

BEACON PLANNING BOARD
Via Video-Conference
BEACON, NEW YORK 12508
Phone (845) 838-5002 Fax (845) 838-5026

The Planning Board will meet on **Tuesday, May 12, 2020** in the Municipal Center Courtroom. Due to public health and safety concerns related to COVID-19, the Planning Board will not be meeting in-person. In accordance with the Governor's Executive Order 202.1, the May 12, 2020 meeting starting at 7:00 p.m. will be held via videoconferencing, and a transcript will be provided at a later date. The public can watch the live meeting online at YouTube at www.youtube.com/channel/UCvPpigGwZdeR7WYmw-SuDxg. If any interested members of the public would like to provide comments on the application, comments can be called in during the meeting at (929) 205-6099; Webinar ID 958-5326-5560; Password 981743. Comments can also be provided via email no later than 5PM on May 12, 2020 to Etha Grogan, Planning Board Secretary, at egrogan@cityofbeacon.org. Please check the meeting materials posted on the City website (www.cityofbeacon.org) and for further instructions to access the virtual meeting and for updated information.

- **Regular Meeting**

1. 3 Water Street
Public hearing on application for Site Plan Approval (relative to a Special Use Permit), Accessory Apartment, 3 Water Street, submitted by POK Beacon, LLC
2. Conklin Street - Beacon Views
Public hearing for SEQRA environmental review on applications for Subdivision and Site Plan Approval, "Beacon Views Townhouses" 39 units, Conklin Street, submitted by Beacon Views, LLC
3. 416 Main Street
Review application for Site Plan Approval, retail/residential, 416-420 Main Street, mixed-use commercial, office & residential development, submitted by 416 Main Street Beacon, LLC & 420 Main Street, LLC (D/B/A 420 Main St., LLC)

- **Miscellaneous Business**

1. Zoning Board of Appeals
Zoning Board of Appeals – no meeting in May
2. 23-28 Creek Drive
Request for Modification of Condition C-1 of Resolution Granting Preliminary and Final Subdivision Plat and Site Plan Approvals for 23-28 Creek Drive
3. Review Local Law - Short Term Rentals
City Council request to review proposed Local Law concerning Short Term Rentals
4. Local Law Review to Amend Chapters 223 & 210
City Council request to review proposed Local Law to amend Chapters 223 and 210 regarding the Schedule of Regulations and associated amendments
5. Local Law Review to Amend City's Zoning Map
City Council request to review proposed Local Law to amend the City's Zoning Map

- **Architectural Review**

1. 16 Coyne Hill Road
Single Family House – 16 Coyne Hill Road

City of Beacon Planning Board
5/12/2020

Title:

3 Water Street

Subject:

Public hearing on application for Site Plan Approval (relative to a Special Use Permit), Accessory Apartment, 3 Water Street, submitted by POK Beacon, LLC

Background:

ATTACHMENTS:

| Description | Type |
|--|--------------------|
| 3 Water Street Architect Cover Letter | Cover Memo/Letter |
| 3 Water Street Engineer Cover Letter | Cover Memo/Letter |
| 3 Water Street Subdivision Plat | Plans |
| 3 Water Street Sheet 1 Site Plan | Plans |
| 3 Water Street Sheet 2 Existing Conditions Demolition Plan | Plans |
| 3 Water Street Sheet 3 Grading & Utilities | Plans |
| 3 Water Street Sheet 4 Erosion & Sediment Control | Plans |
| 3 Water Street Sheet 5 Construction Details | Plans |
| 3 Water Street Sheet 6 Construction Details 2 | Plans |
| Planner Review Letter | Consultant Comment |
| Engineer Review Letter | Consultant Comment |
| Draft Resolution | Resolution |

ARYEH SIEGEL
ARCHITECT

John Gunn - Planning Board Chairman
City of Beacon
One Municipal Plaza
Beacon, NY 12508

Re: 3 Water Street Accessory Apartment, Beacon, New York
Special Use Permit Application – Responses to Comments

April 28, 2020

Dear Chairman Gunn and Members of the Planning Board,

Below please find our responses to the comments included in John Clarke Planning and Design's Memorandum, dated April 9, 2020, and Lanc & Tully's Memorandum dated April 10, 2020.

John Clarke Planning and Design Comment Responses:

1. Comment acknowledged. The Special Use Permit was approved by the City Council on March 16, 2020.
2. The Subdivision Plat notes and tables will be updated.
3. The site plan has been corrected to show the parcel area after conveyance of a portion of the land to the City of Beacon, and consolidation of the lots. Sheet titles have been updated to reflect 6 sheets total.
4. The demolition plan has been updated to show removal of the existing chain link fence.
5. The stockade fence location has been clarified.
6. The Board did not require additional street trees to be added at the last meeting. It was determined that the landscaping visible from the street was adequate.
7. We are working with the Applicant and Central Hudson to avoid interference with the pole and bracing at the driveway.

ARYEH SIEGEL
ARCHITECT

Lanc & Tully Comment Responses:

Sheet 1 of 6

1. The Index of Drawings and sheet numbering have been corrected.
2. The lot areas have been corrected on the Bulk Regulations Table
3. The area to be conveyed to the City of Beacon is called out on the Site Plan.
4. The stockade fence detail has been enlarged for clarity.
5. The stockade fence symbol has been modified for plan visibility.

Thank you. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Aryeh Siegel". The signature is written in a cursive, flowing style.

Aryeh Siegel
Aryeh Siegel, Architect



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

April 28, 2020

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

Re: 3 Water Street Subdivision and Site Plan
3 Water Street
Tax parcel: 6054-38-170722 ±0.54 acres
City of Beacon, NY

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) has been retained by the Applicant to prepare engineering plans and supporting materials in response to John Clark Planning and Design's comment memorandum dated April 9, 2020, and Lanc & Tully's comment letter dated April 10, 2020. Below is a point-by-point response to the comment letters received. Aryeh Siegel has responded to the Consultants' comments under a separate letter.

John Clarke January 9, 2020 Comment Memorandum

1. Comment noted.
2. The tax map number and acreage have been corrected on the Plat.
3. Aryeh Siegel has responded to this comment.
4. Aryeh Siegel has responded to this comment.
5. Aryeh Siegel has responded to this comment.
6. Aryeh Siegel has responded to this comment.
7. The sidewalk has been widened to accommodate ADA passage.

Lanc & Tully January 10, 2020 Comment Letter

Subdivision Plat

1. The date of the consolidation has been updated per information obtained from the Dutchess County Clerk.
2. The tax map number has been corrected.
3. The Parcel Area has been corrected in the Project Information Table.
4. The metes and bounds have been enlarged on the plat.
5. The line distance has been masked over the hatch area for clarity.
6. The fence is owned by the Applicant, and it is now shown to be removed on the site plan set.

General Comments

1. Aryeh Siegel has responded to this comment.

Site Plan (Sheet 1 of 6)

1. Aryeh Siegel has responded to this comment.
2. Aryeh Siegel has responded to this comment.
3. Aryeh Siegel has responded to this comment.
4. Aryeh Siegel has responded to this comment.
5. Aryeh Siegel has responded to this comment.

Grading & Utility Plan (Sheet 3 of 6)

1. The grading was not necessary in that area and was only shown to provide a uniform slope over the existing slope. Therefore, the grading has been removed and the wall elevations have been adjusted.
2. The existing water and sewer service locations and sizes are now shown on the plans.
3. The driveway has been re-configured to avoid the pole and guy wire.
4. The utility pole is proposed to be re-located or removed. We will continue to find who the pole belongs to, and what purpose it serves.
5. The roof leader drain has been re-routed away as much as possible from the adjacent property to the rear of the existing parcel while avoiding interference with existing trees to remain.
6. The hatching has been scaled back so that the elevation labels can be seen with more clarity.
7. The water line is now labeled as 6" on the plans.
8. There is no grading proposed at the north side of the accessory apartment. The existing slope will be left undisturbed to the greatest extent possible.

Construction Details (Sheet 5 of 6)

1. The detail has been revised to reflect 4,000 psi concrete.

Enclosed electronically for your continued review is the following:

- Cover letter from Aryeh Siegel (1 copy);
- Response to comments letter from Aryeh Siegel (1 copy);
- Preliminary Subdivision Plat Sheet 1 of 1 (1 copy);
- Site Plan set consisting of 6 sheets (1 copy), and

We look forward to discussing this project at your next available planning board agenda. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,

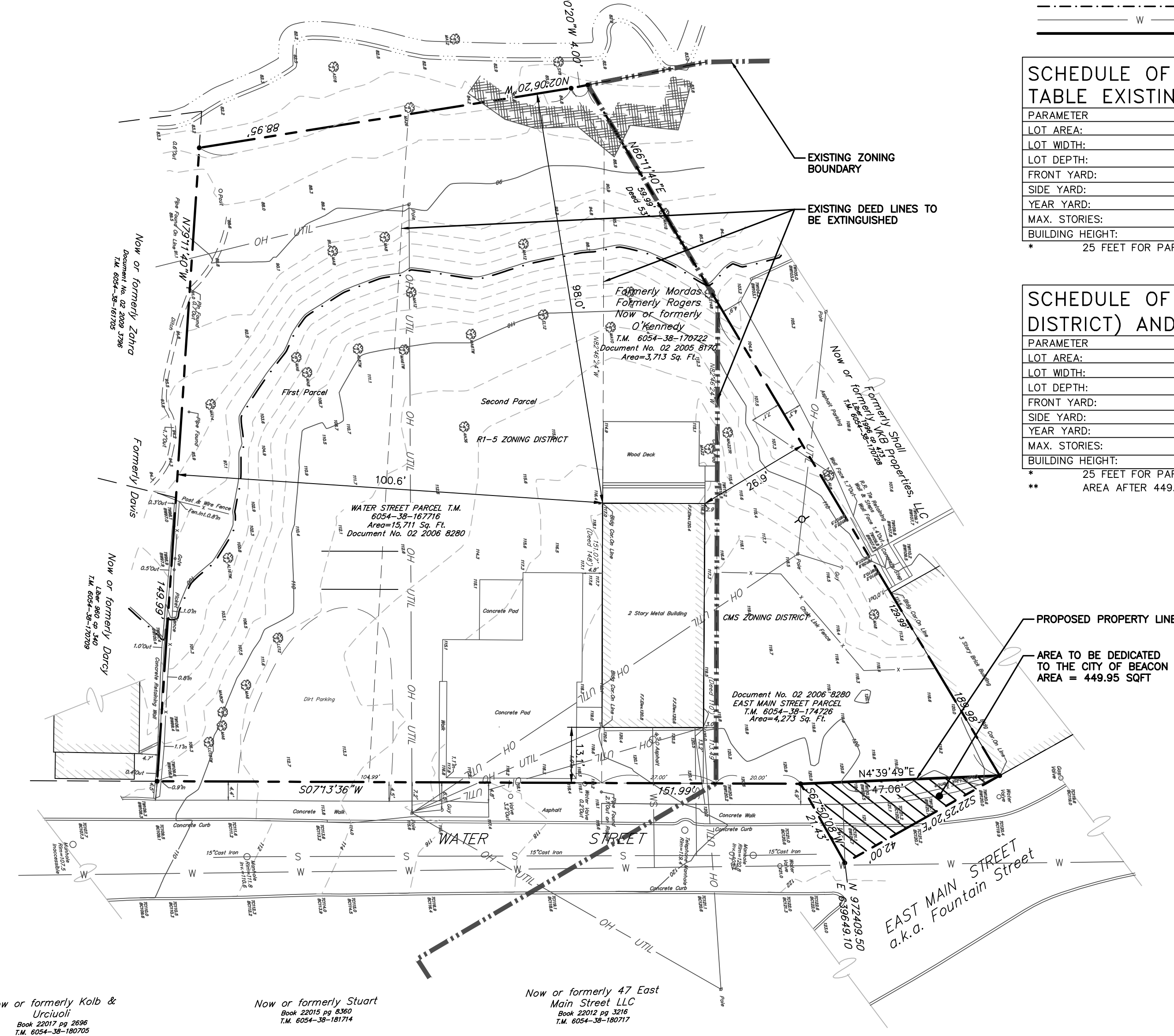
A handwritten signature in black ink, appearing to read "Michael A. Bodendorf". The signature is fluid and cursive, with a large, stylized initial "M".

Michael A. Bodendorf, P.E.
Principal

cc: POK Beacon, LLC
Aryeh Siegel, AIA
Daniel G. Koehler, P.E. (HLD file)



FISHKILL CREEK
a.k.a. 'the mill pond'
a.k.a. Matteawan Creek



LEGEND:

| | |
|---------|----------------------------------|
| --- | EXISTING PROPERTY LINE |
| --- | ADJOINING PROPERTY LINE |
| --- | EXISTING MAJOR CONTOUR |
| --- | EXISTING MINOR CONTOUR |
| --- | EXISTING SEWER LINE |
| OH UTIL | EXISTING OVERHEAD UTILITY LINE |
| --- | EXISTING CHAIN LINK FENCE |
| ○ | EXISTING TREE |
| ○ | EXISTING UTILITY POLE |
| --- | EXISTING ZONING BOUNDARY |
| --- | EXISTING 100-YEAR FLOOD BOUNDARY |
| --- | EXISTING WATER LINE |
| --- | PROPOSED PROPERTY LINE |

PROJECT INFORMATION:

| | |
|-------------------|--|
| APPLICANT: | POK BEACON, LLC, 3 WATER STREET BEACON, NY 12508 |
| PROJECT SURVEYOR: | BADEY & WATSON SURVEYING AND ENGINEERING, P.C. |
| PARCEL LOCATION: | 3 WATER STREET, BEACON, NY 12508 |
| TAX PARCEL ID: | 6054-38-170722 |
| PARCEL AREA: | ±0.53-ACRES |
| WATER SUPPLY: | MUNICIPAL |
| SEWAGE DISPOSAL: | MUNICIPAL |

SCHEDULE OF REGULATIONS (CMS & R1-5 ZONING DISTRICT) AND LOT CONFORMANCE TABLE EXISTING CONDITIONS:

| PARAMETER | REQUIREMENT R1-5 | REQUIREMENT CMS | PARCEL 6054-38-167716 | PARCEL 6058-38-170722 | PARCEL 6058-38-174726 |
|------------------|---------------------------|------------------------|-----------------------|-----------------------|-----------------------|
| LOT AREA: | 5,000 SQUARE FEET MIN | N/A | 15,711 S.F. | 3,713 S.F. | 4,273 S.F. |
| LOT WIDTH: | 50 FEET MINIMUM | N/A | ±100 FEET | ± 27 FEET | ± 59 FEET |
| LOT DEPTH: | 100 FEET MINIMUM | N/A | ±158 FEET | ± 133 FEET | ± 73 FEET |
| FRONT YARD: | 30 FEET | 0 FEET; 10 FEET MAX | N/A | 13.1 FEET | N/A |
| SIDE YARD: | 10 FEET (20 TOTAL OF TWO) | 0 FEET | N/A | 0 FEET; 3 FEET | N/A |
| YEAR YARD: | 30 FEET | 25 FEET* | N/A | ± 28 FEET | N/A |
| MAX. STORIES: | 2 1/2 (1 STORY MIN.) | 2 STORIES MIN.; 3 MAX. | N/A | 2 STORIES | N/A |
| BUILDING HEIGHT: | 35 FEET (12 FEET MIN.) | 38 FEET | N/A | ±24 FEET | N/A |

* 25 FEET FOR PARCELS 100 FEET DEEP OR MORE AND MINIMUM 10 FEET FOR PARCELS UNDER 100 FEET DEEP.

SCHEDULE OF REGULATIONS (CMS & R1-5 ZONING DISTRICT) AND LOT CONFORMANCE TABLE PROPOSED CONDITIONS:

| PARAMETER | REQUIREMENT R1-5 | REQUIREMENT CMS | PARCEL 6054-38-170722 |
|------------------|---------------------------|------------------------|--------------------------------------|
| LOT AREA: | 5,000 SQUARE FEET MIN | N/A | 23,247 S.F.** |
| LOT WIDTH: | 50 FEET MINIMUM | N/A | ±195 FEET |
| LOT DEPTH: | 100 FEET MINIMUM | N/A | ±160 FEET |
| FRONT YARD: | 30 FEET | 0 FEET; 10 FEET MAX | N/A |
| SIDE YARD: | 10 FEET (20 TOTAL OF TWO) | 0 FEET | 26.9 FEET; 127.5 FEET (TOTAL OF TWO) |
| YEAR YARD: | 30 FEET | 25 FEET* | 98.0 FEET |
| MAX. STORIES: | 2 1/2 (1 STORY MIN.) | 2 STORIES MIN.; 3 MAX. | 2 STORIES |
| BUILDING HEIGHT: | 35 FEET (12 FEET MIN.) | 38 FEET | ±24 FEET |

* 25 FEET FOR PARCELS 100 FEET DEEP OR MORE AND MINIMUM 10 FEET FOR PARCELS UNDER 100 FEET DEEP.
** AREA AFTER 449.95 S.F. CONVEYANCE TO THE CITY OF BEACON.

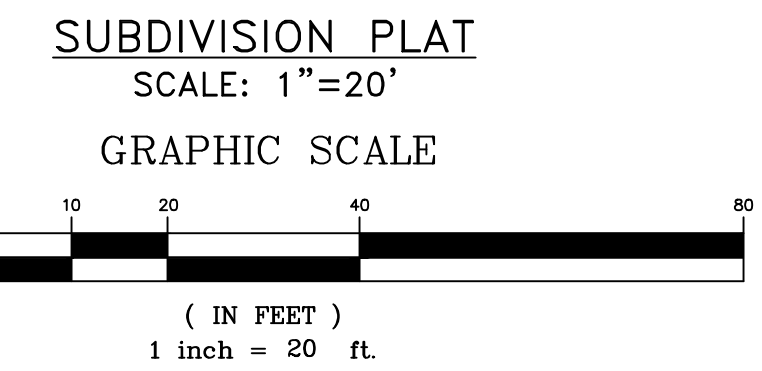


SITE LOCATION MAP SCALE: 1" = 200'

- SURVEY NOTES:**
- THE THREE PARCELS SHOWN ON THIS MAP HAVE BEEN CONSOLIDATED INTO ONE LOT WITH THE PARCEL NO. DESIGNATION 6054-38-170722, AND A TOTAL AREA OF ±0.53 AC, AND FILED WITH THE DUTCHESS COUNTY CLERK'S OFFICE IN AUGUST 2017. THE CONSOLIDATION SHOWN ON THESE PLANS ARE FOR THE PURPOSES OF THE CITY OF BEACON ONLY.
 - APPROXIMATELY 449 SQUARE FEET IS PROPOSED TO BE CONVEYED AND OFFERED FOR DEDICATION TO THE CITY OF BEACON.
 - THIS SURVEY IS OF PROPERTY DESCRIBED IN THE DUTCHESS COUNTY CLERK'S DOCUMENT NO'S 02 2005 8170 AND 02 2006 8280.
 - THE MERIDIAN, DISTANCES AND COORDINATE VALUES SHOWN HEREON REFER TO THE NEW YORK COORDINATE SYSTEM, EAST ZONE (NAD 83), EXPRESSED IN FEET. THE DISTANCES SHOWN ON THIS MAP ARE GRID DISTANCES. THEY HAVE BEEN SCALED BY A GRID FACTOR (SCALE FACTOR X SEA LEVEL FACTOR) OF 0.99991900. TO OBTAIN GROUND DISTANCES DIVIDE THE DISTANCES ON THIS MAP BY THE GRID FACTOR.
 - THE VERTICAL DATUM HEREON IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988).

