052
186.40	0.028	0.053
186.45	0.028	0.054
186.50	0.028	0.054
186.55	0.028	0.055
186.60	0.028	0.055
186.65	0.028	0.056
186.70	0.028	0.056
186.75	0.028	0.057
186.80	0.028	0.058
186.85	0.028	0.058
186.90	0.028	0.059
186.95	0.028	0.059
187.00	0.028	**0.060**

Summary for Subcatchment 1.0S:

Runoff = 38.40 cfs @ 12.35 hrs, Volume= 4.611 af, Depth= 2.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 10-yr Rainfall=4.70"

Area (ac)	CN	Description
8.900	78	Meadow, non-grazed, HSG D
13.400	77	Woods, Good, HSG D
0.200	98	Paved parking, HSG D
22.500	78	Weighted Average
22.300		99.11% Pervious Area
0.200		0.89% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.16"
4.7	345	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.4	170	0.0800	1.98		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.1	280	0.0900	1.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	225		7.50		**Direct Entry, Channel Flow**
0.0	36				**Direct Entry, Pipe Flow**
0.5	360		12.00		**Direct Entry, Channel Flow**
4.3	30	0.1000	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.16"
28.4	1,546	Total			

Subcatchment 1.0S:

Summary for Subcatchment 1.1S:

Runoff = 14.74 cfs @ 12.03 hrs, Volume= 0.987 af, Depth= 3.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 10-yr Rainfall=4.70"

Area (ac)	CN	Description
1.900	98	Paved parking, HSG D
1.400	80	>75% Grass cover, Good, HSG D
3.300	90	Weighted Average
1.400		42.42% Pervious Area
1.900		57.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1.1S:

Summary for Subcatchment 1.2S:

Runoff = 2.28 cfs @ 12.03 hrs, Volume= 0.154 af, Depth= 3.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 10-yr Rainfall=4.70"

Area (ac)	CN	Description
0.310	98	Paved parking, HSG D
0.190	80	>75% Grass cover, Good, HSG D
0.500	91	Weighted Average
0.190		38.00% Pervious Area
0.310		62.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1.2S:

Summary for Reach Design Line:

Inflow Area = 26.300 ac, 9.16% Impervious, Inflow Depth = 2.34" for 10-yr event
Inflow = 42.97 cfs @ 12.34 hrs, Volume= 5.134 af
Outflow = 42.97 cfs @ 12.34 hrs, Volume= 5.134 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Reach Design Line:

Summary for Pond 1.1 EDB:

Inflow Area =	3.300 ac, 57.58% Impervious, Inflow Depth = 3.59" for 10-yr event				
Inflow =	14.74 cfs @	12.03 hrs,	Volume=	0.987 af	
Outflow =	4.93 cfs @	12.24 hrs,	Volume=	0.955 af,	Atten= 67%, Lag= 12.3 min
Primary =	0.12 cfs @	12.24 hrs,	Volume=	0.499 af	
Secondary =	4.82 cfs @	12.24 hrs,	Volume=	0.456 af	

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 185.85' @ 12.24 hrs Surf.Area= 8,799 sf Storage= 19,626 cf

Plug-Flow detention time= 801.7 min calculated for 0.955 af (97% of inflow)
Center-of-Mass det. time= 782.3 min (1,578.4 - 796.1)

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	30,700 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	5,000	0	0
184.00	6,300	5,650	5,650
186.00	9,000	15,300	20,950
187.00	10,500	9,750	30,700

Device	Routing	Invert	Outlet Devices
#1	Primary	182.00'	**4.0" Round Culvert** L= 40.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 182.00' / 181.50' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf
#2	Device 1	182.00'	**1.5" Vert. Orifice/Grate** C= 0.600
#3	Secondary	183.00'	**24.0" Round Culvert** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.00' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#4	Device 3	185.50'	**8.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.11 cfs @ 12.24 hrs HW=185.85' (Free Discharge)
└─**1=Culvert** (Passes 0.11 cfs of 0.53 cfs potential flow)
  └─**2=Orifice/Grate** (Orifice Controls 0.11 cfs @ 9.37 fps)

Secondary OutFlow Max=4.77 cfs @ 12.24 hrs HW=185.85' (Free Discharge)
└─**3=Culvert** (Passes 4.77 cfs of 20.57 cfs potential flow)
  └─**4=Broad-Crested Rectangular Weir** (Weir Controls 4.77 cfs @ 1.71 fps)

Pond 1.1 EDB:

Hydrograph
14.74 cfs
4.82 cfs
0.12 cfs
Inflow Area=3.300 ac
Peak Elev=185.85'
Storage=19,626 cf
Inflow
Outflow
Primary
Secondary
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 1.1 EDB:

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	5,000	0
183.05	5,065	252
183.10	5,130	506
183.15	5,195	765
183.20	5,260	1,026
183.25	5,325	1,291
183.30	5,390	1,559
183.35	5,455	1,830
183.40	5,520	2,104
183.45	5,585	2,382
183.50	5,650	2,663
183.55	5,715	2,947
183.60	5,780	3,234
183.65	5,845	3,525
183.70	5,910	3,818
183.75	5,975	4,116
183.80	6,040	4,416
183.85	6,105	4,720
183.90	6,170	5,027
183.95	6,235	5,337
184.00	6,300	5,650
184.05	6,368	5,967
184.10	6,435	6,287
184.15	6,503	6,610
184.20	6,570	6,937
184.25	6,638	7,267
184.30	6,705	7,601
184.35	6,772	7,938
184.40	6,840	8,278
184.45	6,907	8,622
184.50	6,975	8,969
184.55	7,043	9,319
184.60	7,110	9,673
184.65	7,178	10,030
184.70	7,245	10,391
184.75	7,313	10,755
184.80	7,380	11,122
184.85	7,447	11,493
184.90	7,515	11,867
184.95	7,582	12,244
185.00	7,650	12,625
185.05	7,718	13,009
185.10	7,785	13,397
185.15	7,853	13,788
185.20	7,920	14,182
185.25	7,988	14,580
185.30	8,055	14,981
185.35	8,122	15,385
185.40	8,190	15,793
185.45	8,257	16,204
185.50	8,325	16,619
185.55	8,393	17,037
185.60	8,460	17,458
185.65	8,528	17,883
185.70	8,595	18,311
185.75	8,663	18,742
185.80	8,730	19,177
185.85	8,797	19,615
185.90	8,865	20,057
185.95	8,932	20,502
186.00	9,000	20,950
186.05	9,075	21,402
186.10	9,150	21,857
186.15	9,225	22,317
186.20	9,300	22,780
186.25	9,375	23,247
186.30	9,450	23,718
186.35	9,525	24,192
186.40	9,600	24,670
186.45	9,675	25,152
186.50	9,750	25,638
186.55	9,825	26,127
186.60	9,900	26,620
186.65	9,975	27,117
186.70	10,050	27,617
186.75	10,125	28,122
186.80	10,200	28,630
186.85	10,275	29,142
186.90	10,350	29,658
186.95	10,425	30,177
187.00	**10,500**	**30,700**

Summary for Pond 1.1 INF:

Inflow Area = 3.300 ac, 57.58% Impervious, Inflow Depth > 1.81" for 10-yr event
Inflow = 0.12 cfs @ 12.24 hrs, Volume= 0.499 af
Outflow = 0.10 cfs @ 41.09 hrs, Volume= 0.496 af, Atten= 16%, Lag= 1,731.1 min
Discarded = 0.10 cfs @ 41.09 hrs, Volume= 0.496 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 180.37' @ 41.09 hrs Surf.Area= 4,150 sf Storage= 1,472 cf

Plug-Flow detention time= 169.9 min calculated for 0.496 af (99% of inflow)
Center-of-Mass det. time= 156.9 min (2,387.1 - 2,230.3)

Volume	Invert	Avail.Storage	Storage Description
#1	180.00'	16,150 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.00	3,750	0	0
182.00	5,900	9,650	9,650
183.00	7,100	6,500	16,150

Device	Routing	Invert	Outlet Devices
#1	Discarded	180.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	182.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir**
			Head (feet) 0.20 0.40 0.60 0.80 1.00
			Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.10 cfs @ 41.09 hrs HW=180.37' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.10 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=180.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1.1 INF:

Hydrograph
Inflow
Outflow
Discarded
Primary
0.12 cfs
0.10 cfs
0.00 cfs
Inflow Area=3.300 ac
Peak Elev=180.37'
Storage=1,472 cf
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 1.1 INF:

Elevation (feet)	Surface (sq-ft)	Horizontal (sq-ft)	Storage (cubic-feet)
180.00	3,750	3,750	0
180.10	3,857	3,857	380
180.20	3,965	3,965	771
180.30	4,073	4,073	1,173
180.40	4,180	4,180	1,586
180.50	4,288	4,288	2,009
180.60	4,395	4,395	2,443
180.70	4,502	4,502	2,888
180.80	4,610	4,610	3,344
180.90	4,718	4,718	3,810
181.00	4,825	4,825	4,288
181.10	4,932	4,932	4,775
181.20	5,040	5,040	5,274
181.30	5,148	5,148	5,783
181.40	5,255	5,255	6,304
181.50	5,363	5,363	6,834
181.60	5,470	5,470	7,376
181.70	5,577	5,577	7,928
181.80	5,685	5,685	8,492
181.90	5,793	5,793	9,065
182.00	5,900	5,900	9,650
182.10	6,020	6,020	10,246
182.20	6,140	6,140	10,854
182.30	6,260	6,260	11,474
182.40	6,380	6,380	12,106
182.50	6,500	6,500	12,750
182.60	6,620	6,620	13,406
182.70	6,740	6,740	14,074
182.80	6,860	6,860	14,754
182.90	6,980	6,980	15,446
183.00	**7,100**	**7,100**	**16,150**

Summary for Pond 1.2 FS:

Inflow Area =	0.500 ac, 62.00% Impervious, Inflow Depth = 3.69" for 10-yr event			
Inflow =	2.28 cfs @ 12.03 hrs, Volume=	0.154 af		
Outflow =	2.28 cfs @ 12.03 hrs, Volume=	0.154 af, Atten= 0%, Lag= 0.0 min		
Primary =	1.45 cfs @ 12.03 hrs, Volume=	0.146 af		
Secondary =	0.83 cfs @ 12.03 hrs, Volume=	0.008 af		

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 187.48' @ 12.03 hrs
Flood Elev= 189.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	186.40'	**8.0" Round Culvert** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 186.40' / 185.80' S= 0.0300 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Secondary	186.40'	**12.0" Round Culvert** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 186.40' / 185.50' S= 0.0180 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	187.30'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=1.44 cfs @ 12.03 hrs HW=187.47' (Free Discharge)
└─**1=Culvert** (Inlet Controls 1.44 cfs @ 4.13 fps)

Secondary OutFlow Max=0.77 cfs @ 12.03 hrs HW=187.47' (Free Discharge)
└─**2=Culvert** (Passes 0.77 cfs of 2.85 cfs potential flow)
  └─**3=Broad-Crested Rectangular Weir** (Weir Controls 0.77 cfs @ 1.15 fps)

Pond 1.2 FS:

Hydrograph
2.28 cfs
1.45 cfs
0.83 cfs
Inflow Area=0.500 ac
Peak Elev=187.48'
Inflow
Outflow
Primary
Secondary
Flow (cfs)
Time (hours)
0
1
2
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72

Stage-Area-Storage for Pond 1.2 FS:

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
186.40	**0**	187.44	0	188.48	0
186.42	0	187.46	0	188.50	0
186.44	0	187.48	0	188.52	0
186.46	0	187.50	0	188.54	0
186.48	0	187.52	0	188.56	0
186.50	0	187.54	0	188.58	0
186.52	0	187.56	0	188.60	0
186.54	0	187.58	0	188.62	0
186.56	0	187.60	0	188.64	0
186.58	0	187.62	0	188.66	0
186.60	0	187.64	0	188.68	0
186.62	0	187.66	0	188.70	0
186.64	0	187.68	0	188.72	0
186.66	0	187.70	0	188.74	0
186.68	0	187.72	0	188.76	0
186.70	0	187.74	0	188.78	0
186.72	0	187.76	0	188.80	0
186.74	0	187.78	0	188.82	0
186.76	0	187.80	0	188.84	0
186.78	0	187.82	0	188.86	0
186.80	0	187.84	0	188.88	0
186.82	0	187.86	0	188.90	0
186.84	0	187.88	0	188.92	0
186.86	0	187.90	0	188.94	0
186.88	0	187.92	0	188.96	0
186.90	0	187.94	0	188.98	0
186.92	0	187.96	0	189.00	0
186.94	0	187.98	0		
186.96	0	188.00	0		
186.98	0	188.02	0		
187.00	0	188.04	0		
187.02	0	188.06	0		
187.04	0	188.08	0		
187.06	0	188.10	0		
187.08	0	188.12	0		
187.10	0	188.14	0		
187.12	0	188.16	0		
187.14	0	188.18	0		
187.16	0	188.20	0		
187.18	0	188.22	0		
187.20	0	188.24	0		
187.22	0	188.26	0		
187.24	0	188.28	0		
187.26	0	188.30	0		
187.28	0	188.32	0		
187.30	0	188.34	0		
187.32	0	188.36	0		
187.34	0	188.38	0		
187.36	0	188.40	0		
187.38	0	188.42	0		
187.40	0	188.44	0		
187.42	0	188.46	0		

Summary for Pond 1.2 INF:

Inflow Area =	0.500 ac, 62.00% Impervious, Inflow Depth = 3.50" for 10-yr event				
Inflow =	1.45 cfs @	12.03 hrs,	Volume=	0.146 af	
Outflow =	0.93 cfs @	12.21 hrs,	Volume=	0.146 af,	Atten= 36%, Lag= 10.9 min
Discarded =	0.03 cfs @	8.00 hrs,	Volume=	0.086 af	
Primary =	0.90 cfs @	12.21 hrs,	Volume=	0.060 af	

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 186.41' @ 12.21 hrs Surf.Area= 0.028 ac Storage= 0.053 af

Plug-Flow detention time= 407.0 min calculated for 0.146 af (100% of inflow)
Center-of-Mass det. time= 407.5 min (1,203.1 - 795.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	183.50'	0.026 af	**39.50'W x 30.92'L x 3.50'H Field A** 0.098 af Overall - 0.034 af Embedded = 0.064 af x 40.0% Voids
#2A	184.00'	0.034 af	**ADS_StormTech SC-740** x 32 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 Row Length Adjustment= +0.44' x 6.45 sf x 8 rows
		0.060 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	183.50'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	185.80'	**8.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 185.80' / 185.50' S= 0.0300 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf

Discarded OutFlow Max=0.03 cfs @ 8.00 hrs HW=183.54' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.88 cfs @ 12.21 hrs HW=186.41' (Free Discharge)
└**2=Culvert** (Inlet Controls 0.88 cfs @ 2.65 fps)

Pond 1.2 INF:

Hydrograph
1.45 cfs
0.90 cfs
0.03 cfs
Inflow Area=0.500 ac
Peak Elev=186.41'
Storage=0.053 af
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)
0
1
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72

Stage-Area-Storage for Pond 1.2 INF:

Elevation (feet)	Horizontal (acres)	Storage (acre-feet)
183.50	**0.028**	0.000
183.55	0.028	0.001
183.60	0.028	0.001
183.65	0.028	0.002
183.70	0.028	0.002
183.75	0.028	0.003
183.80	0.028	0.003
183.85	0.028	0.004
183.90	0.028	0.004
183.95	0.028	0.005
184.00	0.028	0.006
184.05	0.028	0.007
184.10	0.028	0.008
184.15	0.028	0.009
184.20	0.028	0.010
184.25	0.028	0.011
184.30	0.028	0.012
184.35	0.028	0.014
184.40	0.028	0.015
184.45	0.028	0.016
184.50	0.028	0.017
184.55	0.028	0.018
184.60	0.028	0.019
184.65	0.028	0.020
184.70	0.028	0.021
184.75	0.028	0.023
184.80	0.028	0.024
184.85	0.028	0.025
184.90	0.028	0.026
184.95	0.028	0.027
185.00	0.028	0.028
185.05	0.028	0.029
185.10	0.028	0.030
185.15	0.028	0.031
185.20	0.028	0.032
185.25	0.028	0.033
185.30	0.028	0.034
185.35	0.028	0.035
185.40	0.028	0.036
185.45	0.028	0.037
185.50	0.028	0.038
185.55	0.028	0.039
185.60	0.028	0.040
185.65	0.028	0.041
185.70	0.028	0.042
185.75	0.028	0.043
185.80	0.028	0.044
185.85	0.028	0.045
185.90	0.028	0.046
185.95	0.028	0.046
186.00	0.028	0.047
186.05	0.028	0.048
186.10	0.028	0.049
186.15	0.028	0.050
186.20	0.028	0.050
186.25	0.028	0.051
186.30	0.028	0.052
186.35	0.028	0.052
186.40	0.028	0.053
186.45	0.028	0.054
186.50	0.028	0.054
186.55	0.028	0.055
186.60	0.028	0.055
186.65	0.028	0.056
186.70	0.028	0.056
186.75	0.028	0.057
186.80	0.028	0.058
186.85	0.028	0.058
186.90	0.028	0.059
186.95	0.028	0.059
187.00	0.028	**0.060**

Summary for Subcatchment 1.0S:

Runoff = 81.88 cfs @ 12.35 hrs, Volume= 10.647 af, Depth= 5.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 100-yr Rainfall=8.31"

Area (ac)	CN	Description
8.900	78	Meadow, non-grazed, HSG D
13.400	77	Woods, Good, HSG D
0.200	98	Paved parking, HSG D
22.500	78	Weighted Average
22.300		99.11% Pervious Area
0.200		0.89% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.16"
4.7	345	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.4	170	0.0800	1.98		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.1	280	0.0900	1.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	225		7.50		**Direct Entry, Channel Flow**
0.0	36				**Direct Entry, Pipe Flow**
0.5	360		12.00		**Direct Entry, Channel Flow**
4.3	30	0.1000	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.16"
28.4	1,546	Total			

Subcatchment 1.0S:

Summary for Subcatchment 1.1S:

Runoff = 24.59 cfs @ 12.03 hrs, Volume= 1.955 af, Depth= 7.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 100-yr Rainfall=8.31"

Area (ac)	CN	Description
1.900	98	Paved parking, HSG D
1.400	80	>75% Grass cover, Good, HSG D
3.300	90	Weighted Average
1.400		42.42% Pervious Area
1.900		57.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1.1S:

Summary for Subcatchment 1.2S:

Runoff = 3.76 cfs @ 12.03 hrs, Volume= 0.301 af, Depth= 7.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
NY-Beacon 24-hr S0P 100-yr Rainfall=8.31"

Area (ac)	CN	Description
0.310	98	Paved parking, HSG D
0.190	80	>75% Grass cover, Good, HSG D
0.500	91	Weighted Average
0.190		38.00% Pervious Area
0.310		62.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1.2S:

Summary for Reach Design Line:

Inflow Area = 26.300 ac, 9.16% Impervious, Inflow Depth = 5.59" for 100-yr event
Inflow = 91.95 cfs @ 12.32 hrs, Volume= 12.260 af
Outflow = 91.95 cfs @ 12.32 hrs, Volume= 12.260 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Reach Design Line:

Summary for Pond 1.1 EDB:

Inflow Area = 3.300 ac, 57.58% Impervious, Inflow Depth = 7.11" for 100-yr event
Inflow = 24.59 cfs @ 12.03 hrs, Volume= 1.955 af
Outflow = 20.62 cfs @ 12.09 hrs, Volume= 1.923 af, Atten= 16%, Lag= 3.9 min
Primary = 0.12 cfs @ 12.09 hrs, Volume= 0.518 af
Secondary = 20.50 cfs @ 12.09 hrs, Volume= 1.405 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 186.34' @ 12.09 hrs Surf.Area= 9,516 sf Storage= 24,134 cf

Plug-Flow detention time= 422.8 min calculated for 1.923 af (98% of inflow)
Center-of-Mass det. time= 412.1 min (1,187.3 - 775.2)

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	30,700 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	5,000	0	0
184.00	6,300	5,650	5,650
186.00	9,000	15,300	20,950
187.00	10,500	9,750	30,700

Device	Routing	Invert	Outlet Devices
#1	Primary	182.00'	**4.0" Round Culvert** L= 40.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 182.00' / 181.50' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf
#2	Device 1	182.00'	**1.5" Vert. Orifice/Grate** C= 0.600
#3	Secondary	183.00'	**24.0" Round Culvert** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.00' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#4	Device 3	185.50'	**8.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.12 cfs @ 12.09 hrs HW=186.34' (Free Discharge)
└─**1=Culvert** (Passes 0.12 cfs of 0.56 cfs potential flow)
  └─**2=Orifice/Grate** (Orifice Controls 0.12 cfs @ 9.96 fps)

Secondary OutFlow Max=20.35 cfs @ 12.09 hrs HW=186.34' (Free Discharge)
└─**3=Culvert** (Passes 20.35 cfs of 23.14 cfs potential flow)
  └─**4=Broad-Crested Rectangular Weir** (Weir Controls 20.35 cfs @ 3.03 fps)

Pond 1.1 EDB:

Hydrograph
24.59 cfs
20.50 cfs
0.12 cfs
Inflow Area=3.300 ac
Peak Elev=186.34'
Storage=24,134 cf
Inflow
Outflow
Primary
Secondary
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 1.1 EDB:

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	5,000	0
183.05	5,065	252
183.10	5,130	506
183.15	5,195	765
183.20	5,260	1,026
183.25	5,325	1,291
183.30	5,390	1,559
183.35	5,455	1,830
183.40	5,520	2,104
183.45	5,585	2,382
183.50	5,650	2,663
183.55	5,715	2,947
183.60	5,780	3,234
183.65	5,845	3,525
183.70	5,910	3,818
183.75	5,975	4,116
183.80	6,040	4,416
183.85	6,105	4,720
183.90	6,170	5,027
183.95	6,235	5,337
184.00	6,300	5,650
184.05	6,368	5,967
184.10	6,435	6,287
184.15	6,503	6,610
184.20	6,570	6,937
184.25	6,638	7,267
184.30	6,705	7,601
184.35	6,772	7,938
184.40	6,840	8,278
184.45	6,907	8,622
184.50	6,975	8,969
184.55	7,043	9,319
184.60	7,110	9,673
184.65	7,178	10,030
184.70	7,245	10,391
184.75	7,313	10,755
184.80	7,380	11,122
184.85	7,447	11,493
184.90	7,515	11,867
184.95	7,582	12,244
185.00	7,650	12,625
185.05	7,718	13,009
185.10	7,785	13,397
185.15	7,853	13,788
185.20	7,920	14,182
185.25	7,988	14,580
185.30	8,055	14,981
185.35	8,122	15,385
185.40	8,190	15,793
185.45	8,257	16,204
185.50	8,325	16,619
185.55	8,393	17,037
185.60	8,460	17,458
185.65	8,528	17,883
185.70	8,595	18,311
185.75	8,663	18,742
185.80	8,730	19,177
185.85	8,797	19,615
185.90	8,865	20,057
185.95	8,932	20,502
186.00	9,000	20,950
186.05	9,075	21,402
186.10	9,150	21,857
186.15	9,225	22,317
186.20	9,300	22,780
186.25	9,375	23,247
186.30	9,450	23,718
186.35	9,525	24,192
186.40	9,600	24,670
186.45	9,675	25,152
186.50	9,750	25,638
186.55	9,825	26,127
186.60	9,900	26,620
186.65	9,975	27,117
186.70	10,050	27,617
186.75	10,125	28,122
186.80	10,200	28,630
186.85	10,275	29,142
186.90	10,350	29,658
186.95	10,425	30,177
187.00	**10,500**	**30,700**

Summary for Pond 1.1 INF:

Inflow Area =	3.300 ac, 57.58% Impervious, Inflow Depth > 1.88" for 100-yr event				
Inflow =	0.12 cfs @	12.09 hrs,	Volume=	0.518 af	
Outflow =	0.10 cfs @	40.74 hrs,	Volume=	0.514 af,	Atten= 21%, Lag= 1,718.6 min
Discarded =	0.10 cfs @	40.74 hrs,	Volume=	0.514 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 180.39' @ 40.74 hrs Surf.Area= 4,171 sf Storage= 1,549 cf

Plug-Flow detention time= 177.5 min calculated for 0.514 af (99% of inflow)
Center-of-Mass det. time= 159.5 min (2,327.9 - 2,168.4)

Volume	Invert	Avail.Storage	Storage Description
#1	180.00'	16,150 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.00	3,750	0	0
182.00	5,900	9,650	9,650
183.00	7,100	6,500	16,150

Device	Routing	Invert	Outlet Devices
#1	Discarded	180.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	182.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir**
			Head (feet) 0.20 0.40 0.60 0.80 1.00
			Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.10 cfs @ 40.74 hrs HW=180.39' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.10 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=180.00' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1.1 INF:

Hydrograph
Inflow Area=3.300 ac
Peak Elev=180.39'
Storage=1,549 cf
0.12 cfs
0.10 cfs
0.00 cfs
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 1.1 INF:

Elevation (feet)	Surface (sq-ft)	Horizontal (sq-ft)	Storage (cubic-feet)
180.00	3,750	3,750	0
180.10	3,857	3,857	380
180.20	3,965	3,965	771
180.30	4,073	4,073	1,173
180.40	4,180	4,180	1,586
180.50	4,288	4,288	2,009
180.60	4,395	4,395	2,443
180.70	4,502	4,502	2,888
180.80	4,610	4,610	3,344
180.90	4,718	4,718	3,810
181.00	4,825	4,825	4,288
181.10	4,932	4,932	4,775
181.20	5,040	5,040	5,274
181.30	5,148	5,148	5,783
181.40	5,255	5,255	6,304
181.50	5,363	5,363	6,834
181.60	5,470	5,470	7,376
181.70	5,577	5,577	7,928
181.80	5,685	5,685	8,492
181.90	5,793	5,793	9,065
182.00	5,900	5,900	9,650
182.10	6,020	6,020	10,246
182.20	6,140	6,140	10,854
182.30	6,260	6,260	11,474
182.40	6,380	6,380	12,106
182.50	6,500	6,500	12,750
182.60	6,620	6,620	13,406
182.70	6,740	6,740	14,074
182.80	6,860	6,860	14,754
182.90	6,980	6,980	15,446
183.00	**7,100**	**7,100**	**16,150**

Summary for Pond 1.2 FS:

Inflow Area =	0.500 ac, 62.00% Impervious, Inflow Depth = 7.23" for 100-yr event			
Inflow =	3.76 cfs @ 12.03 hrs, Volume=	0.301 af		
Outflow =	3.76 cfs @ 12.03 hrs, Volume=	0.301 af, Atten= 0%, Lag= 0.0 min		
Primary =	1.59 cfs @ 12.03 hrs, Volume=	0.269 af		
Secondary =	2.17 cfs @ 12.03 hrs, Volume=	0.032 af		

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 187.63' @ 12.03 hrs
Flood Elev= 189.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	186.40'	**8.0" Round Culvert** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 186.40' / 185.80' S= 0.0300 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Secondary	186.40'	**12.0" Round Culvert** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 186.40' / 185.50' S= 0.0180 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	187.30'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=1.58 cfs @ 12.03 hrs HW=187.62' (Free Discharge)
└─**1=Culvert** (Inlet Controls 1.58 cfs @ 4.53 fps)

Secondary OutFlow Max=2.08 cfs @ 12.03 hrs HW=187.62' (Free Discharge)
└─**2=Culvert** (Passes 2.08 cfs of 3.21 cfs potential flow)
  └─**3=Broad-Crested Rectangular Weir** (Weir Controls 2.08 cfs @ 1.62 fps)

Pond 1.2 FS:

Hydrograph
Inflow Area=0.500 ac
Peak Elev=187.63'
3.76 cfs
2.17 cfs
1.59 cfs
Inflow
Outflow
Primary
Secondary
Flow (cfs)
Time (hours)
0
1
2
3
4
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72

Stage-Area-Storage for Pond 1.2 FS:

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
186.40	**0**	187.44	0	188.48	0
186.42	0	187.46	0	188.50	0
186.44	0	187.48	0	188.52	0
186.46	0	187.50	0	188.54	0
186.48	0	187.52	0	188.56	0
186.50	0	187.54	0	188.58	0
186.52	0	187.56	0	188.60	0
186.54	0	187.58	0	188.62	0
186.56	0	187.60	0	188.64	0
186.58	0	187.62	0	188.66	0
186.60	0	187.64	0	188.68	0
186.62	0	187.66	0	188.70	0
186.64	0	187.68	0	188.72	0
186.66	0	187.70	0	188.74	0
186.68	0	187.72	0	188.76	0
186.70	0	187.74	0	188.78	0
186.72	0	187.76	0	188.80	0
186.74	0	187.78	0	188.82	0
186.76	0	187.80	0	188.84	0
186.78	0	187.82	0	188.86	0
186.80	0	187.84	0	188.88	0
186.82	0	187.86	0	188.90	0
186.84	0	187.88	0	188.92	0
186.86	0	187.90	0	188.94	0
186.88	0	187.92	0	188.96	0
186.90	0	187.94	0	188.98	0
186.92	0	187.96	0	189.00	0
186.94	0	187.98	0		
186.96	0	188.00	0		
186.98	0	188.02	0		
187.00	0	188.04	0		
187.02	0	188.06	0		
187.04	0	188.08	0		
187.06	0	188.10	0		
187.08	0	188.12	0		
187.10	0	188.14	0		
187.12	0	188.16	0		
187.14	0	188.18	0		
187.16	0	188.20	0		
187.18	0	188.22	0		
187.20	0	188.24	0		
187.22	0	188.26	0		
187.24	0	188.28	0		
187.26	0	188.30	0		
187.28	0	188.32	0		
187.30	0	188.34	0		
187.32	0	188.36	0		
187.34	0	188.38	0		
187.36	0	188.40	0		
187.38	0	188.42	0		
187.40	0	188.44	0		
187.42	0	188.46	0		

Summary for Pond 1.2 INF:

Inflow Area =	0.500 ac, 62.00% Impervious, Inflow Depth = 6.45" for 100-yr event				
Inflow =	1.59 cfs @	12.03 hrs,	Volume=	0.269 af	
Outflow =	1.46 cfs @	12.14 hrs,	Volume=	0.269 af,	Atten= 8%, Lag= 6.9 min
Discarded =	0.03 cfs @	5.15 hrs,	Volume=	0.092 af	
Primary =	1.44 cfs @	12.14 hrs,	Volume=	0.176 af	

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 186.86' @ 12.14 hrs Surf.Area= 0.028 ac Storage= 0.058 af

Plug-Flow detention time= 244.4 min calculated for 0.269 af (100% of inflow)
Center-of-Mass det. time= 245.0 min (1,022.6 - 777.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	183.50'	0.026 af	**39.50'W x 30.92'L x 3.50'H Field A** 0.098 af Overall - 0.034 af Embedded = 0.064 af x 40.0% Voids
#2A	184.00'	0.034 af	**ADS_StormTech SC-740** x 32 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 Row Length Adjustment= +0.44' x 6.45 sf x 8 rows
		0.060 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	183.50'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	185.80'	**8.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 185.80' / 185.50' S= 0.0300 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf

Discarded OutFlow Max=0.03 cfs @ 5.15 hrs HW=183.54' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=1.43 cfs @ 12.14 hrs HW=186.86' (Free Discharge)
└**2=Culvert** (Inlet Controls 1.43 cfs @ 4.11 fps)

Pond 1.2 INF:

Hydrograph
1.59 cfs
1.44 cfs
0.03 cfs
Inflow Area=0.500 ac
Peak Elev=186.86'
Storage=0.058 af
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)

Stage-Area-Storage for Pond 1.2 INF:

Elevation (feet)	Horizontal (acres)	Storage (acre-feet)
183.50	**0.028**	0.000
183.55	0.028	0.001
183.60	0.028	0.001
183.65	0.028	0.002
183.70	0.028	0.002
183.75	0.028	0.003
183.80	0.028	0.003
183.85	0.028	0.004
183.90	0.028	0.004
183.95	0.028	0.005
184.00	0.028	0.006
184.05	0.028	0.007
184.10	0.028	0.008
184.15	0.028	0.009
184.20	0.028	0.010
184.25	0.028	0.011
184.30	0.028	0.012
184.35	0.028	0.014
184.40	0.028	0.015
184.45	0.028	0.016
184.50	0.028	0.017
184.55	0.028	0.018
184.60	0.028	0.019
184.65	0.028	0.020
184.70	0.028	0.021
184.75	0.028	0.023
184.80	0.028	0.024
184.85	0.028	0.025
184.90	0.028	0.026
184.95	0.028	0.027
185.00	0.028	0.028
185.05	0.028	0.029
185.10	0.028	0.030
185.15	0.028	0.031
185.20	0.028	0.032
185.25	0.028	0.033
185.30	0.028	0.034
185.35	0.028	0.035
185.40	0.028	0.036
185.45	0.028	0.037
185.50	0.028	0.038
185.55	0.028	0.039
185.60	0.028	0.040
185.65	0.028	0.041
185.70	0.028	0.042
185.75	0.028	0.043
185.80	0.028	0.044
185.85	0.028	0.045
185.90	0.028	0.046
185.95	0.028	0.046
186.00	0.028	0.047
186.05	0.028	0.048
186.10	0.028	0.049
186.15	0.028	0.050
186.20	0.028	0.050
186.25	0.028	0.051
186.30	0.028	0.052
186.35	0.028	0.052
186.40	0.028	0.053
186.45	0.028	0.054
186.50	0.028	0.054
186.55	0.028	0.055
186.60	0.028	0.055
186.65	0.028	0.056
186.70	0.028	0.056
186.75	0.028	0.057
186.80	0.028	0.058
186.85	0.028	0.058
186.90	0.028	0.059
186.95	0.028	0.059
187.00	0.028	**0.060**

APPENDIX D

Project and Owner information

Site Data:

Beacon Views
City of Beacon
Dutchess County, New York

Owner Information:

Highlands @ Beacon, LLC
2847 Church Street
Pine Plains, New York 12567

Applicant Information:

Beacon Views, LLC
500 River Avenue
Wakefield, New Jersey 08701

Party Responsible for Implementation of the Stormwater Pollution Prevention Plan (Including Maintenance During and After Construction):

Beacon Views, LLC
500 River Avenue
Wakefield, New Jersey 08701

Qualified Professional Responsible for Inspection of the Stormwater Pollution Prevention Plan:

Inspector to be determined at time of construction

APPENDIX E

NYSDEC SPDES for Construction Activities Construction Site Log Book

APPENDIX F
CONSTRUCTION SITE INSPECTION AND MAINTENANCE LOG BOOK

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES

SAMPLE CONSTRUCTION SITE LOG BOOK

Table of Contents

I. Pre-Construction Meeting Documents
   a. Preamble to Site Assessment and Inspections
   b. Pre-Construction Site Assessment Checklist

II. Construction Duration Inspections
   a. Directions
   b. Modification to the SWPPP

I. PRE-CONSTRUCTION MEETING DOCUMENTS

Project Name _____

Permit No. _____ **Date of Authorization** _____

Name of Operator _____

Prime Contractor _____

a. Preamble to Site Assessment and Inspections

The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified inspector[1] conduct an assessment of the site prior to the commencement of construction[2] and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements. A preconstruction meeting should be held to review all of the SWPPP requirements with construction personnel.