- MAP REFERENCE:**
- EXISTING FEATURES AS SHOWN ON THIS PLAN PROVIDED BY A SURVEY ENTITLED "SURVEY OR PROPERTY PREPARED FOR POK BEACON, LLC" COMPLETED ON JULY 14, 2011, BY BADEY & WATSON.
 - THE LOCATION OF THE WATER MAIN SHOWN IN WATER STREET HAS NOT BEEN SURVEYED AND THE LOCATION IS CONSIDERED REPUTED.

- FLOOD BOUNDARY:**
- A PORTION OF THE SUBJECT PARCEL IS LOCATED IN ZONE AE (AREAS DETERMINED TO BE INSIDE THE 1% ANNUAL CHANCE FLOODPLAIN) PER PANEL 36027C0464E DATED MAY 2, 2012.



DCDOH STANDARD NOTE:

FOR PERMISSION TO FILE
THIS PLAN DOES NOT CONSTITUTE A REALTY SUBDIVISION AS DEFINED BY ARTICLE XI, TITLE II, SECTION 1115 OF THE PUBLIC HEALTH LAW OF THE STATE OF NEW YORK, AND ARTICLE XI OF THE DUTCHESS COUNTY SANITARY CODE. PERMISSION IS HEREBY GRANTED FOR THE FILING OF THIS MAP WITH THE CLERK OF DUTCHESS COUNTY. APPROVAL FOR ARRANGEMENTS FOR WATER SUPPLY AND/OR SEWAGE DISPOSAL IS NEITHER SOUGHT NOR GRANTED.

AUTHORIZED REPRESENTATIVE OF THE COMMISSIONER OF HEALTH _____ DATE _____

| DRAWN BY: CMB | | | | CHECKED BY: MAB | | | |
|---------------|------------|-----------------------------|-----|-----------------|------|-------------|----|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 04/28/2020 | PER PLANNING BOARD COMMENTS | MAB | | | | |

SEAL

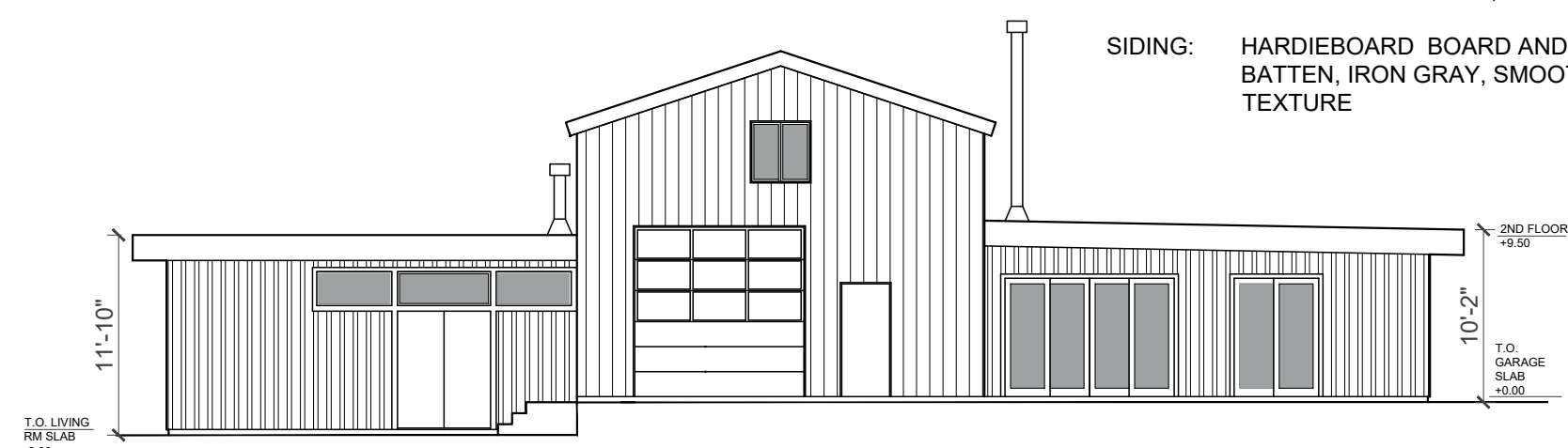
HUDSON LAND DESIGN
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

PRELIMINARY SUBDIVISION PLAT
3 WATER STREET
3 WATER STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-38-170722

JOB #: 2020:013
DATE: 3/31/2020
SCALE: 1" = 20'
TITLE: SD-1
SHEET: 1 OF 1

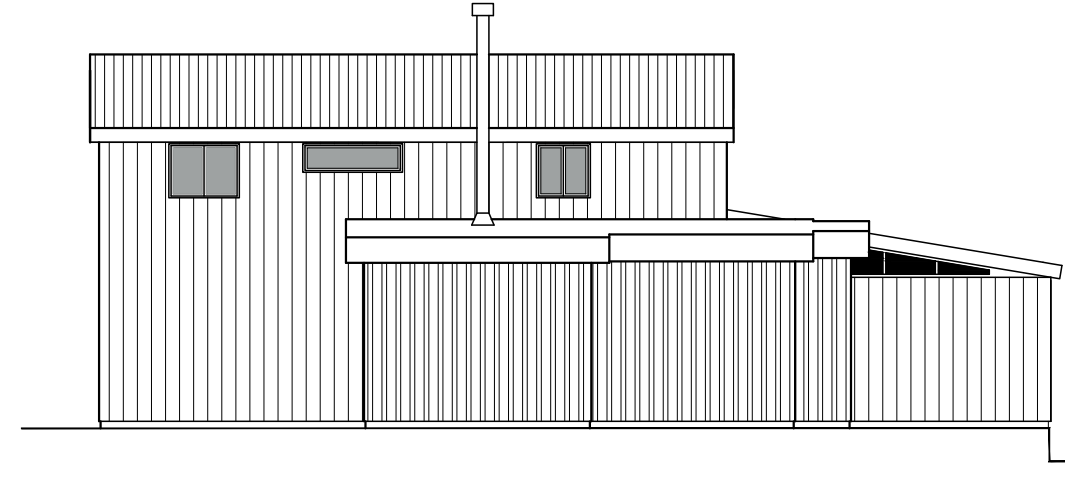
EXISTING SIDING: RIBBED GALVANIZED METAL

WINDOWS: ANDERSEN A-SERIES, BLACK
DOORS: ANDERSEN A-SERIES, BLACK
SIDING: HARDIEBOARD BOARD AND BATTEN, IRON GRAY, SMOOTH TEXTURE



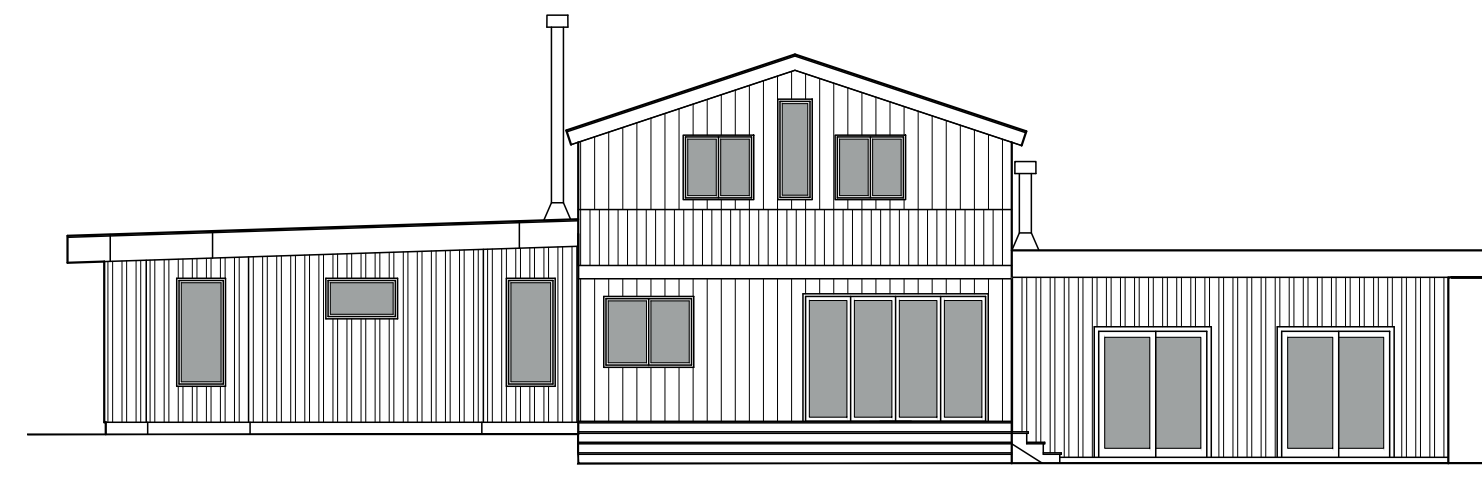
Water Street (East) Elevation

Scale: 3/32" = 1'-0"



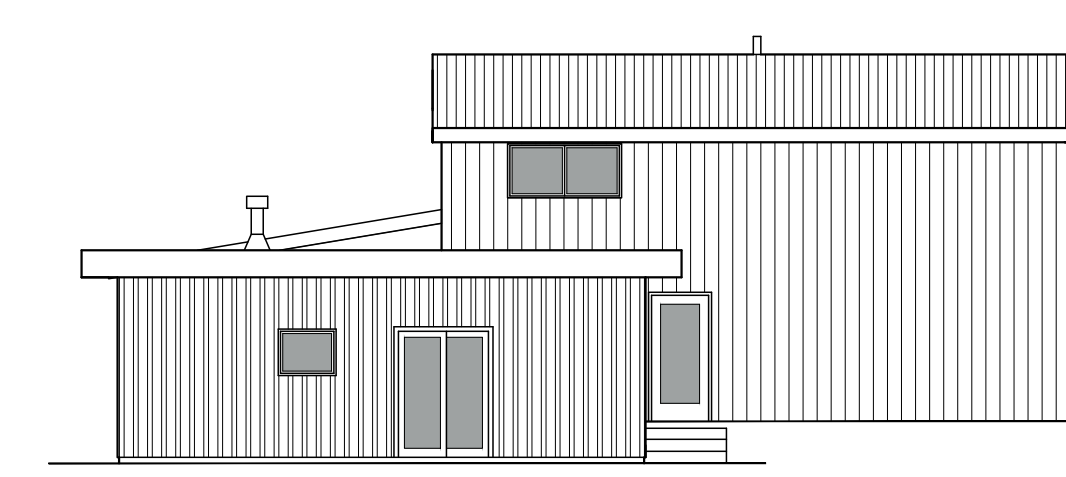
North Elevation

Scale: 3/32" = 1'-0"



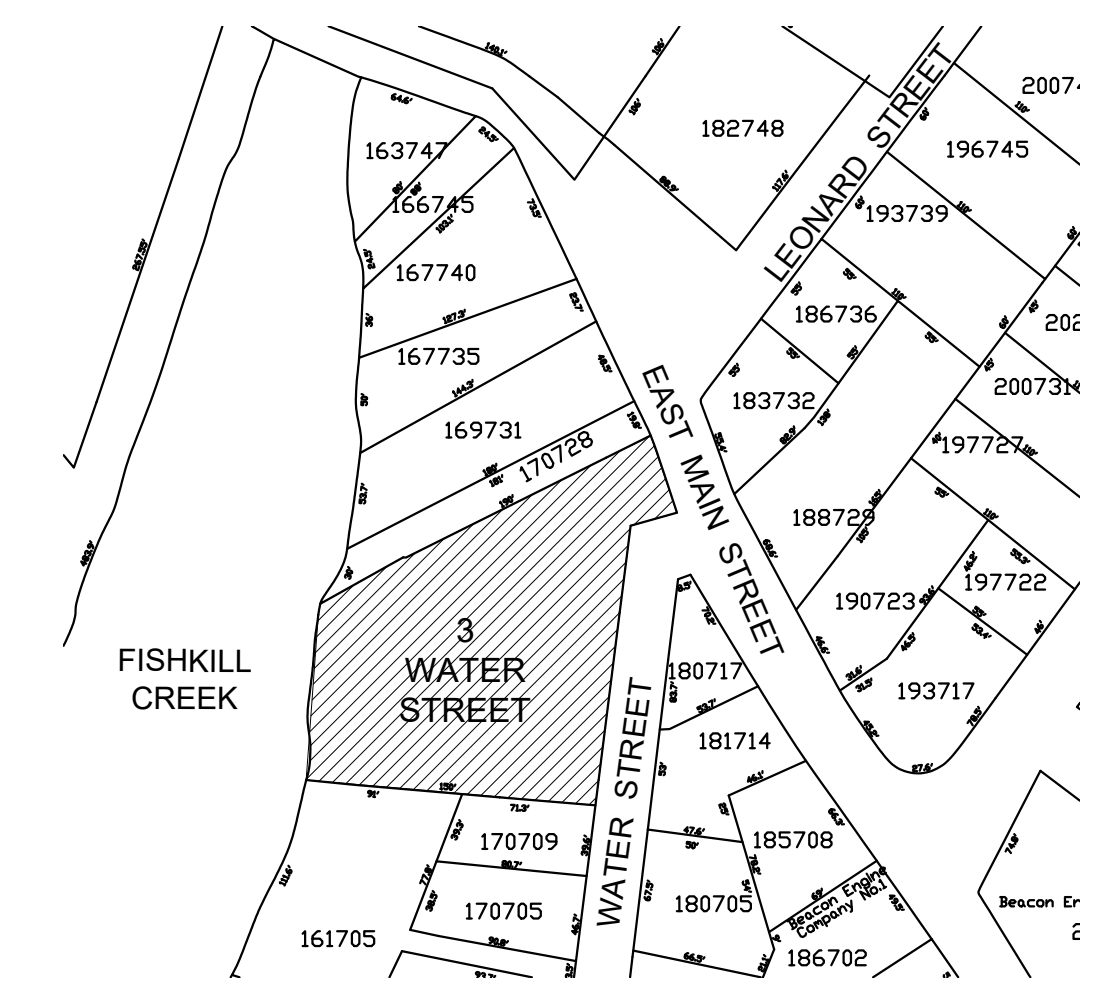
West Elevation

Scale: 3/32" = 1'-0"



South Elevation

Scale: 3/32" = 1'-0"



Location Plan

Not to Scale



L1: Wall Mounted

HAMPTON BAY
"1-LIGHT ZINC OUTDOOR WALL LANTERN" MODEL # HSP1691A - 60 W INCANDESCENT LAMP OR LED EQUIVALENT - MAX COLOR TEMPERATURE SHALL BE 2700K. SHIELD LIGHTS TO PREVENT LIGHT SPILL ACROSS TO ADJACENT PROPERTIES OR ABOVE THE HORIZONTAL PLANE INTO THE SKY

Bulk Regulations Table

| Zoning District | Required Setbacks | | | Proposed Setbacks | | | Lot Depth Required | Lot Depth Existing | Maximum Building Coverage | Proposed Building Coverage | Allowable Building Height | Proposed Building Height | Lot Area |
|---------------------------|------------------------|------|------|-------------------------------|--------|--------|--------------------|--------------------|---------------------------|----------------------------|--|---|---|
| | Front | Side | Rear | Front | Side | Rear | | | | | | | |
| R1-5 ONE FAMILY RESIDENCE | 30' | 10' | 30' | 13.1' Existing non-conforming | 76.36' | 94.19' | 100' | 149.69' | NA | 2,056 SF | 2-1/2 Story | 2 Story | 23,247 SF total lot area after merging of lots and after conveyance of land to City of Beacon |
| CMS - CENTRAL MAIN STREET | 0 Minimum, 10' Maximum | 0 | 25' | 30.00' at addition | 12.67' | NA | 75' | 130' | NA | 573 SF | 3 stories, With special permit, 4 stories with a 15' step back above 38' | 2 story at existing, 1 story at additions | |

Zoning Summary

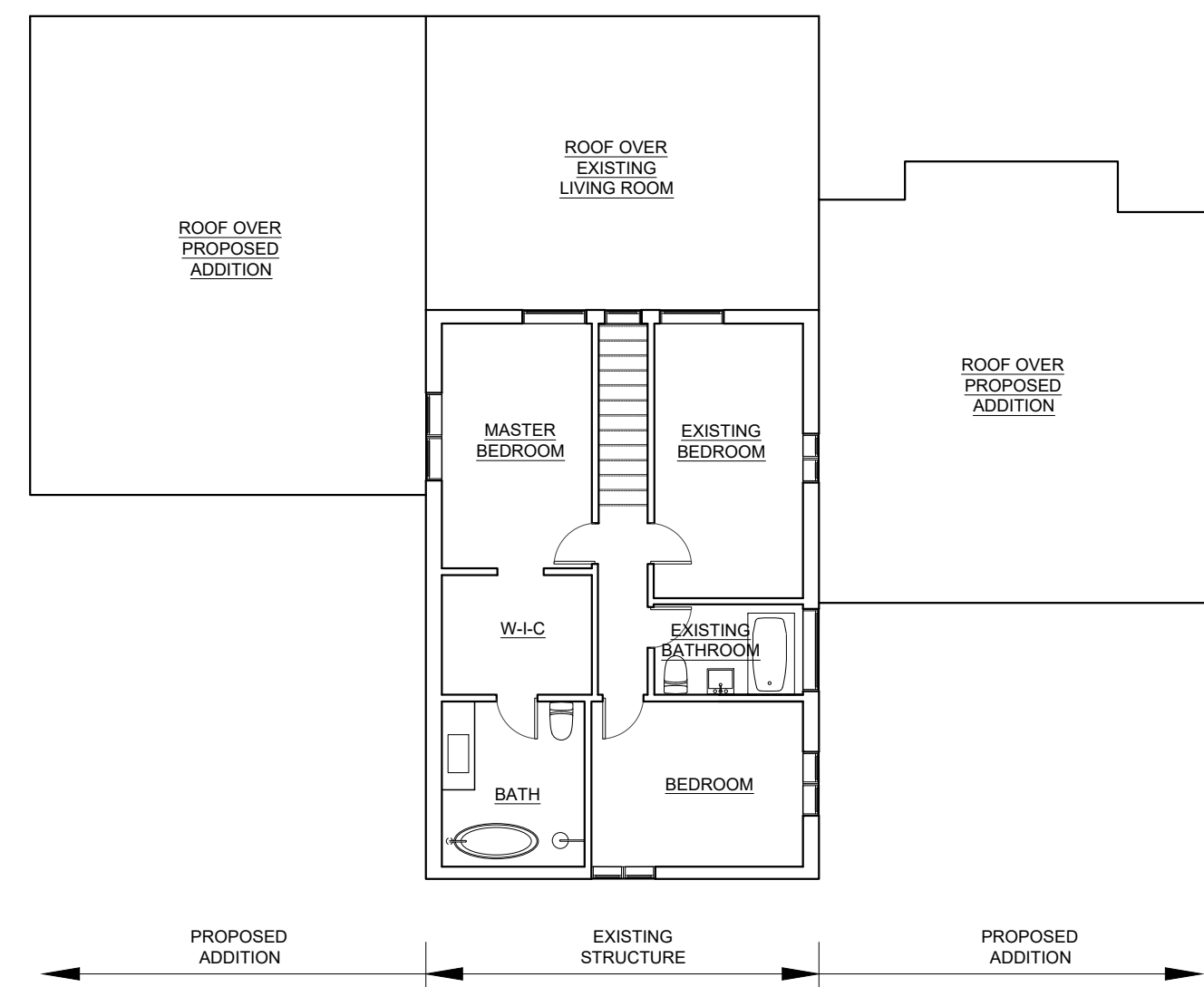
Zoning District: R1-5 & CMS
Tax Map No.: 6054-38-170722
Lot Area: +0.53 acre
Historical Overlay District: No
Parking Overlay District: No
Existing Use: Single Family Residence
Proposed Use: Owner-Occupied Single-Family Residence with Accessory Apartment