When construction starts, site inspections shall be conducted by the qualified inspector at least every 7 calendar days. The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified inspector perform a final site inspection. The qualified inspector shall certify that the site has undergone final stabilization[3] using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 Refer to "Qualified Inspector" inspection requirements in the current SPDES General Permit for Stormwater Discharges from Construction Activity for complete list of inspection requirements.
2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.
3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

b. Pre-construction Site Assessment Checklist
(NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

Yes No NA
[ ] [ ] [ ] Has a Notice of Intent been filed with the NYS Department of Conservation?
[ ] [ ] [ ] Is the SWPPP on-site? Where?_____
[ ] [ ] [ ] Is the Plan current? What is the latest revision date?_____
[ ] [ ] [ ] Is a copy of the NOI (with brief description) onsite? Where?_____
[ ] [ ] [ ] Have all contractors involved with stormwater related activities signed a contractor's certification?

2. Resource Protection

Yes No NA
[ ] [ ] [ ] Are construction limits clearly flagged or fenced?
[ ] [ ] [ ] Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.
[ ] [ ] [ ] Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

Yes No NA
[ ] [ ] [ ] Clean stormwater runoff has been diverted from areas to be disturbed.
[ ] [ ] [ ] Bodies of water located either on site or in the vicinity of the site have been identified and protected.
[ ] [ ] [ ] Appropriate practices to protect on-site or downstream surface water are installed.
[ ] [ ] [ ] Are clearing and grading operations divided into areas <5 acres?

4. Stabilized Construction Access

Yes No NA
[ ] [ ] [ ] A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
[ ] [ ] [ ] Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
[ ] [ ] [ ] Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Sediment Controls

Yes No NA
[ ] [ ] [ ] Silt fence material and installation comply with the standard drawing and specifications.
[ ] [ ] [ ] Silt fences are installed at appropriate spacing intervals
[ ] [ ] [ ] Sediment/detention basin was installed as first land disturbing activity.
[ ] [ ] [ ] Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA
[ ] [ ] [ ] The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
[ ] [ ] [ ] The plan is contained in the SWPPP on page _____
[ ] [ ] [ ] Appropriate materials to control spills are onsite. Where? _____

II. CONSTRUCTION DURATION INSPECTIONS

a. Directions:

Inspection Forms will be filled out during the entire construction phase of the project.

Required Elements:

1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;

2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;

3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;

4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);

5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and

6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

SITE PLAN/SKETCH

_____	_____
Inspector (print name)	**Date of Inspection**
_____	_____
Qualified Inspector (print name)	**Qualified Inspector Signature**

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

Maintaining Water Quality

Yes No NA
[ ] [ ] [ ] Is there an increase in turbidity causing a substantial visible contrast to natural conditions at the outfalls?
[ ] [ ] [ ] Is there residue from oil and floating substances, visible oil film, or globules or grease at the outfalls?
[ ] [ ] [ ] All disturbance is within the limits of the approved plans.
[ ] [ ] [ ] Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

Housekeeping

1. General Site Conditions

Yes No NA
[ ] [ ] [ ] Is construction site litter, debris and spoils appropriately managed?
[ ] [ ] [ ] Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
[ ] [ ] [ ] Is construction impacting the adjacent property?
[ ] [ ] [ ] Is dust adequately controlled?

2. Temporary Stream Crossing

Yes No NA
[ ] [ ] [ ] Maximum diameter pipes necessary to span creek without dredging are installed.
[ ] [ ] [ ] Installed non-woven geotextile fabric beneath approaches.
[ ] [ ] [ ] Is fill composed of aggregate (no earth or soil)?
[ ] [ ] [ ] Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

3. Stabilized Construction Access

Yes No NA
[ ] [ ] [ ] Stone is clean enough to effectively remove mud from vehicles.
[ ] [ ] [ ] Installed per standards and specifications?
[ ] [ ] [ ] Does all traffic use the stabilized entrance to enter and leave site?
[ ] [ ] [ ] Is adequate drainage provided to prevent ponding at entrance?

Runoff Control Practices

1. Excavation Dewatering

Yes No NA
[ ] [ ] [ ] Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
[ ] [ ] [ ] Clean water from upstream pool is being pumped to the downstream pool.
[ ] [ ] [ ] Sediment laden water from work area is being discharged to a silt-trapping device.
[ ] [ ] [ ] Constructed upstream berm with one-foot minimum freeboard.

Runoff Control Practices (continued)

2. Flow Spreader

Yes No NA
[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
[ ] [ ] [ ] Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales

Yes No NA
[ ] [ ] [ ] Installed per plan with minimum side slopes 2H:1V or flatter.
[ ] [ ] [ ] Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
[ ] [ ] [ ] Sediment-laden runoff directed to sediment trapping structure

4. Stone Check Dam

Yes No NA
[ ] [ ] [ ] Is channel stable? (flow is not eroding soil underneath or around the structure).
[ ] [ ] [ ] Check is in good condition (rocks in place and no permanent pools behind the structure).
[ ] [ ] [ ] Has accumulated sediment been removed?.

5. Rock Outlet Protection

Yes No NA
[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Installed concurrently with pipe installation.

Soil Stabilization

1. Topsoil and Spoil Stockpiles

Yes No NA
[ ] [ ] [ ] Stockpiles are stabilized with vegetation and/or mulch.
[ ] [ ] [ ] Sediment control is installed at the toe of the slope.

2. Revegetation

Yes No NA
[ ] [ ] [ ] Temporary seedings and mulch have been applied to idle areas.
[ ] [ ] [ ] 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control Practices

1. Silt Fence and Linear Barriers

Yes No NA
[ ] [ ] [ ] Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
[ ] [ ] [ ] Joints constructed by wrapping the two ends together for continuous support.
[ ] [ ] [ ] Fabric buried 6 inches minimum.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.
Sediment accumulation is ___% of design capacity.

Sediment Control Practices (continued)

2. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated; Filter Sock or Manufactured practices)

Yes No NA
[ ] [ ] [ ] Installed concrete blocks lengthwise so open ends face outward, not upward.
[ ] [ ] [ ] Placed wire screen between No. 3 crushed stone and concrete blocks.
[ ] [ ] [ ] Drainage area is 1acre or less.
[ ] [ ] [ ] Excavated area is 900 cubic feet.
[ ] [ ] [ ] Excavated side slopes should be 2:1.
[ ] [ ] [ ] 2” x 4” frame is constructed and structurally sound.
[ ] [ ] [ ] Posts 3-foot maximum spacing between posts.
[ ] [ ] [ ] Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.
[ ] [ ] [ ] Manufactured insert fabric is free of tears and punctures.
[ ] [ ] [ ] Filter Sock is not torn or flattened and fill material is contained within the mesh sock.
Sediment accumulation ___% of design capacity.

3. Temporary Sediment Trap

Yes No NA
[ ] [ ] [ ] Outlet structure is constructed per the approved plan or drawing.
[ ] [ ] [ ] Geotextile fabric has been placed beneath rock fill.
[ ] [ ] [ ] Sediment trap slopes and disturbed areas are stabilized.
Sediment accumulation is ___% of design capacity.

4. Temporary Sediment Basin

Yes No NA
[ ] [ ] [ ] Basin and outlet structure constructed per the approved plan.
[ ] [ ] [ ] Basin side slopes are stabilized with seed/mulch.
[ ] [ ] [ ] Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
[ ] [ ] [ ] Sediment basin dewatering pool is dewatering at appropriate rate.
Sediment accumulation is ___% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design. All practices shall be maintained in accordance with their respective standards.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

CONSTRUCTION DURATION INSPECTIONS

b. Modifications to the SWPPP (To be completed as described below)

The Operator shall amend the SWPPP whenever:

1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
2. The SWPPP proves to be ineffective in:
   a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
   b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and
3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.

Modification & Reason:

APPENDIX F

NYSDEC Stormwater Design Manual Chapter 5 Analysis

Table Key: ● = Practice Used in Accordance with Chapter 5 Requirements
o = Practice Not Used
- = Practice is Not Applicable

NYSDEC Chapter 5 Requirements	Subcatchments		Remarks
	1.1	1.2	
Chapter 5, Section 5.1: Preservation if Natural Features and Conservation Design			
Practices			
Preservation of Undisturbed Areas	●	●	See Note #2
Preservation of Buffers	-	-	
Reduction of Clearing & Grading	●	●	See Note #4
Locating Development in Less Sensitive Areas	●	●	See Note #4
Open Space Design	-	-	
Soil Restoration	●	●	See Note #5
Chapter 5, Section 5.2: Reduction of Impervious Cover			
Practices			
Roadway Reduction	-	-	
Sidewalk Reduction	●	●	
Driveway Reduction	●	●	See Note #1
Cul-de-sac Reduction	-	-	
Building Footprint Reduction	●	●	See Note #3
Parking Reduction	●	●	See Note #4
Conservation of Natural Areas	-	-	See Note #2
Sheetflow to Riparian Buffers or Filter Strips	-	-	
Vegetated Swale	●	●	
Tree Planting / Tree Pit	-	-	
Disconnection of Rooftop Runoff	-	-	
Stream Daylighting	-	-	
Rain Gardens	-	-	
Green Roofs	-	-	
Stormwater Planters	-	-	
Rain Barrels / Cisterns	-	-	
Porous Pavement	-	-	

Notes:

1. The proposed driveway entrance has been designed to provide a minimum width for safe ingress and egress for the development.
2. Although no formal calculations have been provided, the subject project has provided conservation of natural areas to the maximum extent practical.
3. The proposed buildings are multi-story, thus minimize the building footprints.
4. The reduction in clearing and grading, as well as the driveway and parking areas foot print reduction will be enforced with the approval of the project PSWPPP. Notes on the project plans, establish that any changes in the project plans would require an amended approval from the necessary regulatory agencies
5. Soil restoration requirements per NYSDEC stantards shown on project plans.

APPENDIX G

NYSDEC Infiltration Construction and Maintenance Inspection Checklist

Infiltration Trench Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Pre-construction meeting		
Runoff diverted		
Soil permeability tested		
Groundwater / bedrock sufficient at depth		
2. Excavation		
Size and location		
Side slopes stable		
Excavation does not compact subsoils		
3. Filter Fabric Placement		
Fabric specifications		
Placed on bottom, sides, and top		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
4. Aggregate Material		
Size as specified		
Clean / washed material		
Placed properly		
5. Observation Well		
Pipe size		
Removable cap / footplate		
Initial depth =_____feet		
6. Final Inspection		
Pretreatment facility in place		
Contributing watershed stabilized prior to flow diversion		
Outlet		

Comments:

Actions to be Taken:

Infiltration Trench Operation, Maintenance, and Management Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

MAINTENANCE ITEM	SATISFACTORY / UNSATISFACTORY	COMMENTS
1. Debris Cleanout (Monthly)		
Trench surface clear of debris		
Inflow pipes clear of debris		
Overflow spillway clear of debris		
Inlet area clear of debris		
2. Sediment Traps or Forebays (Annual)		
Obviously trapping sediment		
Greater than 50% of storage volume remaining		
3. Dewatering (Monthly)		
Trench dewaters between storms		
4. Sediment Cleanout of Trench (Annual)		
No evidence of sedimentation in trench		
Sediment accumulation doesn't yet require cleanout		
5. Inlets (Annual)		

MAINTENANCE ITEM	SATISFACTORY / UNSATISFACTORY	COMMENTS
Good condition		
No evidence of erosion		
6. Outlet/Overflow Spillway (Annual)		
Good condition, no need for repair		
No evidence of erosion		
7. Aggregate Repairs (Annual)		
Surface of aggregate clean		
Top layer of stone does not need replacement		
Trench does not need rehabilitation		

Comments:

_____

_____

_____

_____

_____

_____

Actions to be Taken:

_____

_____

_____

_____

_____

_____

Infiltration Basin Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Runoff diverted		
Soil permeability tested		
Groundwater / bedrock depth		
2. Excavation		
Size and location		
Side slopes stable		
Excavation does not compact subsoils		
3. Embankment		
Barrel		
Anti-seep collar or Filter diaphragm		
Fill material		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
4. Final Excavation		
Drainage area stabilized		
Sediment removed from facility		
Basin floor tilled		
Facility stabilized		
5. Final Inspection		
Pretreatment facility in place		
Inlets / outlets		
Contributing watershed stabilized before flow is routed to the factility		

Comments:

Actions to be Taken:

APPENDIX H

Hydrodynamic Separator Sizing and Maintenance Manual

State of New Jersey

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code – 401-02B
Division of Water Quality
Bureau of Nonpoint Pollution Control
P.O. Box 420 – 401 E. State St.
Trenton, NJ 08625-0420
Phone: (609) 633-7021 / Fax: (609) 777-0432
http://www.state.nj.us/dep/dwq/bnpc_home.htm

CATHERINE R. McCABE
Acting Commissioner

March 27, 2018

Graham Bryant, M.Sc., P.E.
President
Hydroworks, LLC
136 Central Avenue
Clark, NJ 07066

Re: MTD Lab Certification
HydroStorm Hydrodynamic Separator by Hydroworks, LLC
Online Installation

TSS Removal Rate 50%

Dear Mr. Bryant:

The Stormwater Management rules under N.J.A.C. 7:8-5.5(b) and 5.7 (c) allow the use of manufactured treatment devices (MTDs) for compliance with the design and performance standards at N.J.A.C. 7:8-5 if the pollutant removal rates have been verified by the New Jersey Corporation for Advanced Technology (NJCAT) and have been certified by the New Jersey Department of Environmental Protection (NJDEP). Hydroworks, LLC has requested an MTD Laboratory Certification for the Hydroworks HydroStorm Hydrodynamic Separator.

The project falls under the "Procedure for Obtaining Verification of a Stormwater Manufactured Treatment Device from New Jersey Corporation for Advance Technology" dated January 25, 2013. The applicable protocol is the "New Jersey Laboratory Testing Protocol to Assess Total Suspended Solids Removal by a Hydrodynamic Sedimentation Manufactured Treatment Device" dated January 25, 2013.

NJCAT verification documents submitted to the NJDEP indicate that the requirements of the aforementioned protocol have been met or exceeded. The NJCAT letter also included a recommended certification TSS removal rate and the required maintenance plan. The NJCAT Verification Report with the Verification Appendix (dated February 2018) for this device is published online at http://www.njcat.org/verification-process/technology-verification-database.html.

The NJDEP certifies the use of the HydroStorm by Hydroworks, LLC at a TSS removal rate of 50% when designed, operated, and maintained in accordance with the information provided in the Verification Appendix and the following conditions:

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1. The maximum treatment flow rate (MTFR) for the manufactured treatment device (MTD) is calculated using the New Jersey Water Quality Design Storm (1.25 inches in 2 hrs) in N.J.A.C. 7:8-5.5.

2. The HydroStorm shall be installed using the same configuration reviewed by NJCAT and shall be sized in accordance with the criteria specified in item 6 below.

3. This HydroStorm cannot be used in series with another MTD or a media filter (such as a sand filter) to achieve an enhanced removal rate for total suspended solids (TSS) removal under N.J.A.C. 7:8-5.5.

4. Additional design criteria for MTDs can be found in Chapter 9.6 of the New Jersey Stormwater Best Management Practices (NJ Stormwater BMP) Manual, which can be found online at www.njstormwater.org.

5. The maintenance plan for a site using this device shall incorporate, at a minimum, the maintenance requirements for the Hydrostorm. A copy of the maintenance plan is attached to this certification. However, it is recommended to review the maintenance website at http://www.hydroworks.com/hydrostormo&m.pdf for any changes to the maintenance requirements.

6. Sizing Requirement:

   The example below demonstrates the sizing procedure for the Hydrostorm:

   Example: A 0.25-acre impervious site is to be treated to 50% TSS removal using a HydroStorm. The impervious site runoff (Q) based on the New Jersey Water Quality Design Storm was determined to be 0.79 cfs.

   Maximum Treatment Flow Rate (MTFR) Evaluation:

   The site runoff (Q) was based on the following:
   time of concentration = 10 minutes
   i = 3.2 in/hr (page 5-8, Fig. 5-3 of the NJ Stormwater BMP Manual)
   c = 0.99 (runoff coefficient for impervious)
   Q = ciA = 0.99 x 3.2 x 0.25 = 0.79 cfs

   Given the site runoff is 0.79 cfs and based on Table 1 below, the HydroStorm Model HS4 with a MTFR of 0.88 cfs could be used for this site to remove 50% of the TSS from the impervious area without exceeding the MTFR.

   The sizing table corresponding to the available system models is noted below. Additional specifications regarding each model can be found in the Verification Appendix under Table A-1.

Table 1 HydroStorm Sizing Information

HydroStorm Model	NJDEP 50% TSS Maximum Treatment Flow Rate (cfs)	Treatment Area (ft^2)	Hydraulic Loading Rate (gpm/ft^2)	50% Maximum Sediment Storage (ft^3)
HS3	0.50	7.1	31.4	3.6
HS4	0.88	12.6	31.4	6.3
HS5	1.37	19.6	31.4	9.8
HS6	1.98	28.3	31.4	14.2
HS7	2.69	38.5	31.4	19.3
HS8	3.52	50.3	31.4	25.2
HS9	4.45	63.6	31.4	31.8
HS10	5.49	78.5	31.4	39.3
HS11	6.65	95.0	31.4	47.5
HS12	7.91	113.0	31.4	56.5

A detailed maintenance plan is mandatory for any project with a Stormwater BMP subject to the Stormwater Management Rules, N.J.A.C. 7:8. The plan must include all of the items identified in the Stormwater Management Rules, N.J.A.C. 7:8-5.8. Such items include, but are not limited to, the list of inspection and maintenance equipment and tools, specific corrective and preventative maintenance tasks, indication of problems in the system, and training of maintenance personnel. Additional information can be found in Chapter 8: Maintenance and Retrofit of Stormwater Management Measures.

If you have any questions regarding the above information, please contact Brian Salvo or Nick Grotts of my office at (609) 633-7021.

Sincerely,

James J. Murphy, Chief
Bureau of Nonpoint Pollution Control

Attachment: Maintenance Plan

cc: Chron File
Richard Magee, NJCAT
Vince Mazzei, NJDEP - DLUR
Ravi Patraju, NJDEP - BES
Gabriel Mahon, NJDEP - BNPC
Brian Salvo, NJDEP – BNPC
Nick Grotts, NJDEP – BNPC

Hydroworks® HydroStorm

Operations & Maintenance Manual

Version 1.0

Please call Hydroworks at 888-290-7900 or email us at support@hydroworks.com if you have any questions regarding the Inspection Checklist. Please fax a copy of the completed checklist to Hydroworks at 888-783-7271 for our records.

Introduction

The HydroStorm is a state of the art hydrodynamic separator. Hydrodynamic separators remove solids, debris and lighter than water (oil, trash, floating debris) pollutants from stormwater. Hydrodynamic separators and other water quality measures are mandated by regulatory agencies (Town/City, State, Federal Government) to protect storm water quality from pollution generated by urban development (traffic, people) as part of new development permitting requirements.

As storm water treatment structures fill up with pollutants they become less and less effective in removing new pollution. Therefore, it is important that storm water treatment structures be maintained on a regular basis to ensure that they are operating at optimum performance. The HydroStorm is no different in this regard and this manual has been assembled to provide the owner/operator with the necessary information to inspect and coordinate maintenance of their HydroStorm.

Hydroworks® HydroStorm Operation

The Hydroworks HydroStorm (HS) separator is a unique hydrodynamic by-pass separator. It incorporates a protected submerged pretreatment zone to collect larger solids, a treatment tank to remove finer solids, and a dual set of weirs to create a high flow bypass. High flows are conveyed directly to the outlet and do not enter the treatment area, however, the submerged pretreatment area still allows removal of coarse solids during high flows.

Under normal or low flows, water enters an inlet area with a horizontal grate. The area underneath the grate is submerged with openings to the main treatment area of the separator. Coarse solids fall through the grate and are either trapped in the pretreatment area or conveyed into the main treatment area depending on the flow rate. Fines are transported into the main treatment area. Openings and weirs in the pretreatment area allow entry of water and solids into the main treatment area and cause water to rotate in the main treatment area creating a vortex motion. Water in the main treatment area is forced to rise along the walls of the separator to discharge from the treatment area to the downstream pipe.

The vortex motion forces solids and floatables to the middle of the inner chamber. Floatables are trapped since the inlet to the treatment area is submerged. The design maximizes the retention of settled solids since solids are forced to the center of the inner chamber by the vortex motion of water while water must flow up the walls of the separator to discharge into the downstream pipe.

A set of high flow weirs near the outlet pipe create a high flow bypass over both the pretreatment area and main treatment chamber. The rate of flow into the treatment area is regulated by the number and size of openings into the treatment chamber and the height of by-pass weirs. High flows flow over the weirs directly to the outlet pipe preventing the scour and resuspension of any fines collected in the treatment chamber.

A central access tube is located in the structure to provide access for cleaning. The arrangement of the inlet area and bypass weirs near the outlet pipe facilitate the use of multiple inlet pipes.

Figure 1. Hydroworks HydroStorm Operation – Plan View

Figure 2 is a profile view of the HydroStorm separator showing the flow patterns for low and high flows.

Figure 2. Hydroworks HydroStorm Operation – Profile View

The HS 4i is an inlet version of the HS 4 separator. There is a catch-basin grate on top of the HS 4i. A funnel sits sits underneath the grate on the frame and directs the water to the inlet side of the separator to ensure all lows flows are properly treated. The whole funnel is removed for inspection and cleaning.

Figure 3. Hydroworks HS 4i Funnel

Inspection

Procedure

Floatables

A visual inspection can be conducted for floatables by removing the covers and looking down into the center access tube of the separator. Separators with an inlet grate (HS 4i or custom separator) will have a plastic funnel located under the grate that must be removed from the frame prior to inspection or maintenance. If you are missing a funnel please contact Hydroworks at the numbers provided at the end of this document.

TSS/Sediment

Inspection for TSS build-up can be conducted using a Sludge Judge®, Core Pro®, AccuSludge® or equivalent sampling device that allows the measurement of the depth of TSS/sediment in the unit. These devices typically have a ball valve at the bottom of the tube that allows water and TSS to flow into the tube when lowering the tube into the unit. Once the unit touches the bottom of the device, it is quickly pulled upward such that the water and TSS in the tube forces the ball valve closed allowing the user to see a full core of water/TSS in the unit. The unit should be inspected for TSS through each of the access covers. Several readings (2 or 3) should be made at each access cover to ensure that an accurate TSS depth measurement is recorded.

Frequency

Construction Period

The HydroStorm separator should be inspected every four weeks and after every large storm (over 0.5" (12.5 mm) of rain) during the construction period.

Post-Construction Period

The Hydroworks HydroStorm separator should be inspected during the first year of operation for normal stabilized sites (grassed or paved areas). If the unit is subject to oil spills or runoff from unstabilized (storage piles, exposed soils) areas the HydroStorm separator should be inspected more frequently (4 times per year). The initial annual inspection will indicate the required future frequency of inspection and maintenance if the unit was maintained after the construction period.

Reporting

Reports should be prepared as part of each inspection and include the following information:

1. Date of inspection
2. GPS coordinates of Hydroworks unit
3. Time since last rainfall
4. Date of last inspection
5. Installation deficiencies (missing parts, incorrect installation of parts)
6. Structural deficiencies (concrete cracks, broken parts)
7. Operational deficiencies (leaks, blockages)
8. Presence of oil sheen or depth of oil layer
9. Estimate of depth/volume of floatables (trash, leaves) captured
10. Sediment depth measured
11. Recommendations for any repairs and/or maintenance for the unit
12. Estimation of time before maintenance is required if not required at time of inspection

A sample inspection checklist is provided at the end of this manual.

Maintenance

Procedure

The Hydroworks HydroStorm unit is typically maintained using a vacuum truck. There are numerous companies that can maintain the HydroStorm separator. Maintenance with a vacuum truck involves removing all of the water and sediment together. The water is then separated from the sediment on the truck or at the disposal facility.

A central access opening (24” or greater) is provided to the gain access to the lower treatment tank of the unit. This is the primary location to maintain by vacuum truck. The pretreatment area can also be vacuumed and/or flushed into the lower treatment tank of the separator for cleaning via the central access once the water level is lowered below the pretreatment floor.

In instances where a vacuum truck is not available other maintenance methods (i.e. clamshell bucket) can be used, but they will be less effective. If a clamshell bucket is used the water must be decanted prior to cleaning since the sediment is under water and typically fine in nature. Disposal of the water will depend on local requirements. Disposal options for the decanted water may include:

1. Discharge into a nearby sanitary sewer manhole
2. Discharge into a nearby LID practice (grassed swale, bioretention)
3. Discharge through a filter bag into a downstream storm drain connection

The local municipality should be consulted for the allowable disposal options for both water and sediments prior to any maintenance operation. Once the water is decanted the sediment can be removed with the clamshell bucket.

Disposal of the contents of the separator depend on local requirements. Maintenance of a Hydroworks HydroStorm unit will typically take 1 to 2 hours based on a vacuum truck and longer for other cleaning methods (i.e. clamshell bucket).

Figure 3. Maintenance Access

Frequency

<u>Construction Period</u>

A HydroStorm separator can fill with construction sediment quickly during the construction period. The HydroStorm must be maintained during the construction period when the depth of TSS/sediment reaches 24" (600 mm). It must also be maintained during the construction period if there is an appreciable depth of oil in the unit (more than a sheen) or if floatables other than oil cover over 50% of the area of the separator

The HydroStorm separator should be maintained at the end of the construction period, prior to operation for the post-construction period.

Post-Construction Period

The HydroStorm was independently tested by Alden Research Laboratory in 2017. A HydroStorm HS 4 was tested for scour with a 50% sediment depth of 0.5 ft. Therefore, maintenance for sediment accumulation is required if the depth of sediment is 1 ft or greater in separators with standard water (sump) depths (Table 1).

There will be designs with increased sediment storage based on specifications or site-specific criteria. A measurement of the total water depth in the separator through the central access tube should be taken and compared to water depth given in Table 1. The standard water depth from Table 1 should be subtracted from the measured water depth and the resulting extra depth should be added to the 1 ft to determine the site-specific sediment maintenance depth for that separator.

For example, if the measured water depth in the HS-7 is 7 feet, then the sediment maintenance depth for that HS-7 is 2 ft (= 1 + 7 – 6) and the separator does not need to be cleaned for sediment accumulation until the measure sediment depth is 2 ft.

The HydroStorm separator must also be maintained if there is an appreciable depth of oil in the unit (more than a sheen) or if floatables other than oil cover over 50% of the water surface of the separator.

Table 1 Standard Dimensions for Hydroworks HydroStorm Models

Model	Diameter (ft)	Total Water Depth (ft)	Sediment Maintenance Depth for Table 1 Total Water Depth(ft)
HS-3	3	3	1
HS-4	4	4	1
HS-5	5	4	1
HS-6	6	4	1
HS-7	7	6	1
HS-8	8	7	1
HS-9	9	7.5	1
HS-10	10	8	1
HS-11	11	9	1
HS-12	12	9.5	1

HYDROSTORM INSPECTION SHEET

Date _____
Date of Last Inspection _____

Site _____
City _____
State _____
Owner _____

GPS Coordinates _____

Date of last rainfall _____

Site Characteristics	**Yes**	**No**
Soil erosion evident	☐	☐
Exposed material storage on site	☐	☐
Large exposure to leaf litter (lots of trees)	☐	☐
High traffic (vehicle) area	☐	☐

HydroStorm	**Yes**	**No**
Obstructions in the inlet or outlet	☐ *	☐
Missing internal components	☐ **	☐
Improperly installed inlet or outlet pipes	☐ ***	☐
Internal component damage (cracked, broken, loose pieces)	☐ **	☐
Floating debris in the separator (oil, leaves, trash)	☐	☐
Large debris visible in the separator	☐ *	☐
Concrete cracks/deficiencies	☐ ***	☐
Exposed rebar	☐ **	☐
Water seepage (water level not at outlet pipe invert)	☐ ***	☐

Water level depth below outlet pipe invert _____"

Routine Measurements

Floating debris depth	**< 0.5" (13mm)**	☐	**>0.5" 13mm)**	☐ *
Floating debris coverage	**< 50% of surface area**	☐	**> 50% surface area**	☐ *
Sludge depth	**< 12" (300mm)**	☐	**> 12" (300mm)**	☐ *

* Maintenance required
** Repairs required
*** Further investigation is required

Hydroworks

Other Comments:

Hydroworks

Hydroworks® HydroStorm

One Year Limited Warranty

Hydroworks, LLC warrants, to the purchaser and subsequent owner(s) during the warranty period subject to the terms and conditions hereof, the Hydroworks HydroStorm to be free from defects in material and workmanship under normal use and service, when properly installed, used, inspected and maintained in accordance with Hydroworks written instructions, for the period of the warranty. The standard warranty period is 1 year.

The warranty period begins once the separator has been manufactured and is available for delivery. Any components determined to be defective, either by failure or by inspection, in material and workmanship will be repaired, replaced or remanufactured at Hydroworks' option provided, however, that by doing so Hydroworks, LLC will not be obligated to replace an entire insert or concrete section, or the complete unit. This warranty does not cover shipping charges, damages, labor, any costs incurred to obtain access to the unit, any costs to repair/replace any surface treatment/cover after repair/replacement, or other charges that may occur due to product failure, repair or replacement.

This warranty does not apply to any material that has been disassembled or modified without prior approval of Hydroworks, LLC, that has been subjected to misuse, misapplication, neglect, alteration, accident or act of God, or that has not been installed, inspected, operated or maintained in accordance with Hydroworks, LLC instructions and is in lieu of all other warranties expressed or implied. Hydroworks, LLC does not authorize any representative or other person to expand or otherwise modify this limited warranty.

The owner shall provide Hydroworks, LLC with written notice of any alleged defect in material or workmanship including a detailed description of the alleged defect upon discovery of the defect. Hydroworks, LLC should be contacted at 136 Central Ave., Clark, NJ 07066 or any other address as supplied by Hydroworks, LLC. (888-290-7900).

This limited warranty is exclusive. There are no other warranties, express or implied, or merchantability or fitness for a particular purpose and none shall be created whether under the uniform commercial code, custom or usage in the industry or the course of dealings between the parties. Hydroworks, LLC will replace any goods that are defective under this warranty as the sole and exclusive remedy for breach of this warranty.

Subject to the foregoing, all conditions, warranties, terms, undertakings or liabilities (including liability as to negligence), expressed or implied, and howsoever arising, as to the condition, suitability, fitness, safety, or title to the Hydroworks HydroStorm are hereby negated and excluded and Hydroworks, LLC gives and makes no such representation, warranty or undertaking except as expressly set forth herein. Under no circumstances shall Hydroworks, LLC be liable to the Purchaser or to any third party for product liability claims; claims arising from the design, shipment, or installation of the HydroStorm, or the cost of other goods or services related to the purchase and installation of the HydroStorm. For this Limited Warranty to apply, the HydroStorm must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Hydroworks' written installation instructions.

Hydroworks, LLC expressly disclaims liability for special, consequential or incidental damages (even if it has been advised of the possibility of the same) or breach of expressed or implied warranty. Hydroworks, LLC shall not be liable for penalties or liquidated damages, including loss of production and profits; labor and materials; overhead costs; or other loss or expense incurred by the purchaser or any third party. Specifically excluded from limited warranty coverage are damages to the HydroStorm arising from ordinary wear and tear; alteration, accident, misuse, abuse or neglect; improper maintenance, failure of the product due to improper installation of the concrete sections or improper sizing; or any other event not caused by Hydroworks, LLC. This limited warranty represents Hydroworks' sole liability to the purchaser for claims related to the HydroStorm, whether the claim is based upon contract, tort, or other legal basis.

FIGURES

PROJECT: BEACON VIEWS CITY OF BEACON, DUTCHESS COUNTY, NEW YORK	PREPARED BY: INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C. 3 Garrett Place • Carmel, New York 10512 Phone (845) 225-9690 • Fax (845) 225-9717 www.insite-eng.com	DATE: 8-26-19
DRAWING: LOCATION MAP		SCALE: 1" = 500'
		PROJECT NO.: 19131.100
		FIGURE: 1

Z:\E19131100\Stormwater\Figures\Figure 1 - Location Map.dwg, 8/26/2019 7:56:56 AM, ependleton, 1:1

SOILS LEGEND

SOILS	DESCRIPTION	HYDROLOGICAL GROUP
BeB	Bernardston Silt Loam, 3% to 8% slope	C/D
BeC	Bernardston Silt Loam, 8% to 15% slope	C/D
Ca	Canandaigua Silt Loam, Nuetral Substratum	C/D
NwC	Nassau–Cardigan Complex, Rolling, Very Rocky	D
	NRCS Soil Boundary Line	

LEGEND

PRE	SUBCATCHMENT
SF	TIME OF CONCENTRATION SHEET FLOW
SCF	TIME OF CONCENTRATION SHALLOW CONCENTRATED FLOW
DESIGN LINE	DESIGN LINE
	SUBCATCHMENT CONTRIBUTING AREA

NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225–9690
(845) 225–9717 fax
www.insite–eng.com

PROJECT:
BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING:
PRE–DEVELOPMENT DRAINAGE MAP

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	FIGURE NO.
DATE	8–26–19	DRAWN BY	E.J.P.	2
SCALE	1" = 50'	CHECKED BY	Z.M.P.	