Parking & Loading

| Use & Parking Requirements | Proposed Area | Current Parking Requirement |
|--------------------------------------|---------------------|-----------------------------|
| Residential | | |
| 2 spaces per dwelling unit | 1 single family | 2 parking spaces |
| | Accessory apartment | 2 parking spaces |
| Total Required Parking Spaces | | 4 Parking Spaces |
| Total Proposed Parking Spaces | | 4 Parking Spaces |

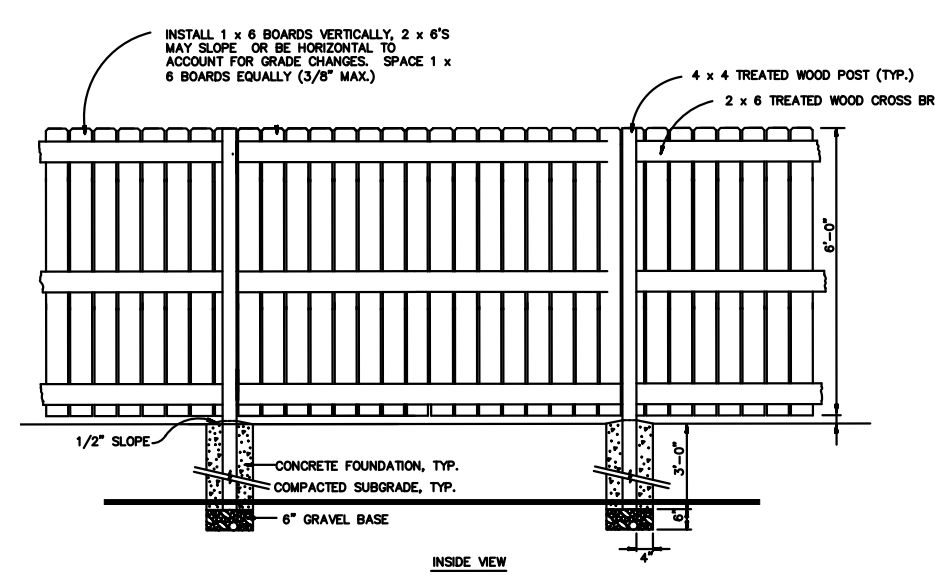
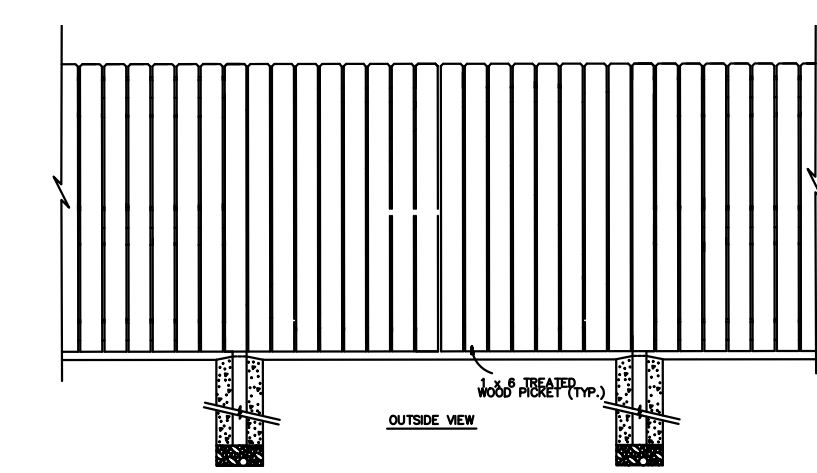
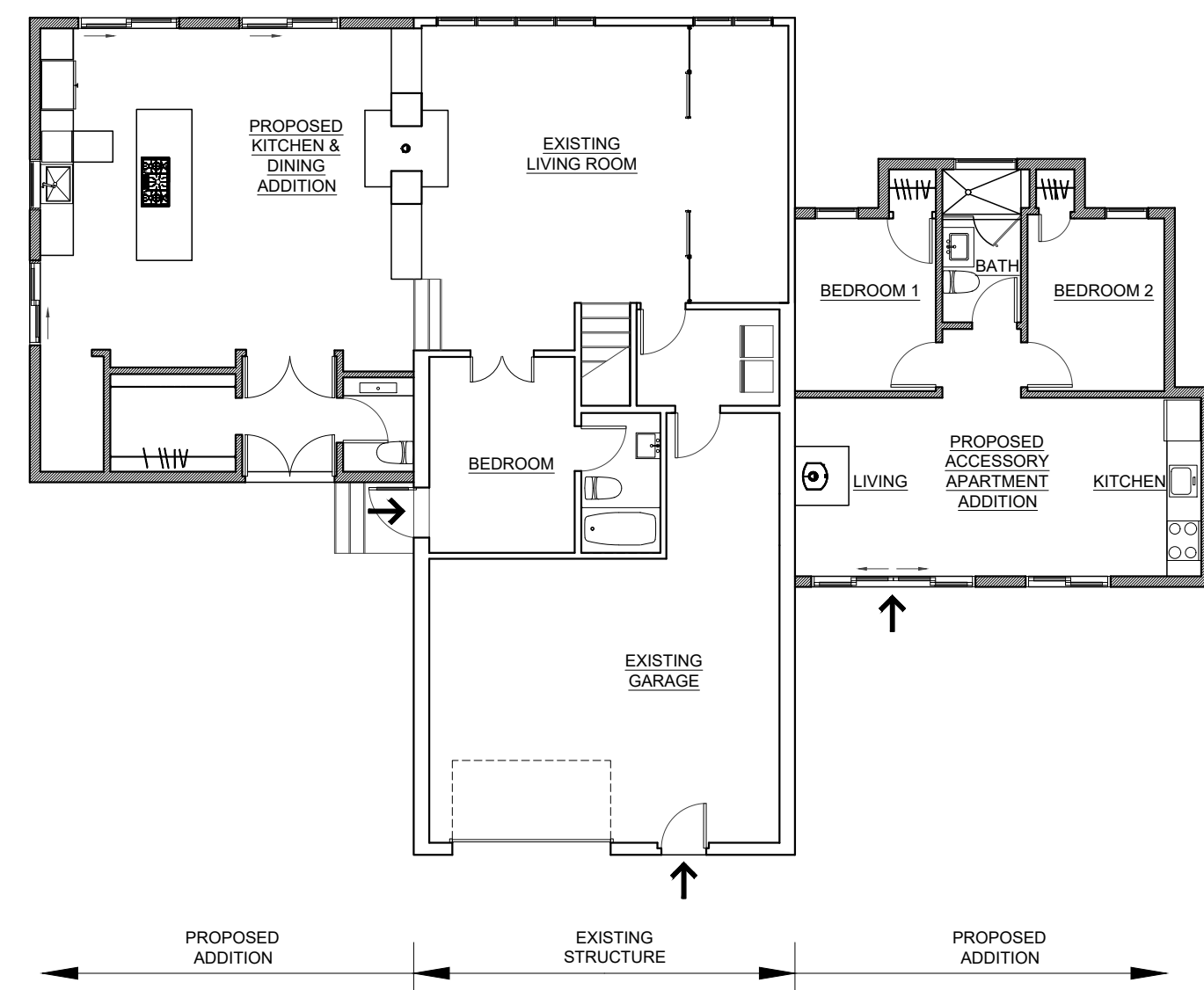
Notes:

- The applicant merged the separate parcels to create one lot prior to the re-zoning of a portion of the lot to CMS.
- The Applicant will submit a Subdivision application to merge the lots according to the City's specifications.
- Per City of Beacon Zoning Section 223-24.1 Accessory Apartments:
 - The Accessory Apartment is connected to an owner-occupied single-family residence
 - The area of the accessory apartment is 590 SF (Maximum 650 SF for attached accessory apartments).
 - The accessory apartment constitutes 21% of the total square footage (2,792 SF). The maximum area for an Accessory Apartment shall not exceed 30% of the floor area of the residence in which it is located.
 - The exterior appearance maintains that of a single-family residence.
 - The Accessory Apartment has 2 parking spaces assigned to it.
- Note that there is one existing garage parking space, and 3 proposed surface parking spaces.
- The City Council approved the Special Use Permit for the Accessory Apartment at their March 16, 2020 public hearing.



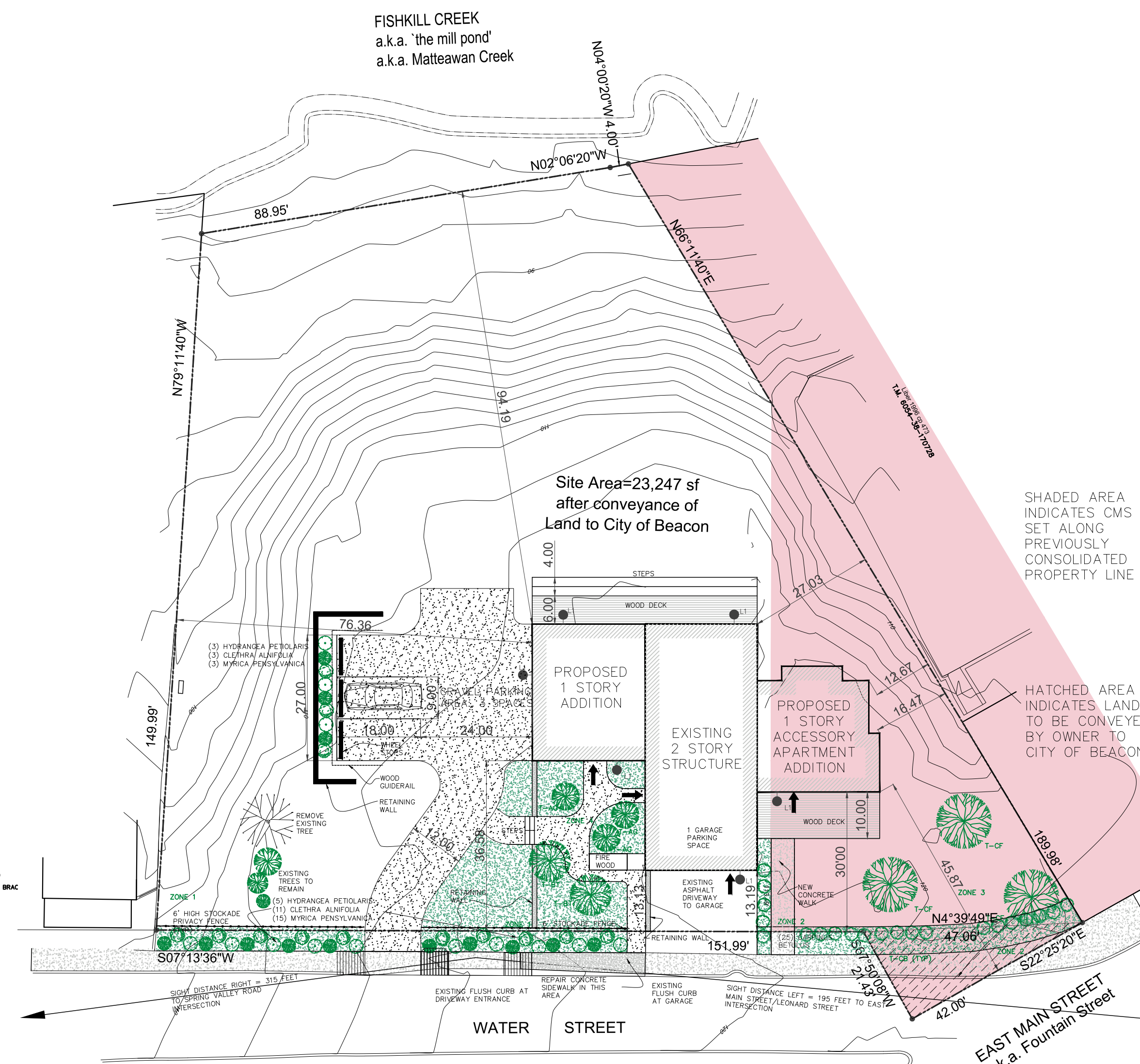
2nd Floor Plan

Scale: 3/32" = 1'-0"



Stockade Fence

Scale: NOT TO SCALE



Site Plan

Scale: 1" = 20'

PLANT SCHEDULE | 3 WATER ST BEACON

| QUANTITY | BOTANIC NAME | COMMON NAME | SIZE | PLANTING TIME | AREA |
|---------------|--------------|---|--------------------|---------------|--------------------|
| TREES | | | | | |
| 3 | T-AG | Amelanchier x grandiflora 'Autumn Brilliance' | apple serviceberry | 2" cal | Spring Fall Zone 4 |
| 2 | T-BT | Betula nigra | river birch | 10'-12' | Spring Fall zone 4 |
| 23 | T-CB | Carpinus betulus | common hornbeam | 10 gal | Spring Fall Zone 2 |
| 3 | T-CF | Cornus florida | flowering dogwood | 2" cal | Spring Fall Zone 3 |
| SHRUBS | | | | | |
| 14 | S-CA | Clethra alnifolia | sweet pepperbush | 7 gal | Spring Fall Zone 1 |
| 18 | S-MP | Myrica pensylvanica | bayberry | 7 gal | Spring Fall Zone 1 |
| VINES | | | | | |
| 8 | V-HA | Hydrangea anomala subsp. petiolaris | climbing hydrangea | 5 gal | Spring Fall Zone 1 |

Index of Drawings

| | |
|--------------|--|
| Sheet 1 of 6 | Site Plan, Floor Plans & Elevations |
| Sheet 2 of 6 | Existing Conditions / Site Demolition Plan |
| Sheet 3 of 6 | Grading and Drainage Plan |
| Sheet 4 of 6 | Erosion & Sediment Control Plan |
| Sheet 5 of 6 | Construction Details |
| Sheet 6 of 6 | Construction Details |

REVISIONS:

| NO. | DATE | DESCRIPTION | BY |
|-----|----------|-------------------------------------|-----|
| 1 | 12/31/19 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 2 | 03/31/20 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 3 | 04/28/20 | REVISED PER PLANNING BOARD COMMENTS | AJS |

Special Use Permit Application

Sheet 1 of 6 - Site Plan

3 Water Street Accessory Apartment

Beacon, New York
Scale: As Noted
October 29, 2019

Owner:
POK Beacon LLC
3 Water Street
Beacon, NY 12508

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

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Recommended For Approval:
Chairman, City Planning Board Date _____
Approved by Resolution of the City Council of Beacon
on the _____ day of _____, 20____
City Clerk

| REVISIONS: | | | |
|------------|----------|-------------------------------------|-----|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 12/31/19 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 2 | 03/31/20 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 3 | 04/28/20 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| | | | |
| | | | |



Site Demolition Plan

Scale: 1" = 20'

Special Use Permit Application

Sheet 2 of 6 - Existing Conditions / Site Demolition Plan

3 Water Street Accessory Apartment

Beacon, New York
Scale: As Noted
October 29, 2019

Owner:
POK Beacon LLC
3 Water Street
Beacon, NY 12508

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

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Recommended For Approval:

Chairman, City Planning Board _____ Date _____

Approved by Resolution of the City Council of Beacon
on the _____ day of _____, 20____

City Clerk _____



FISHKILL CREEK
a.k.a. 'the mill pond'
a.k.a. Matteawan Creek

LEGEND:

| | |
|---------|----------------------------------|
| --- | EXISTING PROPERTY LINE |
| --- | ADJOINING PROPERTY LINE |
| --- | EXISTING MAJOR CONTOUR |
| --- | EXISTING MINOR CONTOUR |
| --- | EXISTING SEWER LINE |
| OH UTIL | EXISTING OVERHEAD UTILITY LINE |
| --- | EXISTING CHAIN LINK FENCE |
| ⊙ | EXISTING TREE |
| ⊙ | EXISTING UTILITY POLE |
| --- | EXISTING ZONING BOUNDARY |
| --- | EXISTING 100-YEAR FLOOD BOUNDARY |
| --- | EXISTING WATER LINE |
| --- | PROPOSED PROPERTY LINE |
| --- | PROPOSED MAJOR CONTOUR |
| --- | PROPOSED MINOR CONTOUR |
| --- | PROPOSED ROOF LEADER LINE |
| --- | PROPOSED FOOTING DRAIN LINE |
| --- | PROPOSED SILT FENCE |
| --- | PROPOSED LIMIT OF DISTURBANCE |
| --- | PROPOSED EROSION CONTROL BLANKET |
| ⊙ | PROPOSED TREE |

PROJECT INFORMATION:

| | |
|--------------------|---|
| APPLICANT: | POK BEACON, LLC, 3 WATER STREET BEACON, NY 12508 |
| PROJECT ENGINEER: | HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508 |
| PROJECT ARCHITECT: | ARYEH SIEGEL ARCHITECT, 84 MASON CIRCLE, BEACON NY 12508 |
| PARCEL LOCATION: | 3 WATER STREET, BEACON, NY 12508 |
| TAX PARCEL ID: | 6054-38-170722 |
| PARCEL AREA: | ±0.53-ACRES |
| WATER SUPPLY: | MUNICIPAL |
| SEWAGE DISPOSAL: | MUNICIPAL |

MAP REFERENCES:

- EXISTING FEATURES AS SHOWN ON THIS PLAN PROVIDED BY A SURVEY ENTITLED "SURVEY OR PROPERTY PREPARED FOR POK BEACON, LLC" COMPLETED ON JULY 14, 2011, BY BADEY & WATSON.
- THE LOCATION OF THE WATER MAIN SHOWN IN WATER STREET HAS NOT BEEN SURVEYED AND THE LOCATION IS CONSIDERED REPUTED.

SITE SPECIFIC NOTES:

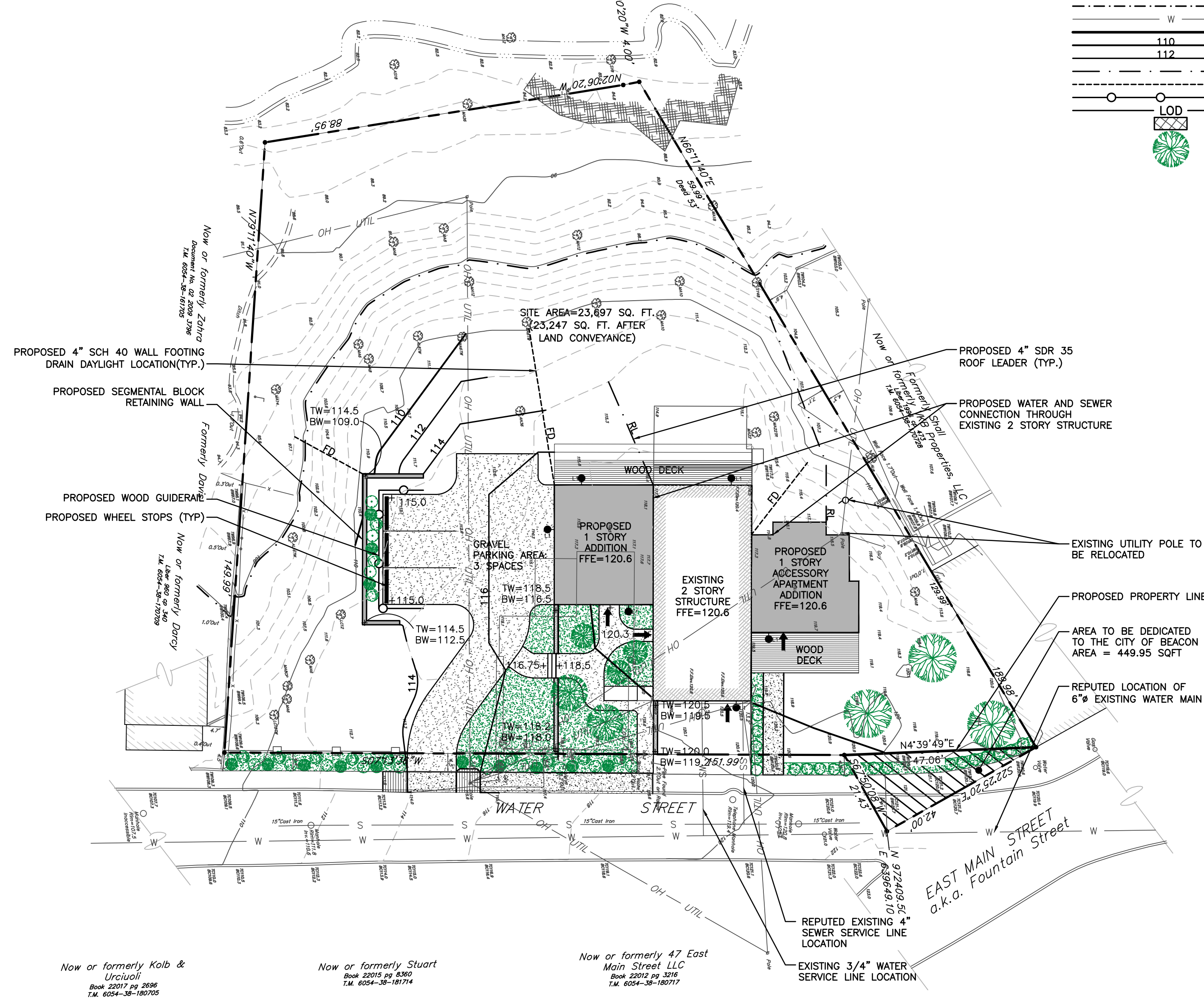
- THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS (IF APPLICABLE), WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE LINES.
- THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
- THE EXISTING LOT SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES.
- THE WATER AND SEWER SERVICE LINES FOR THE BUILDING ADDITION AND ACCESSORY APARTMENT TO BE MADE VIA CONNECTION THROUGH THE EXISTING STRUCTURE. SEE ARCHITECTURAL DRAWINGS FOR LOCATION.
- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. THE PROPOSED DRIVEWAY SHALL HAVE A STABILIZED CONSTRUCTION ENTRANCE.
- ROOF LEADER CONNECTIONS TO BE MINIMUM 4" PVC OR HDPE @ 2.0% MIN.
- SUMP PUMP TO BE PROVIDED FOR FOOTING DRAIN, IF NECESSARY. THE TYPE OF PUMP AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT.
- THE CITY OF BEACON BUILDING DEPARTMENT SHALL BE PROVIDED ACCESS TO VERIFY THE LOCATION OF THE EXISTING ROOF LEADERS AND SUMP PUMPS AND THE AREA THEY DRAIN TO.

INDIANA BAT PROTECTION NOTES:

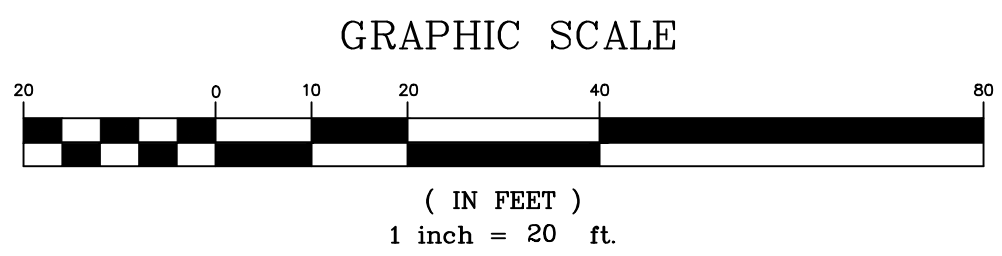
- TREE CLEARING SHALL BE RESTRICTED TO THE PERIOD BETWEEN OCTOBER 1 AND MARCH 31.
- THE LIMITS OF DISTURBANCE SHALL BE DEMARCATED BY INSTALLING ORANGE CONSTRUCTION FENCE FOR THE GENERAL IMPROVEMENT AND INFRASTRUCTURE CONSTRUCTION ACTIVITIES AND FOR THE INDIVIDUAL LOT CONSTRUCTION. THESE LIMITS SHALL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

FLOOD BOUNDARY:

- A PORTION OF THE SUBJECT PARCEL IS LOCATED IN ZONE AE (AREAS DETERMINED TO BE INSIDE THE 1% ANNUAL CHANCE FLOODPLAIN) PER PANEL 36027C0464E DATED MAY 2, 2012.



GRADING AND UTILITY PLAN
SCALE: 1"=20'



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

SIGNED THIS _____ DAY OF _____, 20____, BY _____
 _____ CHAIRMAN
 _____ SECRETARY
 IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

| DRAWN BY: CMB | | | | CHECKED BY: MAB | | | |
|---------------|------------|-----------------------------|-----|-----------------|------|-------------|----|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 04/28/2020 | PER PLANNING BOARD COMMENTS | MAB | | | | |



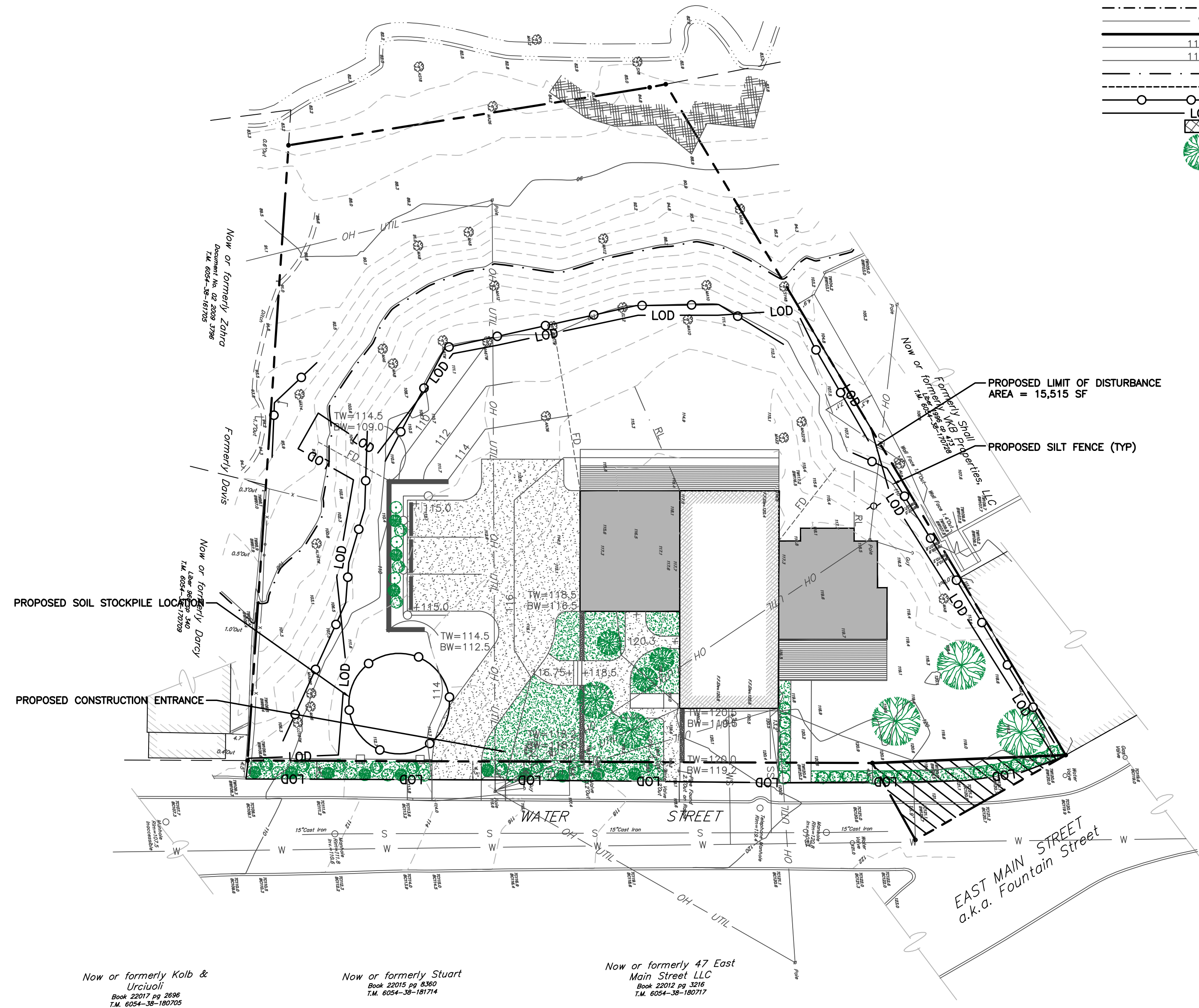
HUDSON LAND DESIGN
 HUDSON LAND DESIGN
 PROFESSIONAL ENGINEERING P.C.
 174 MAIN ST., BEACON, NEW YORK 12508
 13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
 PH: 845-440-6926
 F: 845-440-6637

GRADING AND UTILITY PLAN
3 WATER STREET SITE PLAN
 3 WATER STREET
 CITY OF BEACON
 DUTCHESS COUNTY, NEW YORK
 TAX ID: 6054-38-170722

JOB #: 2020:013
 DATE: 3/31/2020
 SCALE: 1" = 20'
 TITLE: GD-1
 SHEET: 3 OF 6



FISHKILL CREEK
a.k.a. 'the mill pond'
a.k.a. Matteawan Creek



LEGEND:

| | |
|---------|----------------------------------|
| --- | EXISTING PROPERTY LINE |
| - - - - | ADJOINING PROPERTY LINE |
| --- | EXISTING MAJOR CONTOUR |
| --- | EXISTING MINOR CONTOUR |
| --- | EXISTING SEWER LINE |
| OH UTIL | EXISTING OVERHEAD UTILITY LINE |
| --- | EXISTING CHAIN LINK FENCE |
| ○ | EXISTING TREE |
| ○ | EXISTING UTILITY POLE |
| --- | EXISTING ZONING BOUNDARY |
| --- | EXISTING 100-YEAR FLOOD BOUNDARY |
| --- | EXISTING WATER LINE |
| --- | PROPOSED PROPERTY LINE |
| 110 | PROPOSED MAJOR CONTOUR |
| 112 | PROPOSED MINOR CONTOUR |
| --- | PROPOSED ROOF LEADER LINE |
| --- | PROPOSED FOOTING DRAIN LINE |
| --- | PROPOSED SILT FENCE |
| --- | PROPOSED LIMIT OF DISTURBANCE |
| --- | PROPOSED EROSION CONTROL BLANKET |
| ○ | PROPOSED TREE |

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

PERMANENT AND TEMPORARY VEGETATION:

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

SILT FENCE:

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

SOIL STOCKPILE:

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

DUST CONTROL:

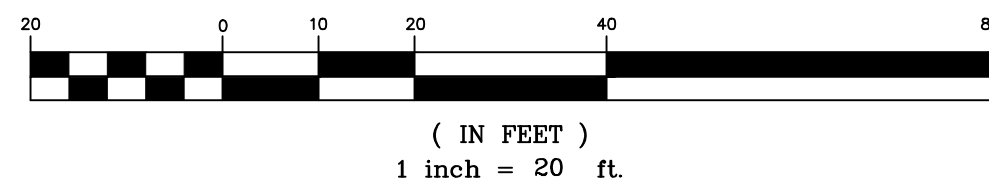
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORK. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT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

EROSION AND SEDIMENT CONTROL NOTES

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

EROSION & SEDIMENT CONTROL PLAN
SCALE: 1"=20'

GRAPHIC SCALE



Now or formerly Kolb & Urcioli
Book 22017 pg 2888
T.M. 6054-38-18295

Now or formerly Stuart
Book 22015 pg 6362
T.M. 6054-38-18174

Now or formerly 47 East Main Street LLC
Book 22012 pg 3218
T.M. 6054-38-180717

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 PLAN, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20____, BY

_____ CHAIRMAN

_____ SECRETARY

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

DRAWN BY: CMB

CHECKED BY: MAB

REVISIONS:

REVISIONS:

| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
|-----|------------|-----------------------------|-----|-----|------|-------------|----|
| 1 | 04/28/2020 | PER PLANNING BOARD COMMENTS | MAB | | | | |
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SEAL



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

EROSION & SEDIMENT CONTROL PLAN
3 WATER STREET SITE PLAN

3 WATER STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-38-170722

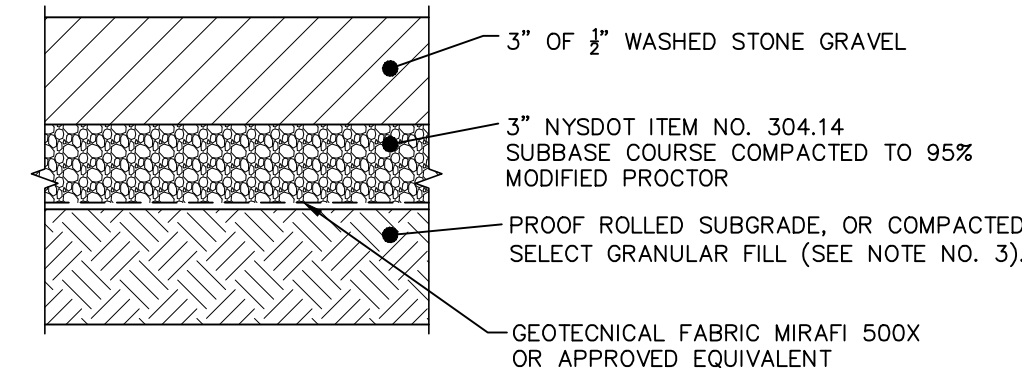
JOB #: 2020:013

DATE: 3/31/2020

SCALE: 1" = 20'

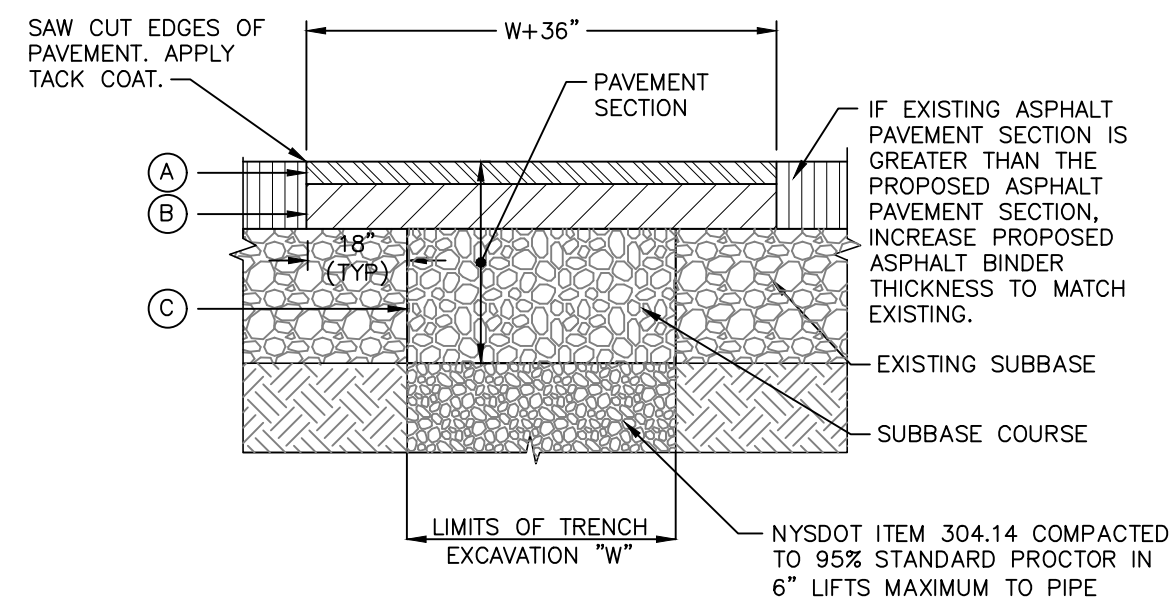
TITLE: ESC-1

SHEET: 4 OF 6



NOTES:
 1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002.
 2. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.