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

Z:\C\19131\00\Stormwater\Figures\Figure 2 - Pre Development.dwg 8/26/2019 7:27:12 AM, epeckham, 1:1

SOILS LEGEND

SOILS	DESCRIPTION	HYDROLOGICAL GROUP
BeB	Bernardston Silt Loam, 3% to 8% slope	C/D
BeC	Bernardston Silt Loam, 8% to 15% slope	C/D
Ca	Canandaigua Silt Loam, Nuetral Substratum	C/D
NwC	Nassau-Cardigan Complex, Rolling, Very Rocky	D
	NRCS Soil Boundary Line	

LEGEND

1.0S	SUBCATCHMENT
1.1P	STORMWATER MANAGEMENT PRACTICE
SF	TIME OF CONCENTRATION SHEET FLOW
SCF	TIME OF CONCENTRATION SHALLOW CONCENTRATED FLOW
PF	TIME OF CONCENTRATION PIPE FLOW
CF	TIME OF CONCENTRATION CHANNEL FLOW
DESIGN LINE	DESIGN LINE
	SUBCATCHMENT CONTRIBUTING AREA
	STORMWATER MANAGEMENT PRACTICE AREA

GRAPHIC SCALE

0 25 50 100

(IN FEET)
1 inch = 50 ft.

NO.	DATE	REVISION	BY

INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place
Carmel, NY 10512
(845) 225-9690
(845) 225-9717 fax
www.insite-eng.com

PROJECT:
BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING:
POST-DEVELOPMENT DRAINAGE MAP

PROJECT NUMBER	19131.100	PROJECT MANAGER	J.J.C.	FIGURE NO.
DATE	8-26-19	DRAWN BY	E.J.P.	3
SCALE	1" = 50'	CHECKED BY	Z.M.P.	

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

Z:\E19131001\Stormwater\Figures\Figure 3 - Post Development.dwg 8/27/2019 7:48:19 AM, epeckham, 1:1

John Clarke Planning and Design jclarkeplandesign@gmail.com
25 Beech Street, Rhinebeck NY 12572 845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: September 6, 2019
Re: **Beacon Views Townhouses Site Plan and Subdivision**

I have reviewed the cover letter from Cuddy + Feder, along with a Full EAF Part 1 and other exhibits, including traffic, school, and archeological impact analyses, an 11-sheet Site Plan set, and a 3-sheet set with floor plans and renderings, all dated August 27, 2019.

Proposal

The applicant is proposing to subdivide and develop an 8.55-acre site with 42 for-sale townhouse units. The parcel is in the RD-5 zoning district. A six-month moratorium was recently adopted by the City Council, so no approvals can be granted for this proposal until the moratorium is lifted.

Comments and Recommendations

1. Sheet 1 shows the approved subdivision at 25 Townsend Street with a 50-foot right-of-way reserved for a connecting street to this parcel. The proposed subdivision and site plan for this lot should include an extension of this right-of-way and provide for the anticipated street connection. A 10-foot wide emergency access lane wedged between two buildings is not sufficient.

2. Sheet 2 should show any existing trees over 6 inches in the area of disturbance and indicate any major trees that will be removed. If the existing wetland is not delineated on the access and stormwater easement area, how can it be guaranteed that the proposed infiltration basin is not in a regulated wetland?

3. The Sheet 3 site plan layout is inconsistent with traditional patterns of development in Beacon. It proposes a private, dead-end street over 1,000 feet long. The townhouses are arranged so that the building fronts are dominated by driveways and garage doors. There are no sidewalks along the building frontages. The Board should note that the adjacent 25 Townsend Street subdivision has the traditional sidewalks on both sides of the street with street trees between the curb and sidewalk, and the recently approved River Ridge and Ferry Landing townhouses have front sidewalks and porches with the parking and garage doors hidden to the rear. The sidewalk along the access easement should have street trees every 30-40 feet between the sidewalk and curb to provide snow storage space and a safety buffer from traffic, and sidewalks should also be provided through the development.

4. On Sheet 3, under Zone Requirements, the side yard setback must be 17.5 feet, according to the Schedule of Regulations, side yard footnote e. The parking requirement for a townhouse is just two spaces per unit. The 30-foot front setback should extend along the entire southern property frontage bordering the lots on Conklin Street and DeSoto Avenue. The Landscaping Plan should identify the location and species of all the plantings on the Plant List and include additional screening along the southern property line.

5. With private lots shown backing into the delineated wetland, the applicant should be prepared to explain the federal wetlands application and how future encroachment into the remaining wetlands will be prevented.

6. For Sheet 4, I suggest making the drainage basins along the project entrance more naturally graded shapes, rather than the proposed artificial and repetitive forms.

7. The floor plans and renderings should be incorporated into one Site Plan set. Scaled elevations will also be required with building and floor-to-floor heights, materials, and colors noted. At the appropriate time, the building designs should be referred to the Architectural Review Subcommittee.

8. For the SEQR determination, the EAF and background exhibits note that the applicant is waiting for additional information from the School District, a concurrence letter from the NYS Office of Parks, Recreation and Historic Preservation, and a wetlands permit from the Army Corps of Engineers.

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

John Clarke, Beacon Planning Consultant

c: Dave Buckley, 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
Jeffrey Contelmo, P.E., Project Engineer

LANC & TULLY

ENGINEERING AND SURVEYING, P.C.

John J. O'Rourke, P.E., Principal
David E. Higgins, P.E., Principal
John Queenan, P.E., Principal
Rodney C. Knowlton, L.S., Principal
Jerry A. Woods, L.S., Principal
John D. Russo, P.E., Principal
John Lanc, P.E., L.S.
Arthur R. Tully, P.E.

September 4, 2019

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

RE: Beacon Views
City of Beacon
Special Use & Site Plan Application

Dear Mr. Gunn:

My office has received the following in regard to the Two Cross Street – Hudson Todd LLC project:

- Applications for site plan and subdivision approval.
- Cover letter from Cuddy and Feder dated August 27, 2019.
- Full Environmental Assessment Form, dated August 27, 2019.
- Preliminary Stormwater Pollution Prevention Plan (SWPPP), dated August 27, 2019 as prepared by INSITE Engineering.
- Plans titled "Beacon Views", dated August 27, 2019, and consisting of 11 sheets as prepared by INSITE Engineering.

As this is the initial submission, we are providing general comments at this time with more specific detailed comments to be provided at a later date. Based on our review of the above materials, we would like to offer the following comments:

General Comments:

1. In the Project Description as provided by the Project Attorney, the Background Section of that description describes various adjacent property owner's and uses. The names of those property owners should correspond with the property owners as shown on the Plan Set.

2. In that same area of the Project Description, it is stated that the project will allow for potential future pedestrian connections to adjacent properties, as well as potential pedestrian linkages to other locations in the City of Beacon. However, it is not clear on the Plan Set as to where these pedestrian access opportunities are to occur.

3. Access

- Access to the site is proposed thru the utilization of an existing "Access and Stormwater Management Easement" located on the Highland Meadows property. Based upon the copy of the "Access Easement and Maintenance Agreement" included as Exhibit "I" of the document submitted by Cuddy & Feder, the document only discusses access through the site. As the applicant is looking to construct and maintain stormwater facilities on the adjacent parcel, additional easements will need to be acquired from the adjacent parcel owner for these stormwater facilities.

- Access to the site is also proposed to be an extension of a drive from existing Hastings Drive on the Highland Meadows property. This extension itself will be approximately 1,100 feet long to serve the 42 proposed townhouses. It appears to our office that this is a significantly long dead end/cul-de-sac to serve these 42 proposed homes. Typically given the number of town houses to be constructed, a secondary means of full access would be provided. This arrangement should be reviewed by the City of Beacon Emergency Services personnel for the suitability of the drive in regards to length, width and type of pavement as well as the proposed cul-de-sac turnaround design, which in our opinion appears to be undersized. The cul-de-sac should be designed at a minimum to meet the requirements of Appendix "D" of the International Fire Code, as adopted by NYS in there 2017 Uniform Code Supplement.

- The application also proposes to provide an emergency access from the site between proposed buildings 22 and 23 to the cul-de-sac which is proposed to be constructed as part of the 25 Townsend Street Subdivision. However, at this time, Townsend Street, while approved, has not been filed with the County Clerk's office and it is not clear as to when this project may be constructed. Additionally, information should be provided in regards to the design of this emergency access, as well as any easements or rights-of-way which may be necessary for its construction, together with information provided as to who will be responsible for the maintenance of this emergency access.

- There currently is a significant amount of traffic utilizing Delavan Avenue. There have been discussions in the past over the need for a traffic light at the intersection of Delavan and New York State Route 52. The addition of these 42 proposed townhouses will only serve to increase the amount of traffic at this intersection. The applicant has provided a Traffic Study as part of this application and it is our understanding that the Planning Board will be retaining the services of a Traffic Consultant to review The Traffic Study which has been prepared by the applicant's consultant.

4. The project contains a significant amount (2.55 acres) of Freshwater Wetlands. However, it is not indicated as to whether or not these wetlands are regulated either by NYS Department of Environmental Conservation or the US Army Corps of Engineers. Since the project proposes a significant amount of construction within or adjacent to these wetlands, the applicant should contact these agencies to determine whether or not these are regulated wetlands and if so, whether the plans, as proposed, will require permitting and mitigation from either or both of these two agencies.

5. There is an existing 12" diameter City of Beacon watermain and 20' wide Utility Easement which crosses through the property along its northern and eastern edges. It appears from the applicant's grading and utilities plan that a significant amount of work will be done either within the City's easement or in close proximity to this watermain. The City requests that the area of the watermain easement be left undisturbed and that all proposed construction activities occur outside the limits of the easement. Additionally, this 12" watermain is a Transmission Main and as such it is preferable that no new watermain taps be made into it, which the applicant is proposing to do to serve this project. Therefore, the applicant should review with the City the suitability of this proposed 8" tap as well as investigate whether or not there are other locations for providing water service into this project. The applicant should also describe whether or not this proposed watermain is to be owned and maintained either by the applicant or by the City of Beacon.

6. The applicant is also proposing to collect sewage from these proposed homes and piping it to a proposed new pump-station which would then connect to an existing City manhole in Conklin Street via a proposed sanitary sewer forcemain. Again, the applicant does not state whether or not this collection system and pump station are to be owned and maintained by the project or if it is their intention to have the City consider owning and maintaining it. Generally, it is the City's preference to not have any new pump stations to own or maintain. The applicant is recommended to investigate the possibility of a gravity connection at a different location, if possible, that would eliminate the need for a sanitary sewer pump-station and forcemain. The applicant should also model the existing sanitary sewer system to ensure that it can handle the additional sewer flows proposed to be added to the system.

7. As the applicant is proposing to use infiltration practices as part of their stormwater management practices, soil testing in the location of these proposed infiltration practices will need to be conducted in accordance with NYSDEC requirements. The testing should be witnessed by the City Engineer's office when being performed. Based upon the location of the proposed stormwater practices adjacent to the wetlands, it is questionable as to whether infiltration practices will work.

8. The Existing Conditions plan should be updated to reflect the retaining wall located along easterly edge of the driveway located at the end of Conklin Street.

9. The Layout & Landscape Plan notes that the sidewalk is to be constructed out to Delevan Avenue. Offsite improvement plans should be prepared as part of the set to show all offsite improvements proposed.

10. The Emergency Access on the Layout & Landscape Plan is shown to run partially through Lot 22. This access, if to be constructed, should be shifted so that it runs through the common area and not on the individual lots. The access would also need to be constructed in accordance with Appendix "D" of the International Fire Code.

11. A subdivision plan should be prepared for the project showing all proposed parcels, easements, etc.

12. The Grading & Utility Plan should show the location of all water and sewer services to each of the proposed units, sizes of the services, rim and invert elevations for the sewer and storm drainage structures, pipe sizes for the sewer and storm drainage collection systems, and the size of the proposed water main.

13. Although the Preliminary Stormwater Pollution Prevention Plan discusses a phasing plan, we were unable to locate such a plan within the report or the plan set. A construction phasing plan should be prepared for the project and included in the plan set.

14. The Boundary and topographic surveys should be signed and sealed by a New York State Licensed Surveyor.

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.
David Buckley, Building Inspector

City of Beacon Planning Board
9/10/2019

Title:

Two Cross Street

Subject:

Review applications for Special Use Permit and Site Plan Approval, “Two Cross Street” 4 Cross Street/172 Main Street, four-story mixed use building, submitted by Hudson Todd, LLC ***(postponed at applicant's request)***

Background:

ATTACHMENTS:

Description	Type
Two Cross Street Site Plan and SUP Application	Application
Two Cross Street EAF	EAF
Two Cross Street - Site Plan	Plans
Planner Review Letter	Consultant Comment
Engineer Review Letter	Consultant Comment

APPLICATION FOR SPECIAL USE PERMIT

Submit to Planning Board Secretary, One Municipal Plaza, Suite One, Beacon, New York 12508

IDENTIFICATION OF APPLICANT

Name: Hudson Todd LLC

Address: 4 Cross Street
Beacon, NY 12508

Signature: [signature]

Date: 27 Aug 2019

Phone: 646-284-3118

(For Official Use Only)	Date	Initials
Application & Fee Rec'd	8-27-19	
Initial Review	9-10-19	
PB Public Hearing		
Sent to City Council		
City Council Workshop		
City Council Public Hearing		
City Council Approve/Disapprove		

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: Joseph Torhan

Address: 19 Wildwood Lane
Poughkeepsie, NY 12603

Phone: 845-475-4102

Fax:

Email address: joe.torhan architect@gmail.com
jDonovan@HudsonTodd.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: Two Cross St, Beacon, NY 12508

4 Cross Street 5954-27-798711
Main Street 5954-27-793967
172 Main Street 5954-27-799966

Tax Map Designation: Section

Block

Lot(s) 799966, 798971, 793967

Land Area: 0.28a

Zoning District(s) CMS

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: retail, office workspace, residential (supportive frail elderly)

Gross Non-Residential Floor Space: Existing 1,431 Proposed 19,717

TOTAL: 19,717

Dwelling Units (by type): Existing 4 (four) Proposed 9 (nine)

TOTAL: 9

ITEMS TO ACCOMPANY THIS APPLICATION

a. Five (5) **folded** copies and One (1) digital copy of a site location sketch showing the location of the subject property and the proposed development with respect to neighboring properties and developments.

b. Five (5) **folded** copies and One (1) digital copy of the proposed site development plan, consisting of sheets, showing the required information as set forth on the back of this form and other such information as deemed necessary by the City Council or the Planning Board to determine and provide for the property enforcement of the Zoning Ordinance.

c. Five (5) **folded** copies and One (1) digital copy of any additional sketches, renderings or other information submitted.

d. An application fee, payable to the City of Beacon, computed per the attached fee schedule.

APPLICATION FOR SITE PLAN APPROVAL

Submit to Planning Board Secretary, One Municipal Plaza, Suite One, Beacon, New York 12508

IDENTIFICATION OF APPLICANT

Name: Hudson Todd, LLC

Address: 4 Cross Street
Beacon, NY 12508

Signature: _____

Date: 8/22/2019

Phone: 646-284-3118

(For Official Use Only)	Date	Initials
Application & Fee Rec'd	8-27-19	
Initial Review	9-10-19	
Public Hearing		
Conditional Approval		
Final Approval		

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: Joseph Torhan

Address: 19 Wildwood Lane
Poughkeepsie, NY 12603

Phone: 845-475-4102

Fax: _____

Email address: joe.torhanarchitect@gmail.com, jDonovan@hudsontodd.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: Two Cross Street, Beacon, NY 12508

Tax Map Designation: Section _____ Block _____ Lot(s) 799966, 798971,793967

Land Area: 0.28 Ac, total

Zoning District(s) Central Business (CMS)

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: retail, office workspace, residential (supportive affordable frail-elderly only)

Gross Non-Residential Floor Space: Existing 1431 SF Proposed 19,717 SF

TOTAL: 19,717 SF

Dwelling Units (by type): Existing 4 (Four) Proposed 9 (nine)

TOTAL: 9

ITEMS TO ACCOMPANY THIS APPLICATION

a. One electronic and five (5) **folded** paper copies of a site location sketch showing the location of the subject property and the proposed development with respect to neighboring properties and developments.

b. One electronic and five (5) **folded** paper copies of the proposed site development plan, consisting of sheets, showing the required information as set forth on the back of this form and other such information as deemed necessary by the City Council or the Planning Board to determine and provide for the property enforcement of the Zoning Ordinance.

c. One electronic and five (5) **folded** paper copies of additional sketches, renderings or other information.

d. An application fee, payable to the City of Beacon, computed per the attached fee schedule.

e. An initial escrow amount, payable to the City of Beacon, as set forth in the attached fee schedule.

APPLICATION PROCESSING RESTRICTION LAW

Affidavit of Property Owner

Property Owner: Hudson Todd, LLC

If owned by a corporation, partnership or organization, please list names of persons holding over 5% interest.
Joseph Donovan, Janet St. Goar

List all properties in the City of Beacon that you hold a 5% interest in:
See attached list

Applicant Address: 4 Cross Street, Beacon, NY 12508

Project Address: Main and Cross Streets

Project Tax Grid # Parcel Numbers 799966, 793967, 798971

Type of Application Site Plan Approval

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, Joseph Donovan, 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

Signature of Owner

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.)	✓		JM
ALL taxes are current for properties in the City of Beacon are current (Tax Dept.)		✓	thm
ALL Special Assessments, i.e. water, sewer, fines, etc. are current (Water Billing)	✓		JC

Beacon Propety List - Janet St Goar & Joe Donovan

	Location	Property Type	Number of Residential	Number of Commercial
	Hudson Todd LLC			
✓	25 North Elm St	Single Family	1	0
✓	321 Main St - Binnacle Books	Mixed Use	1	1
✓	23 Beacon St	Single Family	1	0
✓	40 Church St	Single Family	1	0
✓	12 Ralph St	Single Family	1	0
✓	172 Main St - Riverwinds Gallery	Commercial plus 2 upstairs apt.	1	2
✓	19 Paye St	Single Family	1	0
✓	16 Grove St	Two Family	2	0
✓	6 South Cedar St	Single Family	1	0
✓	8 South Cedar St	Single Family	1	0
✓	62 South Brett St	Single Family	1	0
✓	6 Commerce St	Single Family	1	0
✓	21 W Main St	Single Family Semi-Attached	1	0
	Beacon Todd LLC			
✓	18-20 W Main St	Commercial warehouse	0	14
	The Lindley LLC			
✓	1154 North Ave	Commercial	0	2
	13 W Church St	2 Family	2	0
✓	7 High St	Single Family	1	0
	Main St, The Lindley Todd LLC	**88 apartments, 18 commercial**		
✓	134 Main St	Mixed Use retail+apts	4	1
✓	142 Main St	Mixed Use retail+apts	4	1
✓	144-146 Main St	Mixed Use retail+apts	8	3
✓	150 Main St	Mixed Use retail+apts	5	1
✓	152 Main St	Mixed Use retail+apts	15	1
✓	160 Main St (unimproved)	land	0	0
	127 Main St (unimproved)	land	0	0
✓	129 Main St	Mixed Use retail+apts	3	1
✓	131-137 Main St	Mixed Use retail+apts	9	3
✓	145 Main St	Mixed Use retail+apts	10	2
✓	149 Main St	Mixed Use retail+apts	9	1
✓	201-211 Main St	Mixed Use retail+apts	18	5
✓	15 W.Church (unimproved)	land	0	0
✓	17 W.Church (unimproved)	land	0	0

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
Hudson Todd, LLC	4 Cross St. Beacon NY
Place where such business entity was created Delaware	Official Registrar's or Clerk's office where the documents and papers creating entity were filed Wilmington, DE
Date such business entity or partnership was created	Telephone Contact Information 646-284-3118

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 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.
Hudson Todd, LLC	4 Cross St	646 284 3118	parcel 799966 12/20/2016	Dutchess Co.
	Beacon NY		parcel 79897 9/18/2014	Dutchess Co
			parcel 793967 9/18/2014	

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 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
parcel 799966 previously owned by Area 172, Inc.	71 Maple St, Beacon

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.

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

I, Joseph Donovan being first duly sworn, according to law, deposes and says that I am (Title) member, an active and qualified member of the Hudson Todd, LLC 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) Joseph Donovan

(Signature) _____

5102/11/612145v2 8/20/19

CITY OF BEACON
SITE PLAN SPECIFICATION FORM

Name of Application: Two Cross Street

PLEASE INDICATE WHETHER THE SITE PLAN DRAWINGS SHOW THE SUBJECT INFORMATION BY PLACING A CHECK MARK IN THE APPROPRIATE BOXES BELOW.

	YES	NO
The site plan shall be clearly marked "Site Plan", it shall be prepared by a legally certified individual of firm, such as a Registered Architect or Professional Engineer, and it shall contain the following information:	Y	
LEGAL DATA		
Name and address of the owner of record.	Y	
Name and address of the applicant (if other than the owner).	Y	
Name and address of person, firm or organization preparing the plan.	Y	
Date, north arrow, and written and graphic scale.	Y	
NATURAL FEATURES		
Existing contours with intervals of two (2) feet, referred to a datum satisfactory to the Planning Board.	Pending	
Approximate boundaries of any areas subject to flooding or stormwater overflows.	Y	
Location of existing watercourses, wetlands, wooded areas, rock outcrops, isolated trees with a diameter of eight (8) inches or more measured three (3) feet above the base of the trunk, and any other significant existing natural features.	Y	
EXISTING STRUCTURES, UTILITIES, ETC.		
Outlines of all structures and the location of all uses not requiring structures. Paved areas, sidewalks, and vehicular access between the site and public streets.	Y	
Locations, dimensions, grades, and flow direction of any existing sewers, culverts, water lines, as well as other underground and above ground utilities within and adjacent to the property.	Pending	
Other existing development, including fences, retaining walls, landscaping, and screening.	Y	
Sufficient description or information to define precisely the boundaries of the property.	Y	
The owners of all adjoining lands as shown on the latest tax records.	Y	
The locations, names, and existing widths of adjacent streets and curb lines.	Y	
Location, width, and purpose of all existing and proposed easements, setbacks, reservations, and areas dedicated to private or public use within or adjacent to the properties.	Pending	

PROPOSED DEVELOPMENT	YES	NO
The location, use and design of proposed buildings or structural improvements.	Y	
The location and design of all uses not requiring structures, such as outdoor storage (if permitted), and off-street parking and unloading areas.	Y	
Any proposed division of buildings into units of separate occupancy.	Y	
The location, direction, power, and time of use for any proposed outdoor lighting.	Pending	
The location and plans for any outdoor signs.	Pending	
The location, arrangement, size(s) and materials of proposed means of ingress and egress, including sidewalks, driveways, or other paved areas.	Y	
Proposed screening and other landscaping including a planting plan and schedule prepared by a qualified individual or firm.	Pending	
The location, sizes and connection of all proposed water lines, valves, and hydrants and all storm drainage and sewer lines, culverts, drains, etc.	Y	
Proposed easements, deed restrictions, or covenants and a notation of any areas to be dedicated to the City.	Pending	
Any contemplated public improvements on or adjoining the property.	Y	
Any proposed new grades, indicating clearly how such grades will meet existing grades of adjacent properties or the street.	Y	
Elevations of all proposed principal or accessory structures.	Y	
Any proposed fences or retaining walls.	Y	
MISCELLANEOUS		
A location map showing the applicant's entire property and adjacent properties and streets, at a convenient scale.	Y	
Erosion and sedimentation control measures.	Pending	
A schedule indicating how the proposal complies with all pertinent zoning standards, including parking and loading requirements.	Y	
An indication of proposed hours of operation.	Y	
If the site plan only indicates a first stage, a supplementary plan shall indicate ultimate development.	NA	

For all items marked "NO" above, please explain below why the required information has not been provided:

Applicant/Sponsor Name: Hudson Todd, LLC

Signature:

Date: 8/23/2019

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: Hudson Todd, LLC

Address of Applicant: 4 Cross Street, Beacon, NY 12508

Telephone Contact Information: 646-284-3118

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.
Hudson Todd, LLC	4 Cross Street	646-284-3118	September 18, 2014	Albany, NY

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, Joseph Donovan being first duly sworn, according to law, deposes and says that the statements made herein are true, accurate, and complete.

(Print) Joseph H. Donovan

(Signature) JHDonovan

Full Environmental Assessment Form
Part 1 - Project and Setting

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 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Two Cross Street		
Project Location (describe, and attach a general location map): Intersection of Cross & Main Streets, Beacon (a single parcel on the northeast corner, combining former parcels 799966, 789971, 79397)		
Brief Description of Proposed Action (include purpose or need): Municipal site-plan approval and permits for new construction and the renovation of two existing buildings.		
Name of Applicant/Sponsor: Hudson Todd LLC	Telephone: 646-284-3118 E-Mail: jDonovan@HudsonTodd.com	
Address: 4 Cross Street		
City/PO: Beacon	State: NY	Zip Code: 12508
Project Contact (if not same as sponsor; give name and title/role): Joseph H. Donovan	Telephone: same E-Mail: same	
Address: 889 Hoagerburgh Road		
City/PO: Town of Shawangunk (Wallkill PO)	State: NY	Zip Code: 12589
Property Owner (if not same as sponsor): same	Telephone: E-Mail:	
Address: same		
City/PO:	State:	Zip Code:

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	City Council for Special Use Permit	27-Aug-2019
b. City, Town or Village Planning Board or Commission ☑Yes☐No	Planning Board for Site Plan Approval	27-Aug-2019
c. City, Town or Village Zoning Board of Appeals ☑Yes☐No	Zoning Board of Appeals for 4th Flr Setback	27-Aug-2019
d. Other local agencies ☐Yes☑No		
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):

Main Street Historic District

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?
CMS with Historic District Overlay

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 School District

b. What police or other public protection forces serve the project site?
Beacon City Police

c. Which fire protection and emergency medical services serve the project site?
Beacon Fire Department

d. What parks serve the project site?
Waterfront parks, Memorial Park, South Ave Park, etc

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)?
75% commercial (retail+office), 25% residential (frail elderly under NYS ESSHI program)

b. a. Total acreage of the site of the proposed action? 0.28 acres
b. Total acreage to be physically disturbed? 0.28 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.28 acres

c. Is the proposed action an expansion of an existing project or use? ☐ 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)? % _____ Units: _____

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)

ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No

iii. Number of lots proposed? _____

iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No

i. If No, anticipated period of construction: _____ 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: _____

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				9
At completion of all phases				9

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: 42 height; 75 width; and 110 length

iii. Approximate extent of building space to be heated or cooled: 26,000 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? excavation for foundation and cellar

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): +/- 2,000 CY
- Over what duration of time? 2 months

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.
native soil mixed with rubble backfill

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? 0.14 acres

vi. What is the maximum area to be worked at any one time? 0.28 acres

vii. What would be the maximum depth of excavation or dredging? 11 feet

viii. Will the excavation require blasting? ☐ Yes ☑ No

ix. Summarize site reclamation goals and plan:
restoration of site outside the building line for landscape planting, hardscape terraces and parking

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: 3,000 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:

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: 3,000 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: City of Beacon
- 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

- 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):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: water-saving fixtures including waterless urinals, etc

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)

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

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: very approximately 500,000kwh

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): local utility

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: 7:00am - 5:00pm
- Saturday: 7:00am - 4:00pm
- Sunday: NA
- Holidays: NA

ii. During Operations:

- Monday - Friday: 7:00am - 11:00pm (commercial)
- Saturday: +/-9:00am - 11:30pm (comm'll)
- Sunday: TBD
- Holidays: TBD

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:
standard construction equipment - following best practices to control off-site impacts

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: _____

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:
standard lighting for parking areas with best-practice controls to limit off-site impacts

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: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: _____

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): _____

ii. If mix of uses, generally describe:

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	0.14	0.20	0.06
• Forested	0	0	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.14	0.08	0.06
• 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: _____			

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:

_____

_____

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? 12 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site:

indeterminate subbase @ paving	55 %
indeterminate topsoil	45 %
	%

d. What is the average depth to the water table on the project site? Average: 13 feet

e. Drainage status of project site soils:
- ☐ Well Drained: ___ % of site
- ☐ Moderately Well Drained: 100 % of site
- ☐ Poorly Drained ___ % of site

f. Approximate proportion of proposed action site with slopes:
- ☐ 0-10%: 100 % of site
- ☐ 10-15%: ___ % of site
- ☐ 15% or greater: ___ % 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: _____

m. Identify the predominant wildlife species that occupy or use the project site:
typical soil-dwelling species

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):

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: Beacon Main Street Historic District

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: Hudson River Waterway

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.):

iii. Distance between project and resource: 0.75 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: Hudson River

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 Joseph H Donovan for Hudson Todd LLC Date 27-Aug-2019

Signature Title member

PRINT FORM

List of Exhibits

Sheet 1: List of drawings
Contact Information
Location Map
Rendering - View East

Sheet 2: Existing Conditions Survey
Site Plan
Zoning Summary
Partial Zoning Map
Exterior Lighting Schedule
Plant Schedule

Sheet 3: Ground Floor Plan
Second Floor Plan

Sheet 4: Third Floor Plan
Fourth Floor Plan

Sheet 5: Cellar Floor Plan
Roof Plan

Sheet 6: Front (Main Street) Elevation
Rear Elevation

Sheet 7: Rendering - View Looking West
Photo - View Looking West, Existing
Photo - View Looking West, with Two Cross Profile Line

Sheet 8: Rendering - View Looking East
Photo - View Looking East, Existing
Photo - View Looking East, with Two Cross Profile Line

Sheet 9: Rendering - Bird's-eye View
Looking West 19th C
Looking East 20th C

Sheet 10: Parking Plan
Parking Summary and Zoning

Sheet 11: 3-Story v. 4-Story

Location Map

Not to Scale

N

Owner	Design Team			
Hudson Todd, LLC 4 Cross Street Beacon, NY 12508	Architect of Record Joseph E. Torhan Architect 19 Wildwood Drive Poughkeepsie, NY 12603	Design Consultant Austin Harris Architect 27 Harvard Court White Plains, NY 10605	Civil Engineer Hudson Land Design Professional Engineering, P.C. 174 Main Street Beacon, NY 12503	Surveyor TEC Land Surveying, P.C. 15C Tioronda Avenue Beacon, NY 12503

Two Cross Street - Hudson Todd LLC

Existing Conditions Survey

Scale: 1" = 40.0'

0' 10' 25' 50' 100'

N

Exterior Lighting Schedule

Exterior Lighting Program under development, additional information and details to be provided in next submission.

Site Plan

Scale: 1" = 40.0'

0' 10' 25' 50' 100'

N

Plant Schedule

TE ····· Existing tree to remain.

T1 ····· New tree, Native species TBD

Plant Program under development, additional information and details to be provided in next submission.

Zoning Summary

Primary Zoning District (Form Based District)

CMS - Central Main Street

Parcel 793967 - Cross Street corner
Parcel 798971 - Existing 4 Cross Street
Parcel 799966 - 172 Main Street

Overlay Districts

Historic District and Landmark

Parcel 793967 - Cross Street corner
Parcel 799966 - 172 Main Street
NOTE: Parcel 798971 - Existing 4 Cross Street is SCHEDULED TO BE DESIGNATED

Parking Overlay

Parcel 793967 - Cross Street corner
Parcel 798971 - existing 4 Cross Street
Parcel 799966 - 172 Main Street

PB-Business Off-Street Parking

Parcel 798971 - existing 4 Cross Street

Maximum Building Height = 38 feet,
as determined from the average street front level

Per Article IVD (CMS) § 223-41, E, (6)

Parapet walls. The provisions of this chapter shall not apply to prevent the erection , above the building height limit, of a parapet wall extending above such height limit less than five feet.

Per Article III General Regulations § 223-13 F

2 CROSS STREET MATRIX:

Square Footage

Street Level	6,912 sf
Second Floor	6,912 sf
Third Floor	6,912 sf
Fourth Floor	5,893 sf
Total Square Footage	26,629 sf

SEE SHEET 10 FOR PARKING INFORMATION

Partial Zoning Map

Not to Scale

N

Ground Level Floor Plan

Flexible Retail Space

Second Floor Plan

Affordable and Supportive Residences for Elderly

Third Floor Plan

Bright, Attractive, Flexible Walk-to-Train Workspace

Fourth Floor Plan

Cellar Floor Plan

Roof Plan

Rear Elevation

Main Street Elevation

Cornice Lines and Facade No Taller Than Neighboring 19th C Buildings

Scale: 1"=20.0'

0' 10' 20' 25' 40'

Photo View Looking West

View Looking West

Two Cross Profile Line Added

Details and Materials Matching the Existing Context

Photo - View Looking East

Two Cross Profile Line Added

View Looking East

Highest Quality Materials and Details for a Prominent Location

Looking West 20th C

Looking East 20th C

Bird's-eye View

Landscaped Plaza Permanently Open to the Public

Parking Summary and Zoning

- (A) 5 SPACES (@ Two Cross Street)
- (B) 13 SPACES
- (C) 11 SPACES

29 SPACES DEDICATED TO TWO CROSS

- (D) 4 SPACES
- (E) 7 SPACES
- (F) 6 SPACES
- (G) 6 SPACES

23 SPACES DEDICATED TO 152 MAIN STREET

- (I) 20 EXISTING PUBLIC SPACES

20 PUBLIC SPACES

72 TOTAL SPACES

Required Off Street Parking for 2 Cross Street: AS-OF-RIGHT

Retail Use: 2 spaces per 1000 square feet of floor area.
Per Article IVD (CMS) § 223-41, G, (2), (c).

Senior Citizen Residential Use: 1 spaces per 1unit.
Per Article IVD (CMS) § 223-41, G, (2), (a).

Office Use: (Office and Non-Retail Commercial) 2 spaces per 1000 square feet of floor area.
Per Article IVD (CMS) § 223-41, G, (2), (b).