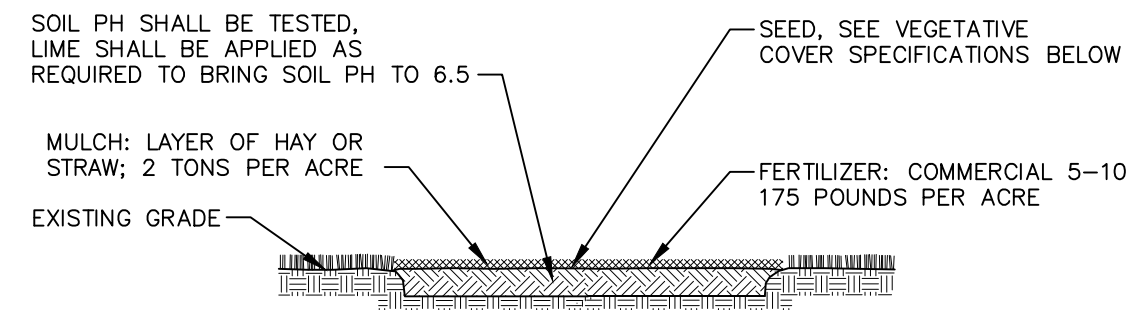
GRAVEL PARKING AREA SECTION DETAIL
NOT TO SCALE



LEGEND
 (A) 1-1/2" ASPHALT CONCRETE TOP COURSE- NYSDOT TYPE 6F
 (B) 3" ASPHALT CONCRETE BINDER COURSE- NYSDOT TYPE 3
 (C) 10" GRANULAR SUBBASE COURSE- NYSDOT ITEM 304.14

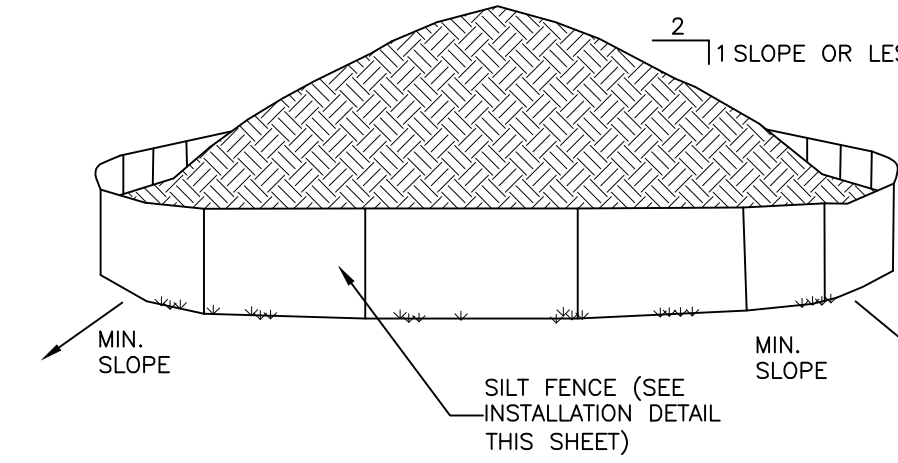
NOTES:
 1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
 2. FURNISH, PLACE, AND COMPACT SUBBASE.
 3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
 4. FURNISH AND PLACE ASPHALT CONCRETE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

STREET PAVEMENT RESTORATION DETAIL
NOT TO SCALE



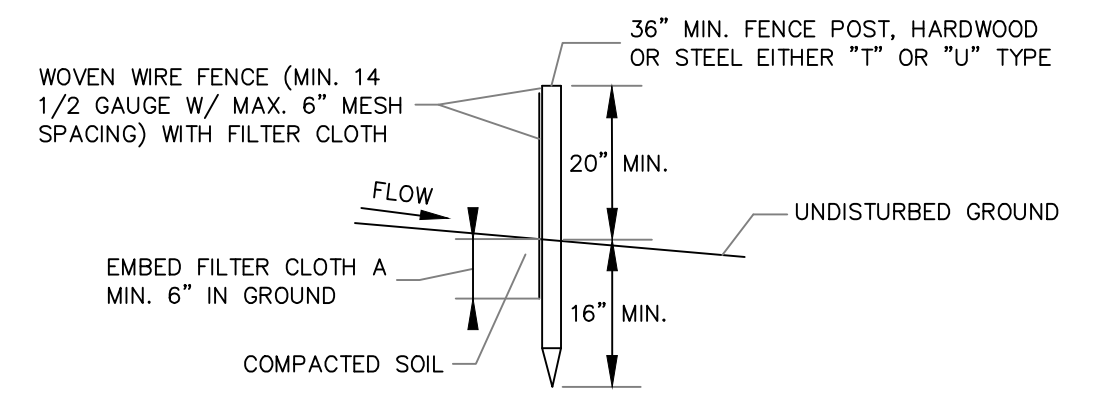
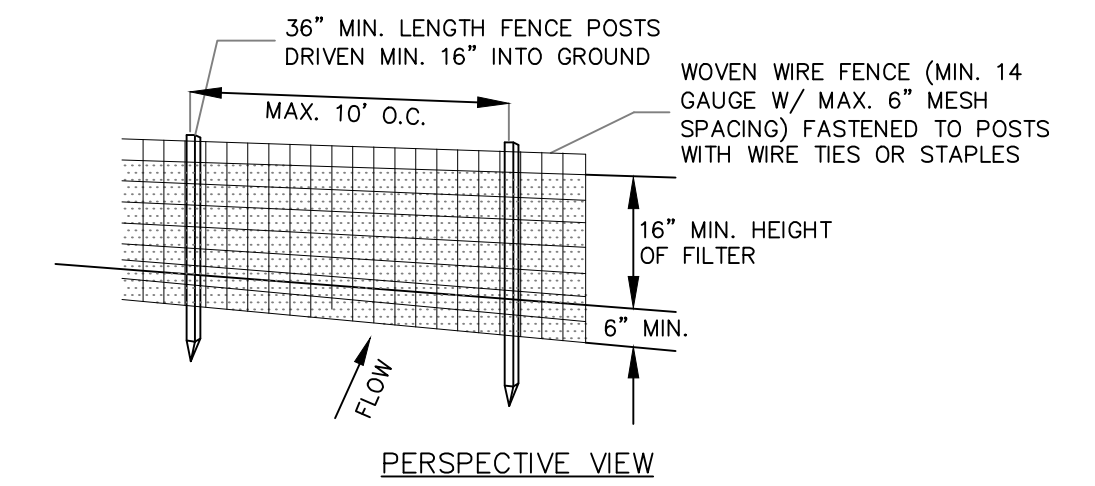
NOTES:
 1. TOPSOIL, SEED, MULCH, AND FERTILIZER DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 14 DAYS OR MORE.
 2. SEED MIXTURE FOR USE ON LAWNS IN SUNNY AREAS:
 65% KENTUCKY BLUE GRASS BLEND 114 POUNDS PER ACRE
 20% PERENNIAL RYEGRASS 35 POUNDS PER ACRE
 15% FINE FESCUE 26 POUNDS PER ACRE
 175 POUNDS PER ACRE
 3. SEED MIXTURE FOR USE IN SHADY AREAS:
 80% BLEND OF SHADE TOLERANT KENTUCKY BLUEGRASS 138 POUNDS PER ACRE
 20% FINE FESCUE 37 POUNDS PER ACRE
 175 POUNDS PER ACRE
 4. SEED BETWEEN APRIL 1ST AND MAY 15TH OR AUGUST 15TH AND OCTOBER 15TH. SEEDING MAY OCCUR BETWEEN MAY 15TH AND AUGUST 15TH IF ADEQUATE IRRIGATION IS PROVIDED.
 5. TOPSOIL SHALL HAVE AT LEAST 6% BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN 20%. TOPSOIL SHALL HAVE NOT LESS THAN 20% FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15% CLAY.

TOPSOIL, SEED AND MULCH DETAIL
NOT TO SCALE



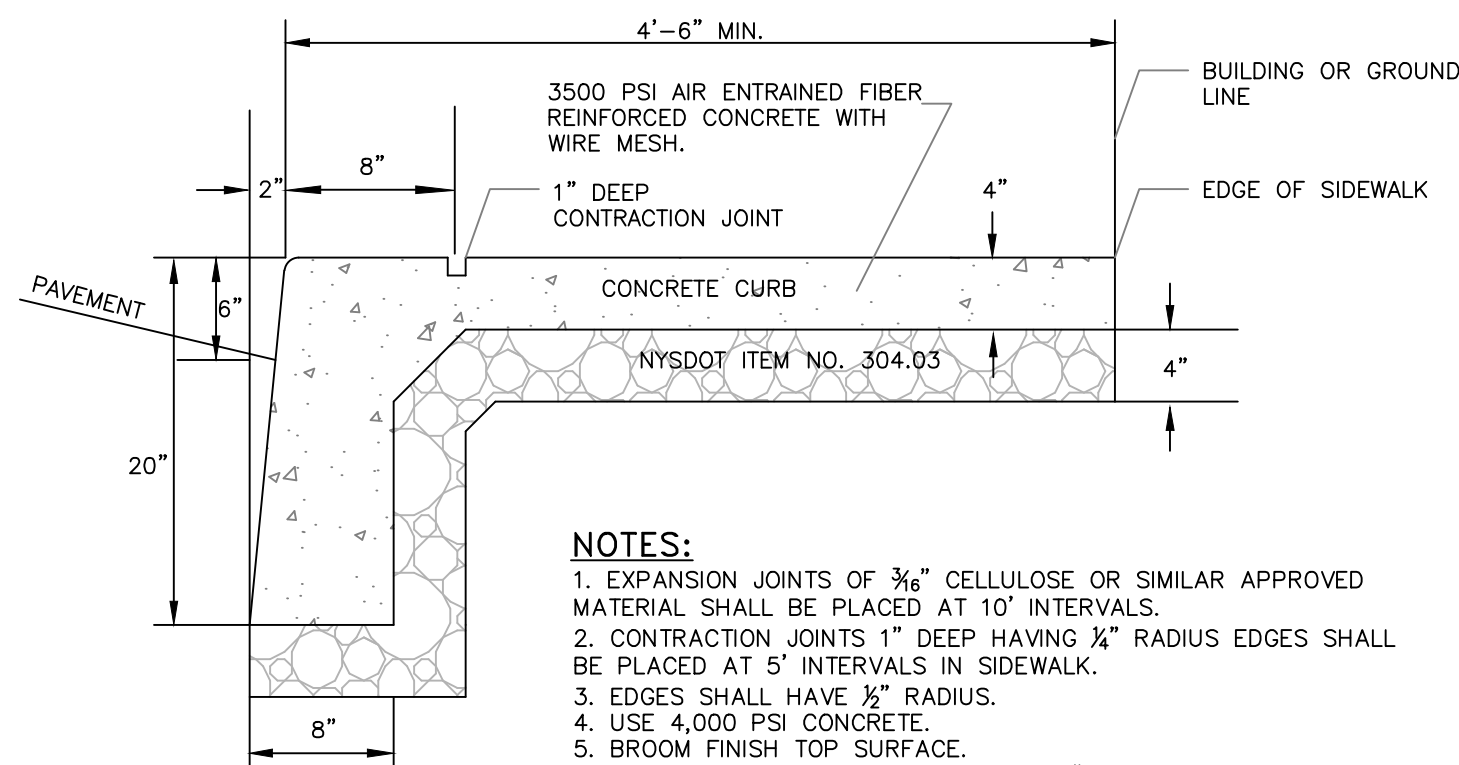
NOTES:
 1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
 2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE



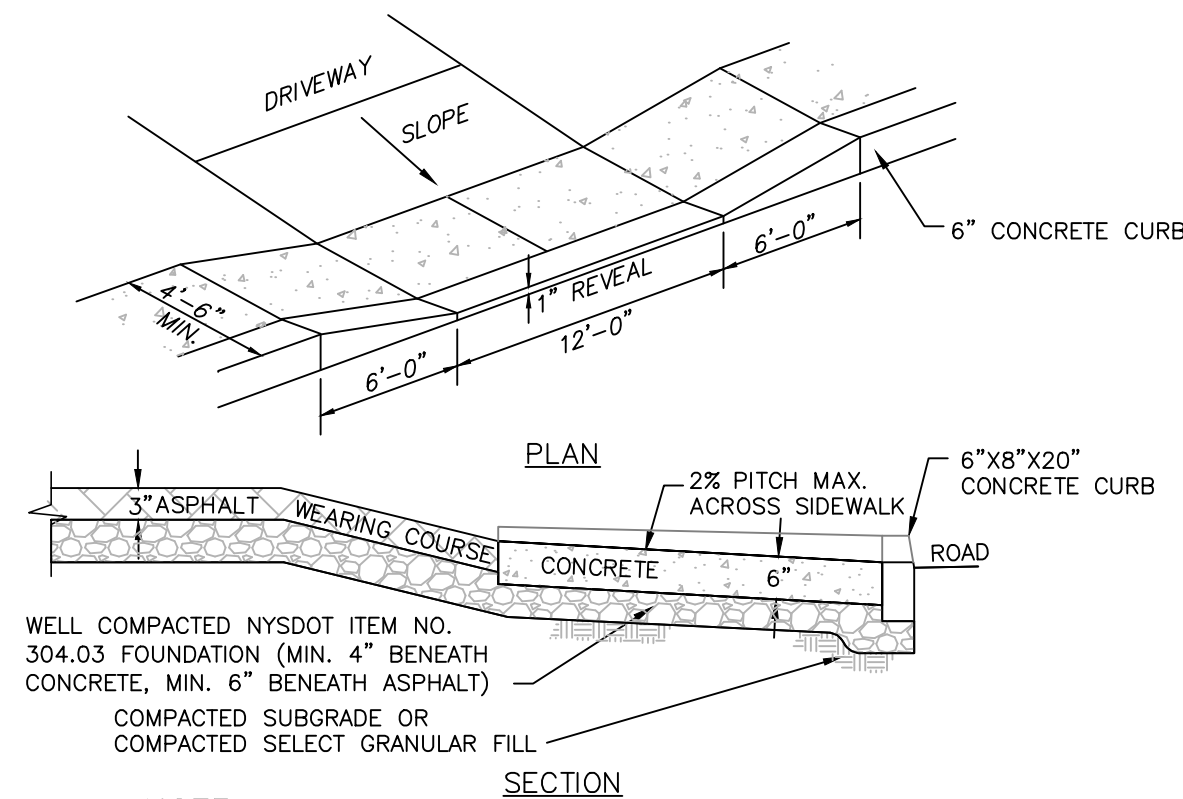
NOTES:
 1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
 2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED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

SILT FENCE DETAIL
NOT TO SCALE



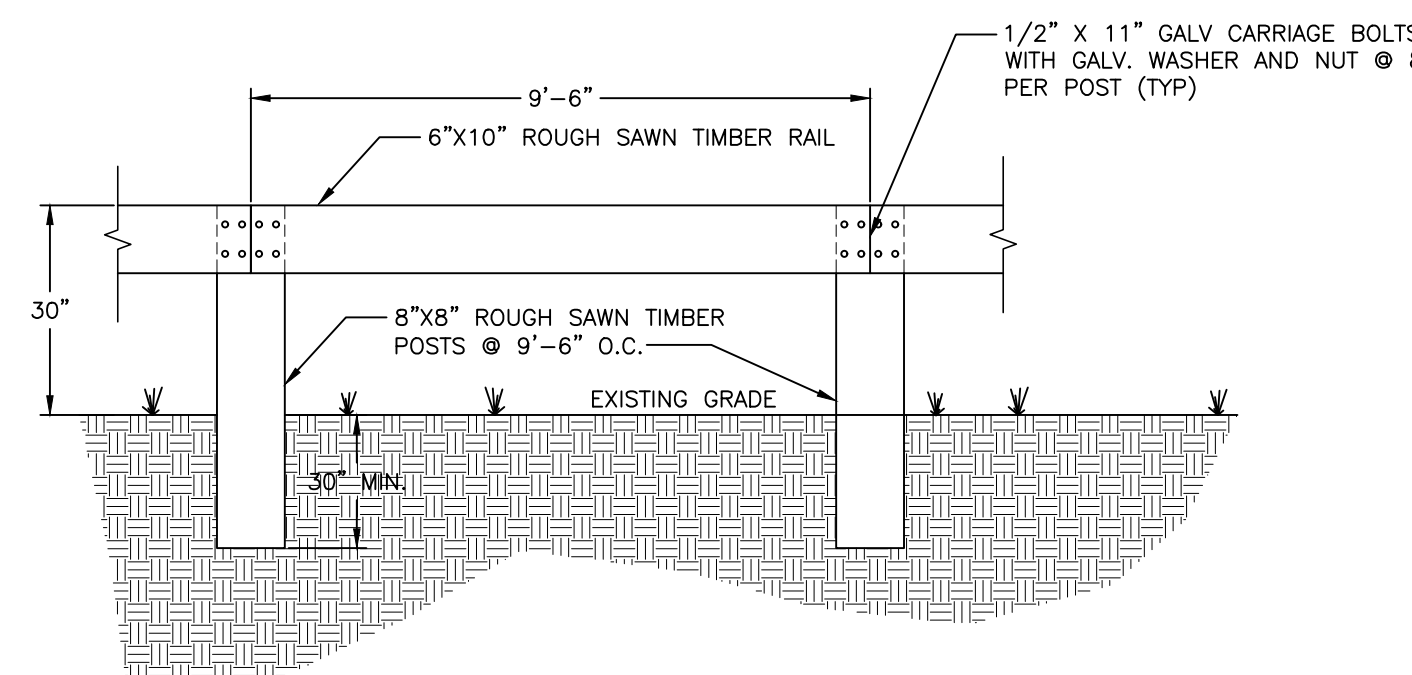
NOTES:
 1. EXPANSION JOINTS OF 3/8" CELLULOSE OR SIMILAR APPROVED MATERIAL SHALL BE PLACED AT 10' INTERVALS.
 2. CONTRACTION JOINTS 1" DEEP HAVING 3/4" RADIUS EDGES SHALL BE PLACED AT 5' INTERVALS IN SIDEWALK.
 3. EDGES SHALL HAVE 1/2" RADIUS.
 4. USE 4,000 PSI CONCRETE.
 5. BROOM FINISH TOP SURFACE.
 6. SIDEWALK SHALL BE A MINIMUM OF 6" THICK AT ALL DRIVEWAYS AND HANDICAP RAMPS.
 7. MAXIMUM SLOPE OF 1 ON 12 TO BE USED WHERE SIDEWALK TERMINATES AT HANDICAP RAMPS.

MONOLITHIC CURB AND SIDEWALK DETAIL
NOT TO SCALE

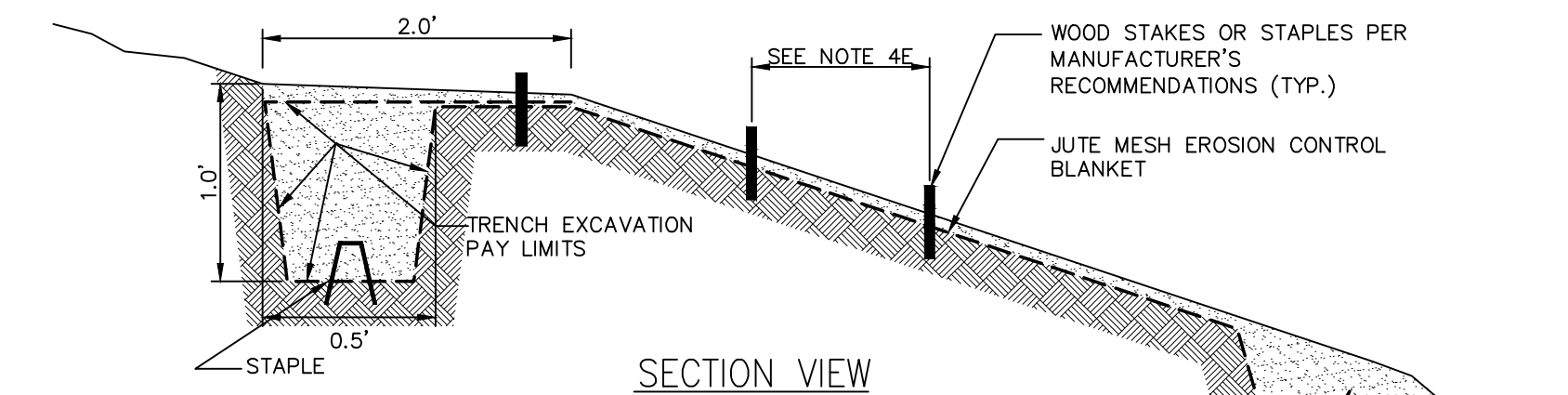


NOTE:
 1. PRE-MOLDED EXPANSION JOINTS TO BE USED AT ALL JOINTS.
 2. DRIVEWAY SHALL BE PAVED AFTER THE CONCRETE APRON TO THE RIGHT-OF-WAY LINE (MINIMUM).
 3. SIDEWALK WIDTH SHALL MATCH EXISTING SIDEWALK, BUT NO LESS THAN 4'-6".

DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE



TIMBER GUIDERAIL DETAIL
NOT TO SCALE



NOTES:
 1. THE SITE SHALL BE PREPARED PER THE MANUFACTURER'S RECOMMENDATIONS. THIS INCLUDES GRADING AND COMPACTING THE AREA OF INSTALLATION, REMOVING ALL ROCKS, VEGETATION, ETC.
 2. LOOSEN THE TOP 2-3 INCHES MINIMUM OF SOIL.
 3. MAT SHALL BE CONFIGURED SUCH THAT IT IS PERPENDICULAR TO THE FLOW OF THE STREAM. OVERLAP COURSES BY A MINIMUM OF 18" WITH THE UPSTREAM MAT ON TOP OF THE DOWNSTREAM MAT.
 4. INSTALL THE MAT.
 5. EXCAVATE A 12"x6" MINIMUM LONGITUDINAL ANCHOR TRENCH 2-3 FEET OVER CREST OF SLOPE.
 6. INSTALL TOP END OF MAT INTO TRENCH AND SECURE TO BOTTOM USING MANUFACTURER'S SUGGESTED ANCHORING DEVICE AND DEPTH SPACED EVERY 12" MINIMUM. BACKFILL AND COMPACT SOIL INTO TRENCH.
 7. UNROLL MAT DOWN SLOPE.
 8. OVERLAPS SHALL BE 18" MINIMUM AND ANCHORED EVERY 18" MINIMUM ALONG THE OVERLAP. SECURE USING WOOD STAKES AS SPECIFIED ON THIS PLAN.
 9. UNROLL MAT IN A MANNER TO MAINTAIN DIRECT CONTACT WITH SOIL. SECURE MAT TO GROUND SURFACE USING WOOD STAKE ANCHORING DEVICES. ANCHORS SHALL BE PLACED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION AND LANDSCAPE DESIGNER.
 10. EXCAVATE A 12"x6" KEY ANCHOR TRENCH AT 1.5 YR ELEVATION.
 11. PLACE BOTTOM END OF MAT INTO KEY ANCHOR TRENCH AT 1.5 YR. ELEVATION AND SECURE TO BOTTOM OF TRENCH USING WOOD STAKE GROUND ANCHORING DEVICES SPACED EVERY 12" MINIMUM. BACKFILL AND COMPACT SOIL INTO TRENCH. ADDITIONAL ANCHORING IN AREAS WHERE STANDING AND/OR FLOWING WATER EXISTS THE TOE OF THE SLOPE MAY BE REQUIRED. CONTACT THE MANUFACTURER IN THESE CASES.
 12. JUTE MESH SHALL BE OF A UNIFORM OPEN PLAIN WEAVE OF UNDYED AND UNBLEACHED SINGLE JUTE YARN. JUTE MESH SHALL BE WOVEN AS FOLLOWS:
 APPROXIMATELY 78 WARP ENDS PER YARD WIDTH.
 APPROXIMATELY 41 WEFT ENDS PER LINEAR YARD.
 MASS OF JUTE MESH SHALL AVERAGE 1 POUND PER SQUARE YARD (PLUS OR MINUS 5%).

ROLLED EROSION CONTROL MAT DETAIL
NOT TO SCALE

| DRAWN BY: CMB | | | | CHECKED BY: MAB | | | |
|---------------|------------|-----------------------------|-----|-----------------|------|-------------|----|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 04/28/2020 | PER PLANNING BOARD COMMENTS | MAB | | | | |
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HUDSON LAND DESIGN
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CONSTRUCTION DETAILS
3 WATER STREET SITE PLAN

3 WATER STREET
 CITY OF BEACON
 DUTCHESS COUNTY, NEW YORK
 TAX ID: 6054-38-170722

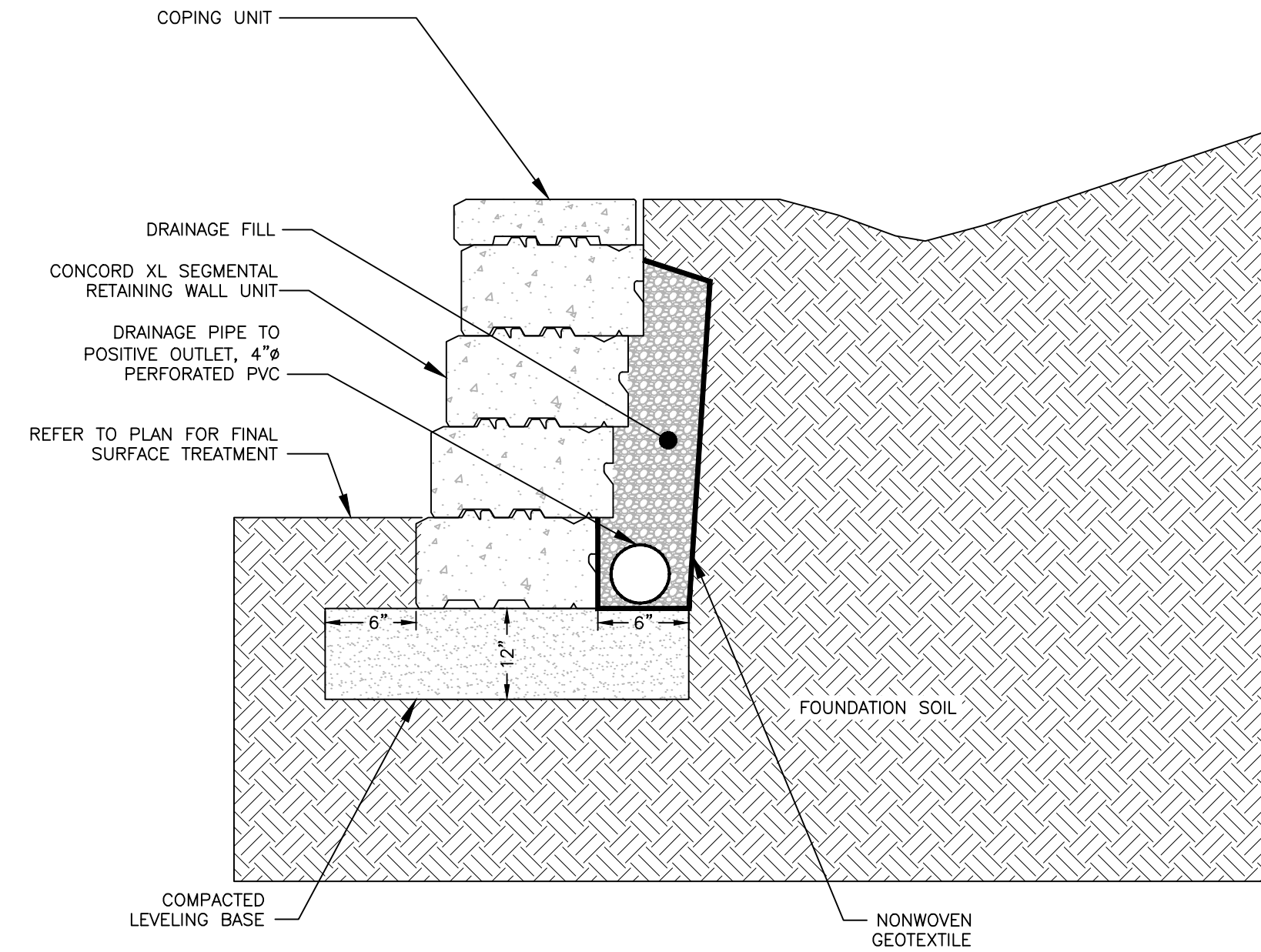
JOB #: 2020-013
 DATE: 3/31/2020
 SCALE: AS SHOWN
 TITLE: CD-1
 SHEET: 5 OF 6

GENERAL RETAINING WALL NOTES:

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

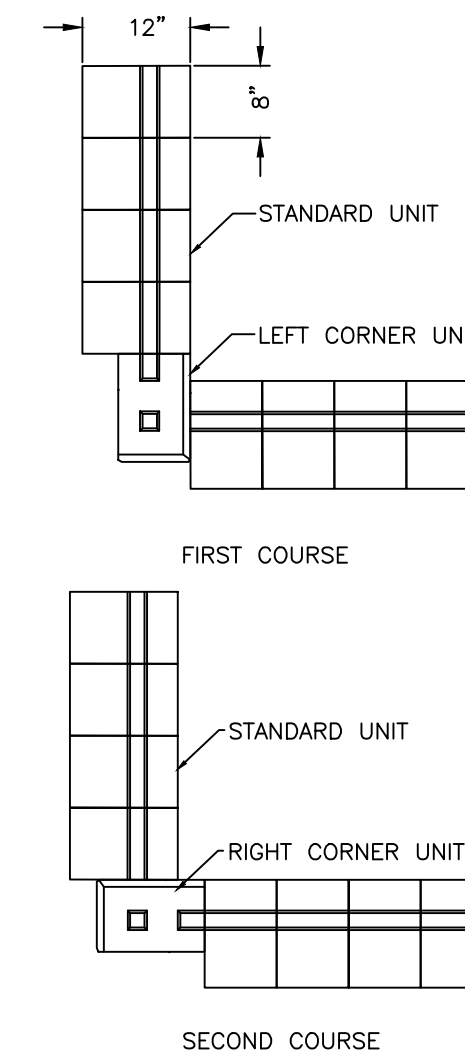
PROJECT SPECIFIC RETAINING WALL NOTES:

- THE CONTRACTOR SHALL BE COGNIZANT OF THE CLOSE PROXIMITY TO THE ADJACENT PROPERTY LINE, AND SHALL MAINTAIN LIMITS OF WORK WITHIN THE SUBJECT PROPERTY BOUNDS.
- IN ORDER TO MAKE THE TRANSITION FROM THE CONCORD XL UNITS TO THE STATE WALL UNITS, THE TONGUE ON THE CONCORD XL UNITS SHALL BE CHIPPED OFF. TWO 3/8 INCH BEADS OF CONCRETE ADHESIVE POSITIONED 2 INCHES IN FRONT AND BEHIND THE REMOVED TONGUE OF THE SEGMENTAL RETAINING WALL UNITS SHALL BE APPLIED.
- IN ADDITION TO THE COPING ADHESIVE INSTALLATION, ALL ESTATE WALL UNITS SHALL HAVE CONCRETE ADHESIVE APPLIED: TWO 3/8 INCH BEADS OF CONCRETE ADHESIVE POSITIONED 2 INCHES FROM THE FACE AND THE BACK OF EACH SEGMENTAL RETAINING WALL UNIT.
- DUE TO LIMITED AVAILABLE PROPERTY CONTROL, THE LEVELING BASE SHALL EXTEND 6 INCHES BEYOND THE BACK OF THE BASE CONCORD XL UNIT. THE CONTRACTOR SHALL PREPARE A NEAR VERTICAL EXCAVATION AT THE PROPERTY LINE IN ORDER TO CREATE THE REQUIRED SECTION.
- THE DRAINAGE PIPE SHALL TRANSITION TO 4" SCH40 SOLID PVC AT THE FITTING AT THE END OF THE ESTATE WALL.



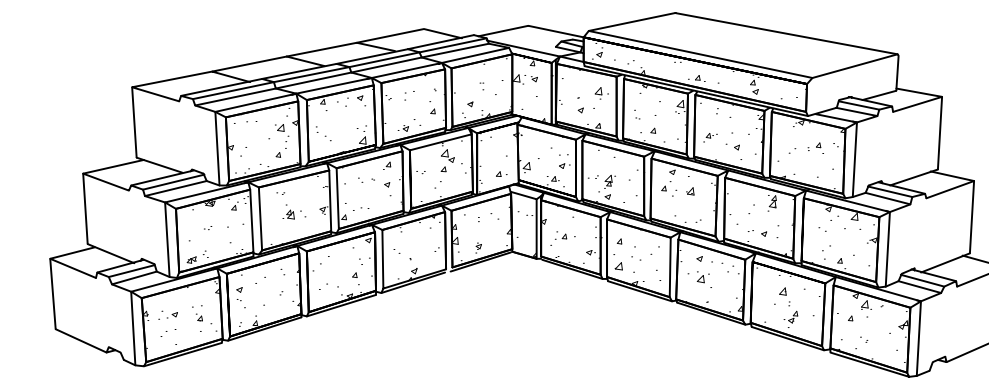
NOTES:
1. REFER TO RETAINING WALL NOTES, THIS SHEET.

SEGMENTAL RETAINING WALL DETAIL - GRAVITY WALL SECTION
NOT TO SCALE



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

SEGMENTAL RETAINING WALL DETAIL - 90° INSIDE CORNER
NOT TO SCALE



| DRAWN BY: CMB | | | | CHECKED BY: MAB | | | |
|---------------|------------|----------------------|-----|-----------------|------|-------------|----|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 04/28/2020 | NO CHANGE THIS SHEET | MAB | | | | |
| | | | | | | | |
| | | | | | | | |
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HUDSON
LAND DESIGN
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
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CONSTRUCTION DETAILS
3 WATER STREET SITE PLAN

3 WATER STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-38-170722

JOB #: 2020:013
DATE: 3/31/2020
SCALE: AS SHOWN
TITLE: CD-2
SHEET: 6 OF 6

To: John Gunn, Chair, and the City of Beacon Planning Board

Date: May 8, 2020

Re: **3 Water Street, Site Plan, Subdivision, and Special Permit for Accessory Apartment**

I have reviewed response letters from Aryeh Siegel and Hudson Land Design, a Preliminary Subdivision Plat, and a 6-sheet Special Permit Application set, all dated April 28, 2020.

Proposal

The applicant is proposing to construct a one-story accessory apartment addition on a 0.54-acre site in the R1-5 and CMS zoning districts. A subdivision is also needed to consolidate the site into one lot.

Comments and Recommendations

1. For the Subdivision Plat, the Schedule of Regulations tables should show the CMS required minimum lot depth as 75 feet.
2. There is an existing telephone pole in the center of the narrow sidewalk just north of the relocated driveway. The applicant is working with Central Hudson to resolve the issue and the sidewalk is shown as widened in this area, but it should have at least 4-foot clearance around the pole and guy wires to allow convenient pedestrian passage.

All my other planning issues have been addressed. 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
Michael Bodendorf, 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 Lane, P.E., L.S.
Arthur R. Tully, P.E.

May 8, 2020

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

RE: 3 Water Street
Subdivision & Special Use Permit
Tax Parcel 6054-38-170722
City of Beacon

Dear Mr. Gunn:

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

- Response correspondence from Aryeh Siegel, dated April 28, 2020.
- Response correspondence from Hudson Land Design, dated April 28, 2020.
- Plan titled "Preliminary Subdivision Plat – 3 Water Street", with the latest revision date of April 28, 2020, as prepared by Hudson Land Design.
- Set of plans entitled "Special Use Permit Application – 3 Water Street Accessory Apartment", with the latest revision date of April 28, 2020 and consisting of sheets 6 sheets as prepared by Aryeh Siegel and Hudson Land Design.

Based upon our review of the above documents and plans, we offer the following comments:

Subdivision Plat:

1. The plan shows a portion of a fence line on the north side of the parcel near the center. Who owns this fence line and is this an encroachment from the neighboring parcel? Although the applicant's consultants note that this fencing is owned by the owner and will be removed, the site plan set should call out the removal of this fence

General Comments:

1. Sheets 1 and 3 of the plan set show that there will be a number of plantings proposed with the road right-of-way. This may require approval from the City Council, and I defer this to the Planning Boards Attorney for further guidance.

Site Plan (Sheet 1 of 6):

1. The driveway Sight Distance line and lengths are shown for, and based upon, the previously proposed driveway location. The driveway sight distances, and location taken, should be revised to reflect the newly proposed driveway location.

2. The plan should be revised to show the location of utility poles and guy wires located along the front of the property and the pole that currently exists within the parcel.

Grading & Utility Plan (Sheet 3 of 6):

1. There are currently overhead lines that run over the existing structure to a utility pole located on site, which is located directly at the rear of the proposed Accessory Apartment. The plans should note how this pole will be handled, as it appears that it conflicts with the construction of the new Accessory Apartment. *The applicant's consultants have noted that ownership of this pole is being further investigated, and that the pole is to be relocated.* Additional information should be provided as to ownership of the utility pole, and as to whether any easements currently exist for the pole or will be provided for the proposed relocated pole.