Existing Off-Street Parking at 152 Main Street (Lindley Todd Lot):

EXISTING MAPPED SPACES AT 152 MAIN STREET = 21 SPACES

Existing public Parking off Cross Street:

EXISTING PUBLIC SPACES = 20 SPACES

TWO CROSS STREET MATRIX:

Square Footage

Street Level	6,912 sf
Second Floor	6,912 sf
Third Floor	6,912 sf
Fourth Floor	5,893 sf
Total Square Footage	26,629 sf

Off-Street-Parking: AS-OF-RIGHT

Retail Use at Street Level - 2 per 1000 sf	14 spaces
9 Senior Citizen Residential Units - 1 per unit	9 spaces
Office Use - 2 per 1000 sf	28 spaces
Total Spaces Required (AS-OF-RIGHT)	51 spaces

Off-Street-Parking: REQUESTED CONSIDERATION

Retail Use at Street Level - 2 per 1000 sf	0 spaces
9 Senior Citizen Residential Units - 1 per unit	3 spaces
Office Use - 2 per 1000 sf	26 spaces
Total Spaces Proposed	29 spaces

Proposed Off-Street-Parking at:
Two Cross Street, 152 Main Street and the Existing Public Lot

Total Spaces Proposed: = 72 spaces

Parking Plan

N

Scale: 1" = 60.0' 0' 20' 50' 100' 200' 300'

Height of Street Facade & Cornice Identical for Both Proposed Four Story and As-of-Right Designs.

As-of-Right Design

Approval Process Steps

Four Story Design

Benefits Made Possible by Special Use Permit and Variance.

- Southwest Facing Landscaped Public Plaza with Amenities and Design TBD in Negotiations with City.
- Supportive Apartments for Elderly Persons.
- Increased Workspace for Office Employment on Main Street.

Abbreviations:

PB ..... Planning Board
SPA ..... Site Plan Approval
CC ..... City Council
SUP ..... Special Use Permit
ZBA ..... Zoning Board of Appeals
C of A ..... Certificate of Appropriateness
N ..... Not Approved to Proceed
Y ..... Approved to Proceed

John Clarke Planning and Design jclarkeplandesign@gmail.com
25 Beech Street, Rhinebeck NY 12572 845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: September 6, 2019
Re: **2 Cross Street, Special Permit and Site Plan**

I have reviewed an August 27, 2019 Special Permit Application, August 22, 2019 Site Plan Application, August 27, 2019 Full EAF Part 1, and an 11-sheet Site Plan Application set, dated August 27, 2019.

Proposal

The applicant is proposing to construct a 3- to 4-story building on three parcels, incorporating an undeveloped lot and two existing buildings into the overall design. The 4 Cross Street parcel is in the PB district and the two Main Street parcels are in the Central Main Street (CMS) district and in the Historic District and Landmark Overlay (HDLO) zone. A six-month moratorium was recently adopted by the City Council, so no approvals can be granted for this proposal until the moratorium is lifted.

Comments and Recommendations

1. The 4 Cross Street parcel is the PB district, which currently does not permit businesses, offices, or more than single family residential uses for this property. The City Council is considering a revised use table that would permit offices and more flexibility for business and residential uses in this area, but there is no guarantee or timetable for its adoption. The Council is also in the process of nominating 4 Cross Street to be included the HDLO district, which could affect this proposal.

2. The two Main Street parcels are in the Lower Main Street National Register Historic District. They are also in the HDLO and subject to the Certificate of Appropriateness approval process in the Historic Preservation chapter, the criteria in 134-7, and the design standards in 223-41.18 J. Of particular concern is any exterior changes to 172 Main Street, which the 1979 Historic Survey cited as particularly intact with a completely original storefront. Adding another floor to this building without a stepback and removing the cornice pediment should be reconsidered.

3. The proposal considers both 3- and 4-story options. The PB district has a 2½-story and 35-foot height limit. The CMS permits 3-story buildings 38 feet in height, but a 4th story requires a Special Permit from the City Council and a 15-foot stepback for the top floor along any street frontage and within 40 feet of another zoning district. The 4-story proposal would also need variances for a top floor without a stepback and for the 4 Cross Street building. I suggest that the applicant consider a more code-compliant 3-story option or a 4-story alternative with the required stepbacks.

4. In the Sheet 2 Zoning Summary the 4 Cross Street parcel should not be listed in the CMS district. The Zoning Summary should also show required and proposed setbacks, frontage occupancy, building heights, and landscaped area.

5. The Existing Conditions and Site Plan maps, floor plans, elevations, and Parking Plan should all be printed at a size that can be accurately measured with engineer's or architect's scale.

6. From the square foot numbers provided and considering that 223-26 F requires only 2 spaces for each 3 senior citizen dwelling units, the required parking should be 46 total spaces. The applicant may request a lower parking count under the provisions in 223-41.18 G(3). If the project will have off-site dedicated parking on the 152 Main Street parcel, an analysis of the required 152 Main Street parking should be provided and a pedestrian path should be shown connecting the parking spaces to the proposed building. The municipal lot on Cross Street is already heavily used and only has 18 public spaces (two are dedicated to 162 Main Street).

7. Future submittals will need a full landscaping plan, lighting plan with fixture specifications, trash disposal methods, and elevations with materials and colors noted.

8. The following EAF questions should be revised:
   - B.e should include a referral to Dutchess County Planning because the parcel is within 500 feet of the County Center on Main Street;
   - B.i.*ii* should be answered yes;
   - C.3.a should include that the 4 Cross Street parcel is in the PB district;
   - D.1.c should be answered yes because the site has existing residential and commercial uses;
   - D.1.g should be answered yes;
   - D1.h should be answered no;
   - D.2.j should be answered yes with the subsequent information provided;
   - D.2.r should be answered yes;
   - E.1.c should be answered yes;
   - E.3.e should be answered yes; and
   - The NYS DEC Mapper should be attached to confirm or supplement some of the answers.

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

John Clarke, Beacon Planning Consultant

c: Dave Buckley, Building Inspector
Jennifer L. Gray, Esq., City Attorney
Arthur R. Tully, P.E., City Engineer
John Russo, P.E., City Engineer
Joseph Torhan, Project Architect
Joseph Donovan, Hudson Todd LLC

LANC & TULLY

ENGINEERING AND SURVEYING, P.C.

John J. O'Rourke, P.E., Principal
David E. Higgins, P.E., Principal
John Queenan, P.E., Principal
Rodney C. Knowlton, L.S., Principal
Jerry A. Woods, L.S., Principal
John D. Russo, P.E., Principal
John Lanc, P.E., L.S.
Arthur R. Tully, P.E.

September 4, 2019

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

RE: Two Cross Street – Hudson Todd
City of Beacon
Special Use & Site Plan Application

Dear Mr. Gunn:

My office has received the following in regard to the Two Cross Street – Hudson Todd LLC project:

- Special Use Permit and Site Plan Applications.
- Full Environmental Assessment Form, dated August 27, 2019.
- Plans titled "Two Cross Street – Hudson Todd LLC", dated August 27, 2019, and consisting of 11 sheets as prepared by Joseph Torhan, Architect.

It should be noted that since this project is in conceptual form at present, with no engineering shown at this time, are comments are general in nature. Based on our review of the above materials, we would like to offer the following comments:

General Comments:

1. The applicant's consultant should conduct an Inflow & Infiltration study of the existing site and buildings 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. A note should also be added to the plans granting the City of Beacon Building Department access to verify where the existing roof leaders and sump pump(s), if present, drain to.
2. The EAF notes a usage of 3,000 gallons of water per day. We would ask that a breakdown for this water usage be provided.

(845) 294-3700 • P.O. Box 687, Route 207, Goshen, N.Y. 10924 • FAX (845) 294-8609
www.lanctully.com

3. A survey of all parcels involved should be provided that shows the metes and bounds for each parcel.
4. Sheet 2 of the plans should note the size of each of the parcels involved.
5. The existing condition survey on Sheet 2 should be updated to reflect the size and material of each of the existing utilities, such as water, sewer, etc.
6. The existing condition survey should show the location of the existing water and sewer services that service parcels 798971 and 799966.
7. We would recommend that a drainage pre and post drainage analysis be prepared for the project.
8. The plans should show how the project will be serviced by water and sewer.
9. The project shall show how they will handle stormwater runoff from the project site.
10. The proposed site plan should show the property lines for the site, along with the metes and bounds of the lines.
11. A site lighting plans shall be provided for the project.
12. The access aisle between the ADA compliant parking stalls shall be 8-feet in width in accordance with the NYS 2017 Supplement to the building code.
13. The plan shall all proposed signage, include signage for the ADA parking.
14. The plans shall include all pertinent construction details necessary for the project.

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.
David Buckley, Building Inspector

City of Beacon Planning Board
9/10/2019

Title:

Zoning Board of Appeals

Subject:

Zoning Board of Appeals – September Agenda

Background:

ATTACHMENTS:

Description	Type
September Agenda	Backup Material

CITY OF BEACON
ONE MUNICIPAL PLAZA - SUITE 1
BEACON, NEW YORK 12508

Phone (845) 838-5002 Fax (845) 838-5026

The Zoning Board of Appeals will meet on **Tuesday, September 17, 2019** in the Municipal Center courtroom, located at One Municipal Plaza, Beacon, New York at 7:00 PM

Regular Meeting

1. Continue review of application submitted by 23-28 Creek Drive, LLC, 23-28 Creek Drive, Tax Grid No. 30-6054-37-037625-00, Fishkill Creek Development (FCD) Zoning District, to construct a mixed use development with eight apartments and 20,000 sq. ft. of commercial space which requires relief from the following:
    1) Section 223-26(F) to provide 93 parking spaces
    (113 parking spaces required)
    2) Section 223-4.14(C) for apartment size of 2,750 sq. ft. for two of the units
    (2,000 sq. ft. maximum permitted)
    3) Section 223-1.14(F) for a four story building
    (three stories maximum permitted)
    4) Section 223-1.14(F) for a building height of 53 ft.-4 in.
    (40 ft. maximum permitted)

2. Application submitted by Robert Vye, 19 South Elm Street, Tax Grid No. 30-5954-27-813875-00, R1-5 Zoning District, for relief from Section 223-17(E) to construct a 425 sq. ft. detached garage *(300 sq. ft. maximum permitted)*

City of Beacon Planning Board
9/10/2019

Title:

Review Local Law

Subject:

City Council request to review proposed Local Law amending the Historic District and Landmark Overlay Map (HDLO) and Zoning Map by the addition of 36 landmarked properties

Background:

ATTACHMENTS:

Description	Type
DOCS-#683563-v1-LL_Amending_Historic_District_and_Landmark_Overlay_Map_	Local Law
HDLO Referral from Dutchess County	Cover Memo/Letter

LOCAL LAW NO. ____ OF 2019

CITY COUNCIL
CITY OF BEACON

LOCAL LAW AMENDING THE HISTORIC DISTRICT AND LANDMARK OVERLAY MAP ("HDLO") AND ZONING MAP OF THE CITY OF BEACON

A LOCAL LAW to amend the HDLO Zoning Map of the City of Beacon.

BE IT ENACTED by the City Council of the City of Beacon as follows:

Section 1. Intent. The City has identified 35 properties to be designated as landmarks pursuant to Chapter 134 of the City Code and to be added to the Historic District and Landmark Overlay Map ("HDLO") and Zoning Map.

Section 2. The parcels listed below having been landmarked pursuant to Chapter 134 of the City Code by Resolution adopted on September __, 2019 are hereby added to the Historic District and Landmark Overlay Map and to be designated as such on the City Zoning Map as listed in the table below and depicted on Figure 1 annexed hereto.

1. 1158 North Avenue - 5954-26-744995 - Hibernation Auto Storage Inc., 1158 North Ave. Beacon, NY 12508
2. 1154 North Avenue - 5954-26-740983 - Lindley LLC, 4 Cross St. Beacon, NY 12508
3. 152 Main Street - 5954-27-774986 - Lindley Todd LLC, 4 Cross St. Beacon, NY 12508
4. 4 Cross Street - 5954-27-798971 - Hudson Todd LLC, 4 Cross St. Beacon, NY 12508
5. 11 Digger Phelps Ct. - 5954-27-843954 - Jonathan Bailey/Gemma Simon, 11 Digger Phelps Ct. Beacon, NY 12508
6. 9 Mattie Cooper Sq. - 5954-27-853946 - Erich Hess/Hattie Hess, 9 Mattie Cooper Sq. Beacon, NY 12508
7. 11 N. Elm Street - 5954-27-858938 - Daniel Aubry, 196 Bowery, New York, NY 10012
8. 4 N. Elm Street - 5954-27-864924 - 4 Elm Holdings LLC, 15 Sumter Rd. Airmont, NY 10952

9. 17 Church Street - 5954-27-873931 - Brenda Belladone Edwards, 17 Church St. Beacon, NY 12508
10. 27 Church Street - 5954-28-897918 - Christopher Brown/Babette Brown, 27 Church St. Beacon, NY 12508
11. 232 Main Street - 5954-27-867918 - Stephen Bock/Ricann Bock, 11540 NE Wing Pt Way, Bainbridge, Island, WA 98110
12. 246 Main Street - 5954-28-877907 - J & J 246 LLC, P.O. Box 548, Beacon, NY 12508
13. 250 Main Street - 5954-28-883903 - Fa Tuan Ni/Ming Fang Chen, 250 Main St. Beacon, NY 12508
14. 257 Main Street - 5954-28-865897 - Marin Equities Inc., P.O. Box 9136, Bardonia, NY 10954
15. 269 Main Street - 5954-27-875890 - Tersal Inc., 269 Main St. Beacon, NY 12508
16. 274 Main Street - 5954-28-903888 - Michael Pomarico/Tina Pomarico, 274 Main St. Beacon, NY 12508
17. 284 Main Street - 5954-28-921882 - Movil Development Corp., 284 Main St. Beacon, NY 12508
18. 288 Main Street - 5954-36-923874 - Movil Development Corp., 284 Main St. Beacon, NY 12508
19. 291 Main Street - 5954-36-893875 - 291 Main Street LLC, 55B Heritage Hills, Somers, NY 10589
20. 315 Main Street - 5954-36-924855 - 315 Beacon Realty LLC, 278 Mil St. Poughkeepsie, NY 12601
21. 314 Main Street - 5954-36-949852 - Sunshine Boy LLC, 20 Harvest Rd. Bloomingburg, NY 12721
22. 372 Main Street - 6054-29-018818 - The Salvation Army, 120-130 W. 14th St. New York, NY 10011
23. 378-382 Main Street - 6054-29-020808 - Dutchess Point II LLC, P.O. Box 229, Beacon, NY 12508

24. 403 Main Street - 6054-29-015786 - Erik Allgauer/Patrick Malouf, 403 Main St. Beacon, NY 12508
25. 159 Fishkill Avenue - 6054-29-024827 - Kimberly Garcia/James Halstead, 159 Fishkill Av. Beacon, NY 12508
26. 189 Fishkill Avenue - 6054-29-047864 - Emily De Cordova, 189 Fishkill Av. Beacon, NY 12508
27. 194 Fishkill Avenue - 6054-29-062856 - Jessica Jelliffe/Jason Craig, 194 Fishkill Av. Beacon, NY 12508
28. 331 Verplanck Avenue - 6054-29-056850 - Beacon Hebrew Alliance, 55 Fishkill Av. Beacon, NY 12508
29. 26 S. Chestnut Street - 5954-36-926817 - St. Rocco Society, 26 S. Chestnut St. Beacon, NY 12508
30. 19 Commerce Street - 5954-27-783929 - June C. Crilly, 19 Commerce St. Beacon, NY 12508
31. 11 Commerce Street - 5954-27-771935 - Jianmao Deng, 11 Commerce St. Beacon, NY 12508
32. 20 South Avenue - 5954-27-753929 - Barbara Sims/Brenda Sims, 5 Kitteridge Pl. Beacon, NY 12508
33. 22 South Avenue - 5954-26-750920 - Shirish Chitanvis/Jacqueline Paris-Chitanvis, 22 South Av. Beacon, NY 12508
34. 26 South Avenue - 5954-26-745908 - Matthew Yarnis/Maggie Garrido-Yarnis, 26 South Av. Beacon, NY 12508
35. 30 South Avenue - 5954-26-743898 - Matthew Healey/Jacqueline Rubin, 255 W. 90th St. New York, NY 12508

Section 3. Severability

The provisions of this Local Law are separable and if any provision, clause, sentence, subsection, word or part thereof is held illegal, invalid or unconstitutional, or inapplicable to any person or circumstance, such illegality, invalidity or unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, subsections, words or parts of this

Local Law or their petition to other persons or circumstances. It is hereby declared to be the legislative intent that this Local Law would have been adopted if such illegal, invalid or unconstitutional provision, clause, sentence, subsection, word or part had not been included therein, and if such person or circumstance to which the Local Law or part hereof is held inapplicable had been specifically exempt there from.

Section 4.

This local law shall become effective immediately upon filing with the Office of the Secretary of State.

Dutchess County Department of Planning and Development

Fax Info			
To	Jennifer Cocozza	Date	# pgs
Dept	Co. / Dept. Planning	From	Collin Milne
Fax #	845 486 3610	Phone #	845 838-5-10

239 Planning/Zoning Referral – Exemption Communities

Municipality: City of Beacon

Referring Agency: ☐ Planning Board ☐ Zoning Board of Appeals ☑ Municipal Board

Tax Parcel Number(s):

Project Name: Historic District Landmark Overlay

Applicant: City of Beacon

Address of Property: Multiple Adresses (35)

Please fill in this section

Parcel(s) within 500 feet of:

- ☐ State Road _____
- ☐ County Road _____
- ☐ State Property (w/public building or recreation area)
- ☐ County Property (w/public building or recreation area)
- ☐ Municipal Boundary
- ☐ Farm operation in an Agricultural District

Actions Requiring 239 Review

- ☐ Comprehensive/Master Plans
- ☐ Zoning Amendments (standards, uses, definitions, district regulations, etc.)
- ☐ Rezonings involving all map changes
- ☑ Other Local Laws associated with zoning (wetlands, historic preservation, affordable housing, architectural review, etc.)
- ☐ Site Plans (all)
- ☐ Special Permits for all non-residential uses
- ☐ Use Variances for all non-residential uses
- ☐ Area Variances for all non-residential uses

Exempt Actions:*
239 Review is NOT Required

- Administrative Amendments (fees, procedures, penalties, etc.)
- Special Permits for residential uses (accessory apts, home occupations, etc.)
- Use Variances for residential uses
- Area Variances for residential uses
- Renewals/Extension of Site Plans or Special Permits that have no changes from previous approvals
- Subdivisions / Lot Line Adjustments
- Interpretations

☐ Exempt Action submitted for informal review

Date Response Requested (if less than 30 days): August 30, 2019

If subject of a previous referral, please note County referral number(s):

** These actions are only exempt in municipalities that signed an intermunicipal agreement with Dutchess County to that effect.*

For County Office Use Only

Response from Dutchess County Department of Planning and Development

No Comments:

- ☐ Matter of Local Concern
- ☐ No Jurisdiction
- ☐ No Authority
- ☐ Project Withdrawn
- ☐ Exempt from 239 Review

Comments Attached:

- ☑ Local Concern with Comments
- ☐ Conditional
- ☐ Denial
- ☐ Incomplete — *municipality must resubmit to County*
- ☐ Incomplete with Comments — *municipality must resubmit to County*
- ☐ Informal Comments Only (Action Exempt from 239 Review)

Date Submitted: 8/15/19	Notes:		☐ Major Project
Date Received: 8/15/19			
Date Requested: 8/30/19			Referral #: ZR19-260
Date Required: 9/13/19	☐ Also mailed hard copy	Reviewer: Jennifer Flynn	
Date Response Faxed: 8/26/19			

MARCUS J. MOLINARO
COUNTY EXECUTIVE

EOIN WRAFTER, AICP
COMMISSIONER

COUNTY OF DUTCHESS
DEPARTMENT OF PLANNING AND DEVELOPMENT

August 26, 2019

To: City Council, City of Beacon

Re: Referral #19-260 — LL Proposing to add 35 properties to the Historic District Landmark Overlay Parcels: see referred materials

The Dutchess County Department of Planning and Development has reviewed the subject referral within the framework of General Municipal Law (GML) (Article 12B, §239-l/m).

ACTION
The City is proposing to add 35 parcels to the Historic District Landmark Overlay.

COMMENTS
We are pleased to see that the City is proposing to add additional properties to the Historic District Landmark Overly as recommended in its Comprehensive Plan. Each property has been evaluated for its historic contributions which are detailed on the Historic Resource Inventory Forms that were completed on behalf of each property.

If not already prepared, we suggest that the City provide informational resources to property owners regarding the particulars of owning a property in the HLDC, including guidance on making home improvements and repairs.

RECOMMENDATION
The Department recommends that the Board rely upon its own study of the facts in the case with due consideration of the above comments.

Eoin Wrafter, AICP
Commissioner
By

Jennifer F. Cocozza
Deputy Commissioner

City of Beacon Planning Board
9/10/2019

Title:

249 Main Street

Subject:

Request for extension of Site Plan Approval - 249 Main Street

Background:

ATTACHMENTS:

Description	Type
249 Main Street Extension Request	Cover Memo/Letter

249 Main Street LLC
80 Business Park Drive, Suite #103
Armonk, New York 10504
917-709-2223
hlewisre@aol.com

August 13, 2019

City of Beacon
Planning Board
One Municipal Plaza
Beacon, New York 12508
Re: Special Use Permit
VIA FACSIMILE: dbuckley@cityofbeacon.org

Dear Sirs & Madams,

Please be advised we are writing to request an extension of the special use permit for 249 Main Street LLC due to expire 11/27/2019.

We are requesting an extension of six months time. Our GC, Baxter Construction, anticipates completing the project between December, 2019 and January, 2020.

Delays occurred in the construction process when we spent six weeks working with a computer tech company who was considering relocating to Beacon. At the time, the company was considering taking both the main retail floor and the second floor. Through that time, work stopped completely on both floors until a decision was reached by their board not to proceed.

Thanking you in advance for your consideration.

Hugh Lewis
General Partner
249 Main Street LLC

249 Main Street LLC
80 Business Park Drive, Suite #103
Armonk, New York 10504
917-709-2223
hlewisre@aol.com

August 13, 2019

City of Beacon
Building Department
One Municipal Plaza
Beacon, New York 12508
Re: Building Permit #2017-0286
VIA FACSIMILE: dbuckley@cityofbeacon.org

Inspector Buckley,

Please be advised we are writing to request an extension of the above referenced permit due to expire 11/27/2019.

We are requesting an extension of six months time. Our GC, Baxter Construction, anticipates completing the project between December, 2019 and January, 2020.

Delays occurred in the construction process when we spent six weeks working with a computer tech company who was considering relocating to Beacon. At the time, the company was considering taking both the main retail floor and the second floor. Through that time, work stopped completely on both floors until a decision was reached by their board not to proceed.

Thanking you in advance for your consideration.

Hugh Lewis
General Partner
249 Main Street LLC

City of Beacon Planning Board
9/10/2019

Title:

St. Luke's Place

Subject:

Single Family House – St. Luke's Place ***(postponed at applicant's request)***

Background:

ATTACHMENTS:

Description	Type
St Luke's Place Application	Application
St Lukes Place Front and Rear Elevations	Backup Material
St Lukes Place Left Side Elevations	Backup Material
St Lukes Place Right Side Elevations	Backup Material

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: June 21, 2019

Project Address: ST. LUKE'S SUBDIVISION

Project Architect/Engineer: Hudson Land Design

Owner/Builder: BEACON 226 MAIN ST. LLC

Contact Phone No.: 845-416-1808

Approval Requested: _____ Certificate of Appropriateness X New Single Family House

Color/Materials:

Siding: Deep Granite

Roofing: Black shingle - asphalt

Windows: Color: Black Type: Marvin double hung

Trim: Wicker

Garage Door: N/A

Stone/Brick: N/A

Signature of Owner

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

FEE: $100.00

NOTES:

1) ALL WINDOW SIZES CALLED OUT ON FLOOR PLANS ARE "ANDERSEN UNIT NUMBERS", IF "ANDERSEN" WINDOWS ARE NOT USED, A WINDOW OF EQUAL TYPE AND UNIT DIMENSION IS TO BE USED
2) ALL GLAZING TO BE DOUBLE INSULATED
3) ALL GLAZING TO BE "HIGH PERFORMANCE", "LOW-E" GLASS
4) ALL GLAZING WITHIN 18" OF FINISHED FLOOR TO BE TEMPERED

ALL OPERABLE WINDOWS THAT HAVE A SILL HEIGHT OF LESS THAN 24" ABOVE THE FINISHED FLOOR AND MORE THAN 72" ABOVE FINISHED GRADE MUST BE PROVIDED WITH WINDOW FALL PREVENTION DEVICES THAT COMPLY WITH ASTM F 2090

SQUARE FOOTAGE:	
1st FLOOR:	1056
2nd FLOOR:	1004
TOTAL:	2060

EGRESS REQUIREMENTS

WINDOW	SQ.FT. CLEAR	WIDTH CLEAR	HEIGHT CLEAR
3049	5.7	32.56"	25.20"

RAILING & STAIR NOTES:

STAIRS WITH (4) OR MORE RISERS SHALL BE PROVIDED WITH HANDRAILS ON AT LEAST ONE SIDE. HANDRAILS SHALL BE A MINIMUM OF 34" IN HEIGHT AND NOT MORE THAN 38" IN HEIGHT. RAILS ARE TO BE MEASURED VERTICALLY FROM THE NOSING OF THE TREADS. CIRCULAR HANDRAILS SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1 1/4" AND NOT GREATER THAT 2". IF THE HANDRAIL IS NOT CIRCULAR IT SHALL HAVE A PERIMETER OF AT LEAST 4" AND NOT MORE THAN 6 1/4".

PORCHES, DECKS, BALCONIES OR RAISED FLOOR SURFACES LOCATED MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS A MINIMUM OF 36" HIGH.

RISERS ARE TO BE CLOSED SUCH THAT THE OPENING BETWEEN THE TREADS DOES NOT PERMIT THE PASSAGE OF A 4" DIAMETER SPHERE.

FRONT ELEVATION

SCALE: 1/4" = 1'-0"

REAR ELEVATION

SCALE: 1/4" = 1'-0"

TABLE R301.2(1)
CLIMATE AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP	ICE BARRIER UNDERLYMT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	SPEED (mph)	TOPOGRAPHIC EFFECTS	SPECIAL WIND REGION	WIND-BORNE DEBRIS ZONE		WEATHERING	FROST LINE DEPTH	TERMITE					
40	115 MPH	NO	YES	NO	B	SEVERE	42"	MOD.-HEAVY	-1	YES	MAY 2, 2012	1500	47.4

NEW RESIDENCE FOR:
Lori Joseph Builders
JUDSON STREET, CITY OF BEACON, NEW YORK

GILLESPIE & STOKOSA
CONSULTING ENGINEERING, P.L.L.C.
CIVIL, SANITARY, ENVIRONMENTAL, ARCHITECTURAL AND SITE
847 ROUTE 376, WAPPINGER FALLS, N.Y. 12590
P. (845) 227-0227 F. (845) 226-1450 - GSENGRS.COM

PROJECT No. 2017-016
DRAWN BY: S.M.M.
CHECKED BY: M.E.G.
REVISIONS
APRIL 13, 2017
APRIL 24, 2017
MAY 1, 2017

NYSPE #074666

SHEET No.
E
1

RAILING & STAIR NOTES:

STAIRS WITH (4) OR MORE RISERS SHALL BE PROVIDED WITH HANDRAILS ON AT LEAST ONE SIDE. HANDRAILS SHALL BE A MINIMUM OF 34" IN HEIGHT AND NOT MORE THAN 38" IN HEIGHT. RAILS ARE TO BE MEASURED VERTICALLY FROM THE NOSING OF THE TREADS. CIRCULAR HANDRAILS SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1 1/4" AND NOT GREATER THAT 2". IF THE HANDRAIL IS NOT CIRCULAR IT SHALL HAVE A PERIMETER OF AT LEAST 4" AND NOT MORE THAN 6 1/4".

PORCHES, DECKS, BALCONIES OR RAISED FLOOR SURFACES LOCATED MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS A MINIMUM OF 36" HIGH.

RISERS ARE TO BE CLOSED SUCH THAT THE OPENING BETWEEN THE TREADS DOES NOT PERMIT THE PASSAGE OF A 4" DIAMETER SPHERE.

LEFT SIDE ELEVATION

SCALE: 1/4" = 1'-0"

NEW RESIDENCE FOR:

Lori Joseph Builders

JUDSON STREET, CITY OF BEACON, NEW YORK

GILLESPIE & STOKOSA
CONSULTING ENGINEERING, P.L.L.C.
CIVIL, SANITARY, ENVIRONMENTAL, ARCHITECTURAL, AND SITE
847 ROUTE 376, WAPPINGER FALLS, N.Y. 12590
P. (845) 227-6227 F. (845) 226-1430 - GSENGRS.COM

PROJECT No.	2017-010
DRAWN BY:	S.M.M.
CHECKED BY:	M.E.G.
REVISIONS	
APRIL 13, 2017	
APRIL 24, 2017	
MAY 1, 2017	

NYSPE #074666

SHEET No.

E / 3

RAILING & STAIR NOTES:

STAIRS WITH (4) OR MORE RISERS SHALL BE PROVIDED WITH HANDRAILS ON AT LEAST ONE SIDE. HANDRAILS SHALL BE A MINIMUM OF 34" IN HEIGHT AND NOT MORE THAN 38" IN HEIGHT. RAILS ARE TO BE MEASURED VERTICALLY FROM THE NOSING OF THE TREADS. CIRCULAR HANDRAILS SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1 1/4" AND NOT GREATER THAT 2". IF THE HANDRAIL IS NOT CIRCULAR IT SHALL HAVE A PERIMETER OF AT LEAST 4" AND NOT MORE THAN 6 1/4".

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RISERS ARE TO BE CLOSED SUCH THAT THE OPENING BETWEEN THE TREADS DOES NOT PERMIT THE PASSAGE OF A 4" DIAMETER SPHERE.

RIGHT SIDE ELEVATION

SCALE: 1/4" = 1'-0"

NEW RESIDENCE FOR:

Lori Joseph Builders

JUDSON STREET, CITY OF BEACON, NEW YORK

GILLESPIE & STOKOSA
CONSULTING ENGINEERING, P.L.L.C.
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847 ROUTE 376, WAPPINGER FALLS, N.Y. 12590
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PROJECT No.	2017-010
DRAWN BY:	S.M.M.
CHECKED BY:	M.E.G.
REVISIONS	
APRIL 13, 2017	
APRIL 24, 2017	
MAY 1, 2017	

NYSPE #074666

SHEET No.

E / 2

City of Beacon Planning Board
9/10/2019

Title:

7 East Main Street

Subject:

Certificate of Appropriateness – 7 East Main Street Hudson Valley Brewery, change in façade material

Background:

ATTACHMENTS:

Description	Type
7 East Main Street Application	Application
7 East Main Street Sheet 1 of 2 Proposed Plans & Elevations	Backup Material
7 East Main Street Sheet 2 of 2 Previously Approved Plans & Elevations	Backup Material

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: August 27, 2019

Project Address: 7 East Main Street

Project Architect/Engineer: Aryeh Siegel Architect

Owner/Builder: Hudson Valley Brewery

Approval Requested: ☑ Certificate of Appropriateness ☐ New Single Family House

Color/Materials:

Siding: Board & Batten siding and matching railing to replace previously approved

Roofing: N/A

Windows: Color: N/A Type: N/A

Trim: N/A

Garage Door: N/A

Stone/Brick: N/A

Signature of Owner

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

_____

_____

FEE: $100.00

1st Floor Plan

Scale: $\frac{1}{16}$" = 1'-0"

NOTE: THIS APPLICATION IS TO AMEND THE PREVIOUSLY APPROVED SIDING MATERIAL AND RAILING DETAIL AT THE EXTERIOR DECK. ALL OTHER WORK HAS BEEN PREVIOUSLY APPROVED AND IS NOT THE SUBJECT OF THIS REVIEW

Lower Level Plan

Scale: $\frac{1}{16}$" = 1'-0"

Architectural Review Board Application

Sheet 1 of 2 - Proposed Plans & Elevations

Owner:
Hudson Valley Brewery
7 East Main Street
Beacon, New York 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Hudson Valley Brewery
Beacon, New York
Scale: As Noted
August 27, 2019

42" HIGH METAL PICKET FENCE
COLOR: BLACK

1st Floor Plan

Scale: $\frac{1}{16}$" = 1'-0"

6' HIGH WOOD STOCKADE
PRIVACE FENCE

CONCRETE WALL

Lower Level Plan

Scale: $\frac{1}{16}$" = 1'-0"

42" HIGH METAL PICKET FENCE
COLOR: BLACK

CONCRETE WALL

42" HIGH METAL PICKET FENCE
COLOR: BLACK

CONCRETE WALL

42" HIGH METAL PICKET FENCE
COLOR: BLACK

CONCRETE WALL

Architectural Review Board Application

Sheet 2 of 2 - Previously Approved Plans & Elevations

Owner:
Hudson Valley Brewery
7 East Main Street
Beacon, New York 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Hudson Valley Brewery
Beacon, New York
Scale: As Noted
August 27, 2019

City of Beacon Planning Board
9/10/2019

Title:

193-195 Main Street

Subject:

Certificate of Appropriateness – 193-195 Main Street; change façade color

Background:

ATTACHMENTS:

Description	Type
193-195 Main Street Application	Application
193-195 Main Street Elevation 1	Backup Material
193-195 Main Street Elevation 2	Backup Material

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: 8/27/19

Project Address: 193 - 195 Main Street

Project Architect/Engineer:

Owner/Builder: Kamel Jamal

Contact Phone No.: (914) 804 - 2323

Approval Requested: _____Certificate of Appropriateness _____New Single Family House

Color/Materials: - Behr - HC - 33

Siding: Brick (wood) Almond Latte (~~VL 200~~)

Roofing: Black Tar Hamilton Blue HC 191 - trim

Windows: Color:_____ Type:_____

Trim:

Garage Door: N/A

Stone/Brick:

Signature of Owner

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

FEE: $100.00

HC33
HC191
Dash Lock & Key
Locksmith
24 Hour Service
845-831-7556
THINK LOCAL FIRST
WE RECOMMEND
HC191
HC33

New color
H-C-33
HC 191
H C 33
193
BRIOCH
HC 191
New color
HC 191
HC 191