This completes our review at this time. Further comments may be forthcoming 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

RESOLUTION

**PLANNING BOARD
BEACON, NEW YORK**

**PRELIMINARY & FINAL SUBDIVISION PLAT APPROVALS AND
SITE PLAN APPROVAL FOR
3 WATER STREET**

Parcel ID# 6054-38-170722

WHEREAS, the Beacon Planning Board received applications for a Special Use Permit, Preliminary and Subdivision Plan Approvals and Site Plan Approval from POK Beacon LLC (the “Applicant”) to construct a one-story 590 square foot accessory apartment and addition to an existing single-family house (the “Proposed Action”) on property located at 3 Water Street in the R1-5 and Central Main Street Zoning Districts. Said premises being known and designated on the tax map of the City of Beacon as **Parcel ID# 6054-38-170722** (the “Property”); and

WHEREAS, the applicant seeks to consolidate parcels to create one 0.54 acre parcel, which is partially located in the CMS and R1-5 Zoning District as shown on the Subdivision Plat referenced below; and

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

WHEREAS, the Planning Board is the approval authority for the Subdivision (lot merger) and Site Plan pursuant to City of Beacon Code §§ 195-2 and 223-25; and

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

WHEREAS, the Subdivision is shown on the drawing, entitled “Preliminary Subdivision Plat 3 Water Street,” prepared Hudson Land Design Professional Engineering, P.C., last revised April 28, 2020; and

WHEREAS, the Site Plan is shown the following drawings, generally entitled “Special Use Permit Application - 3 Water Street Accessory Apartment,” prepared by Aryeh Siegal Architect and Hudson Land Design Professional Engineering P.C., last revised April 28, 2020:

| <u>Sheet</u> | <u>Title</u> |
|--------------|--|
| 1 of 6 | <i>Site Plan, Floor Plans & Elevations</i> |
| 2 of 6 | <i>Site Plan, Floor Plans & Elevations</i> |

- 3 of 6 *Grading and Drainage Plan*
- 4 of 6 *Erosion & Sediment Control Plan*
- 5 of 6 *Construction Details*
- 6 of 6 *Construction Details; and*

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

WHEREAS, on March 16, 2020, the City Council approved the Special Use Permit application for a 590 square foot accessory apartment after finding that the Proposed Action complies with the City of Beacon Zoning Code §§ 223-18.B and 223-24.1; and

WHEREAS, on May 12, 2020 the Planning Board opened a duly noticed public hearing on the application for Subdivision and Site Plan approvals concerning the Proposed Action, at which time all those interested were given an opportunity to be heard and the public hearing was closed on May 12, 2020; and

WHEREAS, due to public health and safety concerns related to the current COVID-19 pandemic, the public hearing was duly noticed by publication, mailing and signage in accordance with notice requirements of the Zoning Code of the City of Beacon, and held by videoconference in accordance with the Governor’s Executive Orders which suspend the “in-person” requirements of the NYS Open Meetings Law and provide alternative means by which to conduct public meetings and hearings remotely; and

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

NOW, THEREFORE, BE IT RESOLVED, that the Planning Board hereby grants Preliminary Subdivision Plat Approval (lot merger) for the Proposed Action, as shown on the plan entitled “Preliminary Subdivision Plat 3 Water Street,” prepared Hudson Land Design Professional Engineering, P.C., last revised April 28, 2020.

BE IT FURTHER RESOLVED, that the Planning Board hereby finds the Final Subdivision Plat will not be substantively changed from the Preliminary Subdivision Plat and hereby determines that a public hearing on the Final Plat is not required.

BE IT FURTHER RESOLVED, that the Planning Board hereby grants Final Subdivision Plat Approval (lot merger), as shown on the plan entitled “Preliminary Subdivision Plat 3 Water Street,” prepared Hudson Land Design Professional Engineering, P.C., last revised April 28, 2020; subject to the conditions and modifications set forth herein.

BE IT FURTHER RESOLVED, that the Planning Board hereby grants Site Plan Approval as set forth and detailed on the plans prepared by prepared by Aryeh Siegal Architect and Hudson Land Design Professional Engineering P.C., last revised April 28,

2020, subject to the following conditions set forth below and any other requirements which must be met by law:

A. The following conditions shall be fulfilled prior to the signing of the Final Subdivision Plat 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, including but not necessarily limited to approval from the Dutchess County Department of Health, 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 May 8, 2020, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Engineer.
4. The comments contained in the City Planner's letter to the Planning Board dated May 8, 2020, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Planner.
5. All existing and proposed easements and offers of dedication, as applicable, shall be shown on the Final Subdivision Plat to the satisfaction of the City Engineer and City Attorney. Proposed easement agreements, declarations of restrictive covenants, offers of dedication, or other appropriate documents corresponding with the easements and notes shown on the Final Subdivision Plat shall be prepared, as applicable, and submitted to the City Attorney for review as to form and shall be recorded in the Dutchess County Clerk's Office simultaneously with the Subdivision Plat, with a copy of the recorded documents submitted to the City Clerk for filing.

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. 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, including but not necessarily limited to approval from the Dutchess County Department of Health, 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 May 8, 2020, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Engineer.
4. The comments contained in the City Planner's letter to the Planning Board dated May 8, 2020, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Planner.
5. The Site Plan proposes plantings within the City right-of-way. The Applicant shall obtain any and all approvals from the City Council and/or City Building Department and/or City Highway Department for the placement of such plantings in the right-of-way. The Site Plan shall be revised to add the following note:

In the event the proposed plantings within the right-of-way are not installed, or are removed in the future, the fence along the frontage shall either be removed, or the fence shall be relocated to allow sufficient area on the lot to install in-kind replacement plantings between the fence and the right-of-way for the purpose of screening the fence from public view.

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.

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

1. All conditions, set forth in any previous Planning Board Resolution related to the Property, and not superseded herein, shall remain in full force and effect. Any previous resolution or approval for an artist live/work unit at the Property is superseded by the approvals issued herein and by the City Council resolution for an accessory apartment and all necessary revisions shall be made to the Certificate of Occupancy to reflect the classification of the existing structure on the Property as a single-family dwelling.
2. 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.
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 Applicant within thirty (30) days of each notification by the City that such fees are due. If such fees are not paid within said thirty (30) day period, and an extension therefore has not been granted by the City, this resolution shall be rendered null and void.

4. As used herein, the term “Applicant” shall include its heirs, successors and assigns, and where applicable its contractors and employees.
5. 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.
6. The approvals granted by this resolution do not supersede the authority of any other entity.
7. Conditional approval of the Final Subdivision Plat shall expire one hundred eighty (180) days from the date of the adoption of this resolution unless all items in Condition A above have been certified as completed and the Final Plat has been submitted for endorsement by the Planning Board Chairman, or unless a written request for an extension of Final Subdivision Plat Approval is granted. The Planning Board may grant ninety (90) day extensions to said time period.
8. Once the Final Subdivision Plat has been endorsed by the Planning Board Chairman, said plat must be filed in the Dutchess County Clerk’s Office within sixty-two (62) days. After said filing, two (2) copies of the Final Plat certified by Dutchess County shall be submitted to the Planning Board Secretary. One (1) certified copy of the Final Plat shall be retained by the Planning Board and the other certified copy shall be transmitted to the City Clerk along with a signed copy of this resolution and proof of recording of the easement documents described above.
9. Any proposed revision to the approved Subdivision or Site Plan Drawings, except revisions determined by the Building Inspector and City Engineer to be field changes, shall be submitted to the Planning Board. The Planning Board, in its discretion, shall determine the appropriate procedures for consideration of the proposed revision, and whether such revision is material enough to require further environmental analysis and/or further project review, as the Board may deem appropriate.

Resolution Adopted: May 12, 2020
 Beacon, New York

 John Gunn Chairman
 City of Beacon Planning Board

 Date

Motion by _____, seconded by _____:

Kevin Byrne

Voting:

Leonard Warner

Voting:

Rick Muscat
Karen Quiana
Jill Reynolds

Voting:
Voting:
Voting:

J. Randall Williams
John Gunn, Chairman

Voting:
Voting:

Resolution: Approved _____
Denied _____

City of Beacon Planning Board
5/12/2020

Title:

Conklin Street - Beacon Views

Subject:

Public hearing for SEQRA environmental review on applications for Subdivision and Site Plan Approval, "Beacon Views Townhouses" 39 units, Conklin Street, submitted by Beacon Views, LLC

Background:

ATTACHMENTS:

| Description | Type |
|---|--------------------|
| Beacon Views Cover Letter | Cover Memo/Letter |
| Beacon Views Preliminary Water & Wastewater | Backup Material |
| Beacon Views SHPO No Impact Letter | Backup Material |
| Beacon Views Preliminary Plat | Plans |
| Beacon Views Details 2 | Plans |
| Beacon Views Sheet 1 Cover Sheet | Plans |
| Beacon Views Sheet 2 Existing Conditions | Plans |
| Beacon Views Sheet 3 Layout & Landscape | Plans |
| Beacon Views Sheet 4 Grading & Utilities | Plans |
| Beacon Views Sheet 5 Erosion & Sediment Control | Plans |
| Beacon Views Sheet 6 Lighting Plan | Plans |
| Beacon Views Sheet 7 Details | Plans |
| Beacon Views Sheet 9 Details 3 | Plans |
| Beacon Views Sheet 10 Details 4 | Plans |
| Beacon Views Sheet 11 Details 5 | Plans |
| Beacon Views Townhouses_Sheet 1_Floor Plans_Front Garage-Sheet 1_200428 | Plans |
| Beacon Views Townhouses_Sheet 2_Floor Plans_Rear Garage-Sheet 1_200428 | Plans |
| Beacon Views Townhouses_Sheet 3_Renderings-Sheet 1_200428 | Plans |
| Beacon Views SWPPP | Backup Material |
| Beacon Views Wetland Evaluation Report | Backup Material |
| Beacon Views School Impact Study | Backup Material |
| Beacon Views Traffic Study Response Letter | Backup Material |
| Beacon Views Traffic Impact Study | Backup Material |
| Planner Review Letter | Consultant Comment |
| Traffic Engineer Review Letter | Consultant Comment |
| Engineer Review Letter | Consultant Comment |



April 28, 2020

City of Beacon Planning Board
1 Municipal Plaza
Beacon, NY 12508

RE: Beacon Views Site Plan and Conservation Subdivision
Conklin Street
Beacon, New York
Tax Parcel ID: 6055-03-331123

Dear Chairman Gunn and Members of the Board:

Enclosed please find the following documents in support of the subject application:

- Preliminary Plat, dated April 28, 2020.
- Revised Site Plan Set, dated April 28, 2020.
- Revised Water and Wastewater Report, dated April 27, 2020.
- Revised SWPPP, dated April 28, 2020.
- Revised Architectural Plans and Renderings prepared by Aryeh Siegel Architect, dated April 28, 2020.
- Revised Traffic Study, dated March 26, 2020, under separate cover, from Maser Consulting, PA.
- Wetland Evaluation & Impact Report, dated March 14, 2020 from Ecological Solutions, LLC.
- Revised School Impact Analysis, dated April 22, 2020 from AKRF Environmental, Planning, and Engineering Consultants, Inc.
- Letter from NYS Historical Preservation Office, dated October 21, 2019.

A Preliminary Plat has been provided for review as we open the public hearing. The applicant proposes a 42-lot conservation subdivision, which would include 40 townhouse lots, two common space lots and a City of Beacon right of way. The site plans have been revised in response to Planning Board staff comments.

In response to the comments provided in a letter from John Clarke Planning and Design, dated March 6, 2020, we offer the following responses:

1. As noted, the application proposes a conservation subdivision per Section 223-12J of the City Code.
2. The plan has been revised to shorten the length of the driveways to 20' to bring the right of way corridor as far to the north as possible.
3. A Wetland Evaluation & Impact Report has been provided.
4. The sidewalk has been set back from the curb 5' providing the planting strip and tree plantings as requested.

3 Garrett Place, Carmel, New York 10512 (845) 225-9690 Fax (845) 225-9717
www.insite-eng.com

April 28, 2020

5. Scaled Elevations are included with the architectural plans. The proposed driveways have been revised to accommodate the double wide garage doors on the end units. The renderings were reviewed by the Architectural Review Board Subcommittee at a meeting with the Applicant and his representatives on February 14, 2020. The ARB Subcommittee approved the elevations with comments that are addressed on the elevations submitted herein.
6. A revised School Impact Analysis has been provided, and the letter provided from NYS Historical Preservation Office, states that, "Based on the information provided, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking."

In response to the comments provided in a letter from Lanc & Tully Engineering and Surveying, P.C., dated September 4, 2019, we offer the following responses:

1. The plans now label adjoiners by owner's name and project name for ease of reference.
2. Pedestrian linkage has been shown on the latest plans.
3. Access is now shown in the manner discussed with the Board and their consultants. The updated Maser Traffic Study addresses the noted traffic concerns.
4. The enclosed Wetland Evaluation & Impact Report addresses the wetland jurisdiction and related wetland permitting requirements.
5. Proposed improvements have been modified to not impact the easement area. The proposal is for the water main to be owned and maintained by the city. We plan to discuss the water connection point with the City Water Department.
6. The sewer main now proposes a gravity connection to Conklin Street. It is understood that this portion of the city system has available capacity. This will be verified with the City Operators and their Consultants.
7. The stormwater practices and supporting report have been updated based on field testing. It is noted that the infiltration area testing needs to be witnessed by the City Engineering Consultant.
8. The Existing Condition Plan now shows the retaining wall near Conklin Street.
9. The project does propose extending the sidewalk to Delavan Avenue. Details of these offsite improvements will be included in a future submission.
10. The emergency access is now proposed through the easement to Hastings Avenue. The proposed gate has been located so the turnaround meets the fire code requirements.
11. The Preliminary Subdivision Plat is enclosed. Easements will be addressed in project legal documents which will be included in a future submission.
12. The requested information for the water, sewer, and drainage improvements has been included in the plans.
13. Construction phasing has been addressed on the Erosion & Sediment Control Plan.
14. The Final Plat will be signed and sealed by the project surveyor.


We request appearance before the Board at their May 12, 2020 meeting to further discuss the revised materials we have provided.

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, PE
Senior Principal Engineer

JJC/adt

Enclosures

cc: Nathan Kahn
Greg Kamedulski
Aryeh Siegel (Email Only)
Phil Grealy, P.E. (Email Only)

Insite File No. 19131.100

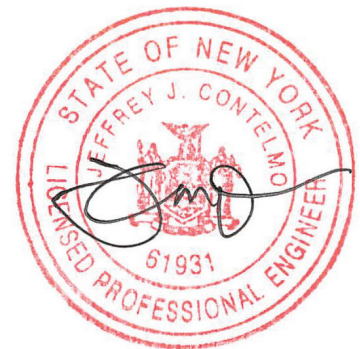


PRELIMINARY WATER & WASTEWATER ENGINEERING REPORT

For

**Beacon Views
City of Beacon, New York**

April 27, 2020



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

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| 1.0 INTRODUCTION | 1 |
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| 3.0 PROPOSED WATER CONNECTION TO CITY OF BEACON SYSTEM..... | 2 |
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| 3.2 Service Connection | 2 |
| 4.0 PROPOSED WASTEWATER CONNECTIONS TO CITY OF BEACON SYSTEM | 2 |

1.0 INTRODUCTION

The Beacon Views project is located on a parcel adjacent to Conklin Street and Hastings Drive. The subject property is 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 40 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 12” diameter water main that is located along the southern and eastern property lines of subject property. The existing 12” diameter main is in an existing easement and is a transmission line from the City of Beacon to the Village of Fishkill.

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 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) |
|----------------------------|------------------------|---------------------------------|
| 40 –Three Bedroom Townhome | 330 gpd/dwelling | 13,200 |
| Total | | 13,200 |

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) |
|--|-----------------|-----------------------------|------------------------------|-----------------|
| 40 –Three Bedroom Townhome | 3.0 people/unit | 120 | 45 | 5,400 |
| Total Anticipated Water Use (gpd) | | | | 5,400 |

As demonstrated above, through the use of water saving fixtures as required by current building code, a design maximum flow of 13,200 gpd is proposed for the project, while the design average daily flows are anticipated to be substantially less 5,400 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

$$13,200 \text{ gpd} \div (24 \text{ hr/day}) \div (60 \text{ min/hr}) = 9.2 \text{ gallons per minute (gpm)}$$

$$\text{Peak Hourly Flow} = 9.2 \text{ gpm} \times 4 = 36.8 \text{ gpm}$$

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 in the area of the subject project, there is an existing 12" diameter water main located in the easement that runs along the southern and eastern portion of the subject parcel. The 12" diameter main is a transition line that ultimately services the Village of Fishkill. 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. Discussions with the Village of Fishkill Water Department and City of Beacon Water and Sewer Department will be required regarding the potential connection to the existing 12" diameter watermain. 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 development will be provided via a gravity sewer main through the development with a connection to the gravity sewer system located east of the project site, on Conklin Street. The proposed onsite gravity sewer main will be 8" PVC SDR 35. The sewer 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 to the proposed 8" main. The service connections will be installed with a minimum slope of 1/4" per foot slope meeting the requirements of DEC14. 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.



**Parks, Recreation,
and Historic Preservation**

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

October 21, 2019

Ms. Etha Grogan
Planning Board Secretary
City of Beacon Planning Board
City of Beacon
One Municipal Plaza
Beacon, NY 12508

Re: USACE
Beacon Views Townhouses
City of Beacon, Dutchess County, NY
19PR06731

Dear Ms. Grogan:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources.

SHPO has reviewed *Phase 1A Literature Search and Sensitivity Assessment & Phase 1B Archaeological Field Reconnaissance Survey, Beacon Views Project, 100 Conklin Street, Beacon, Dutchess County, New York* (Hudson Valley Cultural Resource Consultants, October 2019). Based on the information provided, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If you have any questions, please don't hesitate to contact me.

Sincerely,

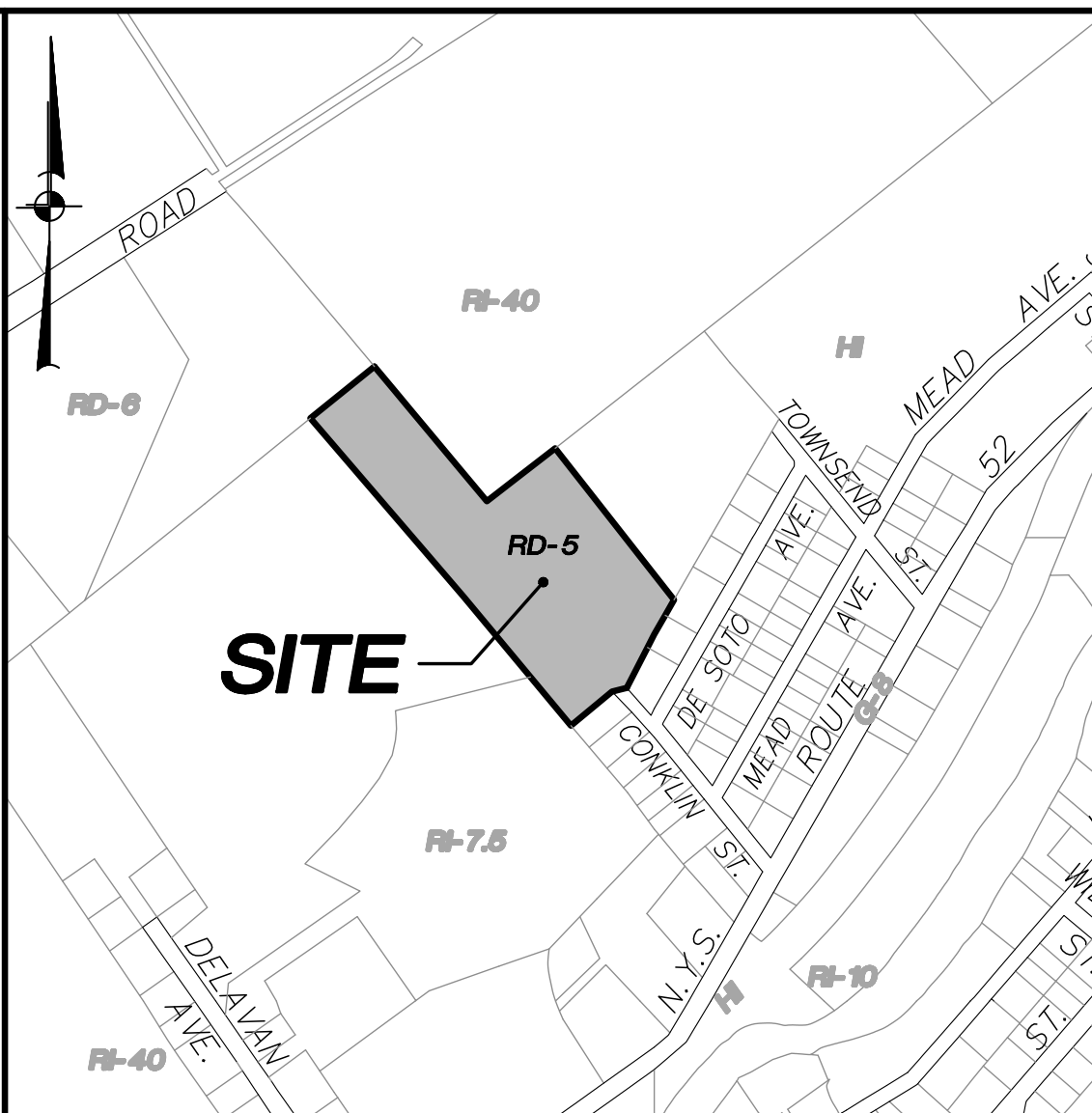
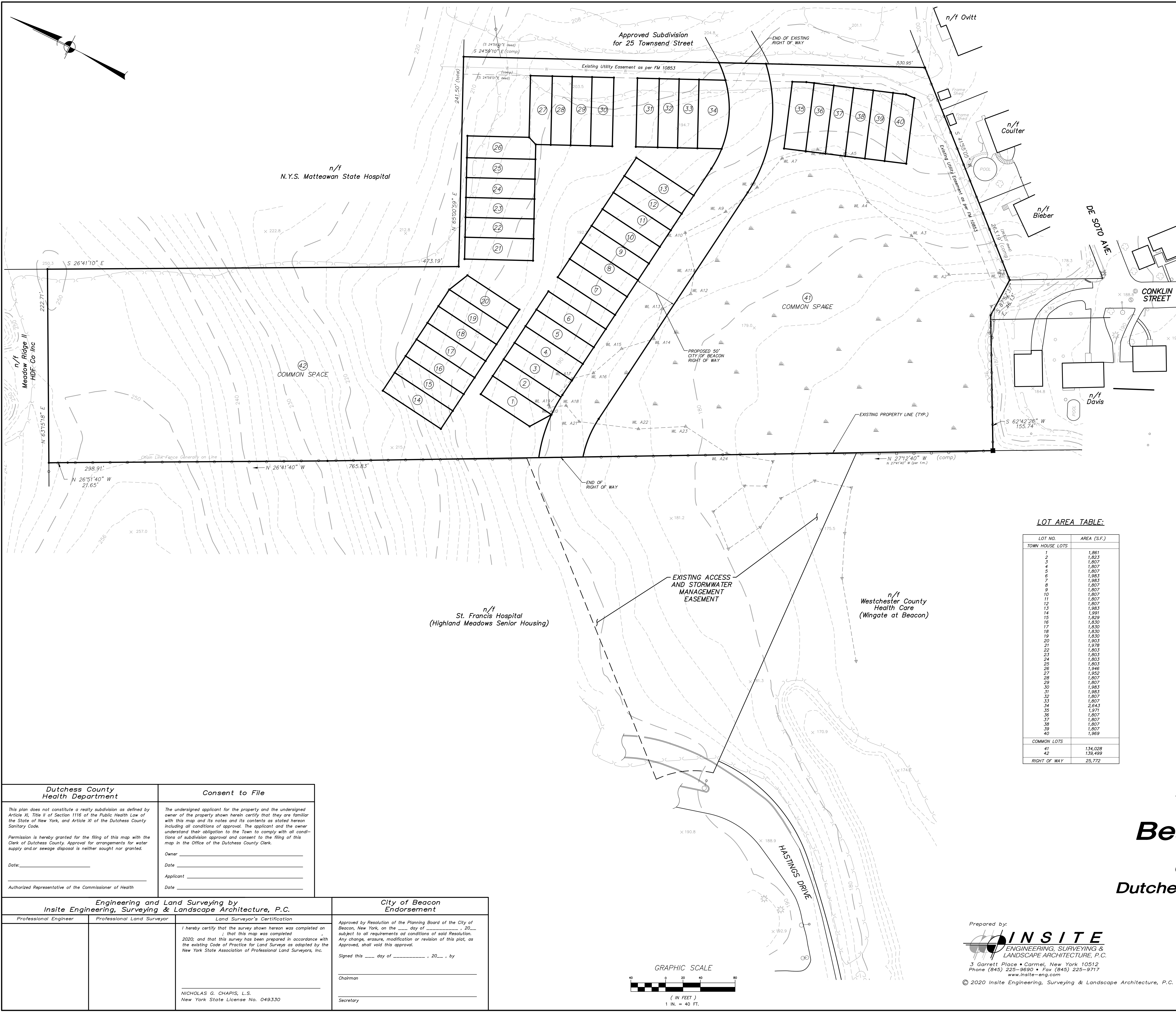
Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit
Phone: 518-268-2175
e-mail: philip.perazio@parks.ny.gov

via e-mail only

cc: Taylor Palmer, Cuddy & Feder
Beth Selig, HVCRC

Division for Historic Preservation

P.O. Box 189, Waterford, New York 12188-0189 • (518) 237-8643 • parks.ny.gov



LOCATION MAP SCALE: 1" = 500'±

Applicant:
Beacon Views, LLC
530 River Avenue, Suite 145
Waketon, 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:**
- 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.
 - Topography shown on these plans are based upon aerial photography dated April 14, 2003 and is photogrammetrically 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'.
 - 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.
 - 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.

LEGEND

- EXISTING & PROPOSED PROPERTY LINE
- - - EXISTING EASEMENT
- - - EXISTING CHAIN LINK FENCE
- - - EXISTING EDGE OF PAVEMENT
- EXISTING WETLAND
- - - EXISTING WETLAND FLAG
- - - EXISTING TREE LINE
- - - EXISTING 10' CONTOUR
- - - EXISTING 2' CONTOUR
- × EXISTING SPOT GRADE
- EXISTING 12" WATER MAIN

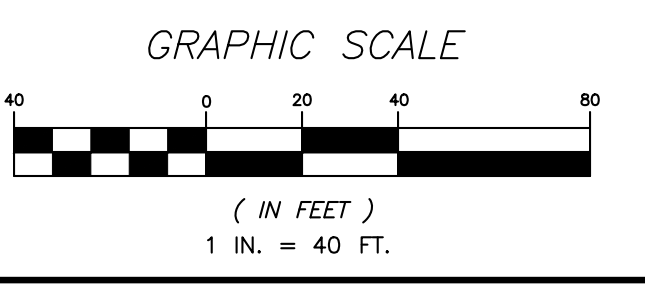
LOT AREA TABLE:

| LOT NO. | AREA (S.F.) |
|------------------------|---------------|
| TOWN HOUSE LOTS | |
| 1 | 1,861 |
| 2 | 1,823 |
| 3 | 1,807 |
| 4 | 1,807 |
| 5 | 1,807 |
| 6 | 1,983 |
| 7 | 1,983 |
| 8 | 1,807 |
| 9 | 1,807 |
| 10 | 1,807 |
| 11 | 1,807 |
| 12 | 1,807 |
| 13 | 1,983 |
| 14 | 1,991 |
| 15 | 1,830 |
| 16 | 1,830 |
| 17 | 1,830 |
| 18 | 1,830 |
| 19 | 1,830 |
| 20 | 1,903 |
| 21 | 1,978 |
| 22 | 1,803 |
| 23 | 1,803 |
| 24 | 1,803 |
| 25 | 1,803 |
| 26 | 1,946 |
| 27 | 1,952 |
| 28 | 1,807 |
| 29 | 1,807 |
| 30 | 1,983 |
| 31 | 1,983 |
| 32 | 1,807 |
| 33 | 1,807 |
| 34 | 2,643 |
| 35 | 1,971 |
| 36 | 1,807 |
| 37 | 1,807 |
| 38 | 1,807 |
| 39 | 1,807 |
| 40 | 1,869 |
| COMMON LOTS | |
| 41 | 134,028 |
| 42 | 139,499 |
| RIGHT OF WAY | 25,772 |

| | |
|--|--|
| Dutchess County Health Department | Consent to File |
| This plan does not constitute a realty subdivision as defined by Article XI, Title II of Section 1116 of the Public Health Law of the State of New York, and Article XI of the Dutchess County Sanitary Code. Permission is hereby granted for the filing of this map with the Clerk of Dutchess County. Approval for arrangements for water supply and/or sewage disposal is neither sought nor granted. Date: _____ Authorized Representative of the Commissioner of Health | The undersigned applicant for the property and the undersigned owner of the property shown herein certify that they are familiar with this map and its notes and its contents as stated herein including all conditions of approval. The applicant and the owner understand their obligation to the Town to comply with all conditions of subdivision approval and consent to the filing of this map in the Office of the Dutchess County Clerk. Owner: _____ Date: _____ Applicant: _____ Date: _____ |

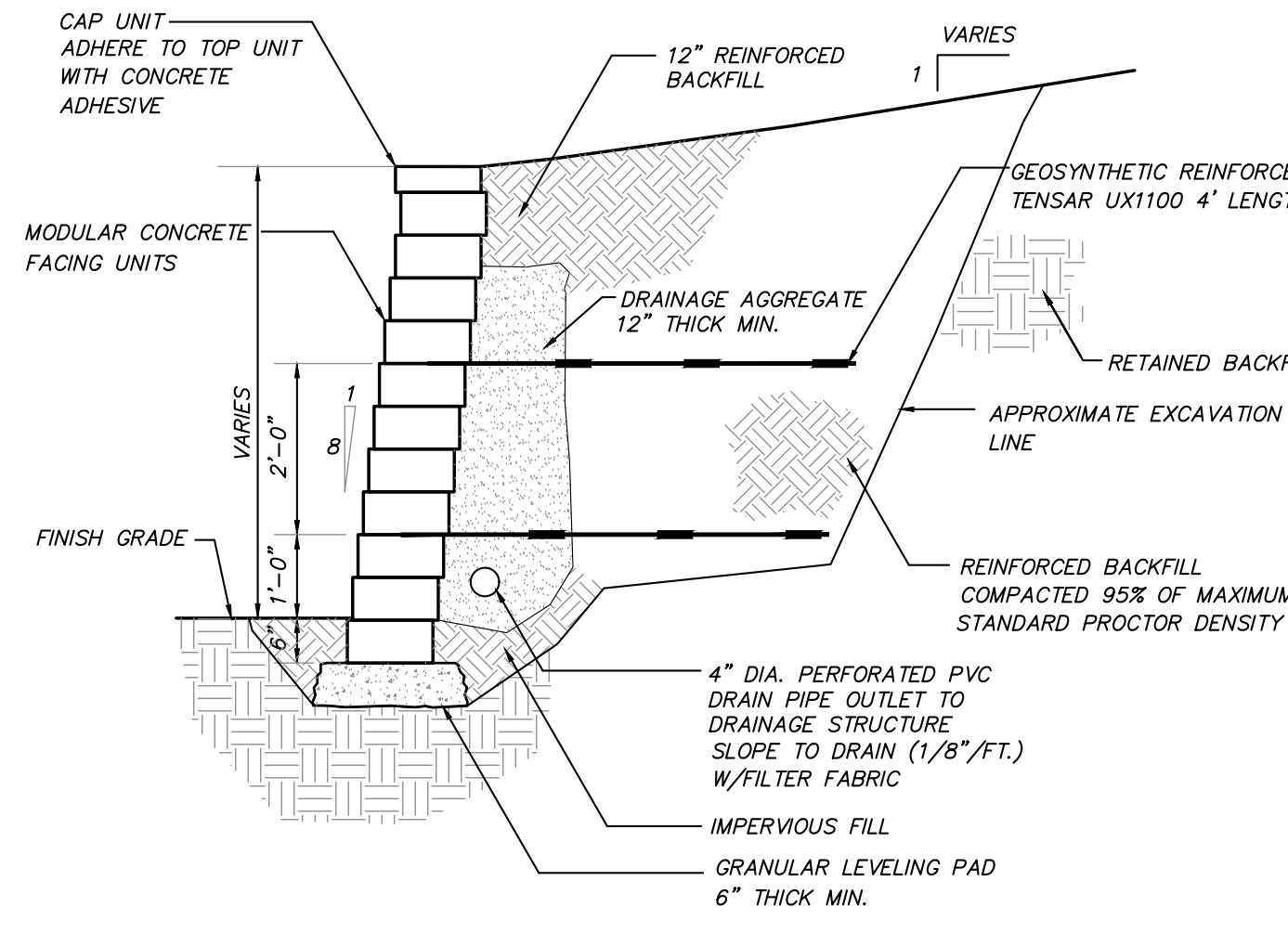
| | | |
|---|----------------------------|---|
| Engineering and Land Surveying by Insite Engineering, Surveying & Landscape Architecture, P.C. | | City of Beacon Endorsement |
| Professional Engineer | Professional Land Surveyor | Land Surveyor's Certification |
| | | I hereby certify that the survey shown hereon was completed on _____, 2020; and that this survey has been prepared in accordance with the existing Code of Practice for Land Surveys as adopted by the New York State Association of Professional Land Surveyors, Inc. Signed this _____ day of _____, 20____, by _____ Chairman _____ Secretary _____ |
| | | NICHOLAS G. CHAPIS, L.S. New York State License No. 049330 |

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, errasure, modification or revision of this plan, as Approved, shall void this approval.



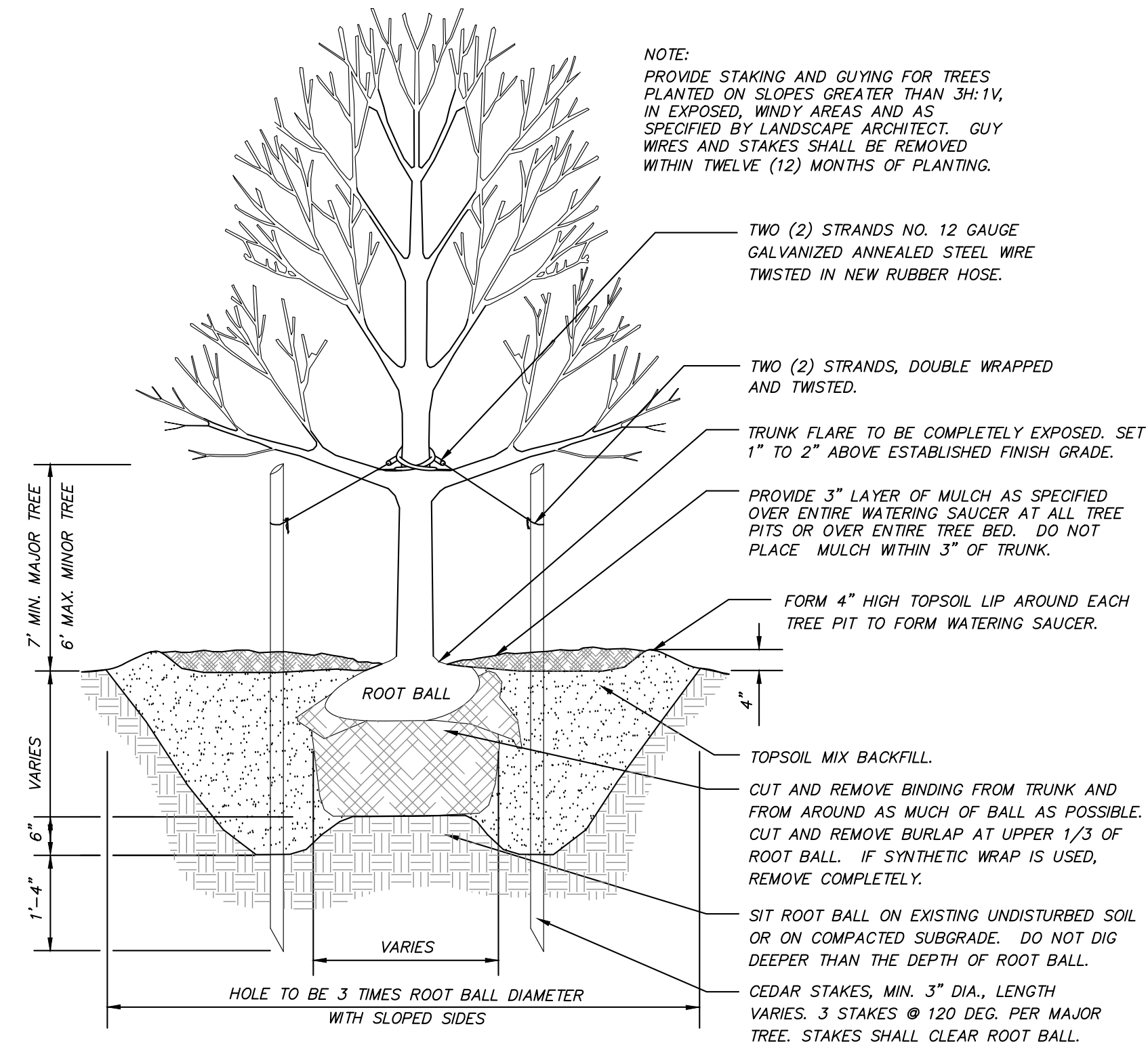
Prepared by:
INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place • Carmel, New York 10512
Phone (845) 225-9690 • Fax (845) 225-9717
www.insite-eng.com
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Preliminary Plat
Prepared for the
Beacon Views
Situate in the
City of Beacon
Dutchess County, New York
Date: April 24, 2020



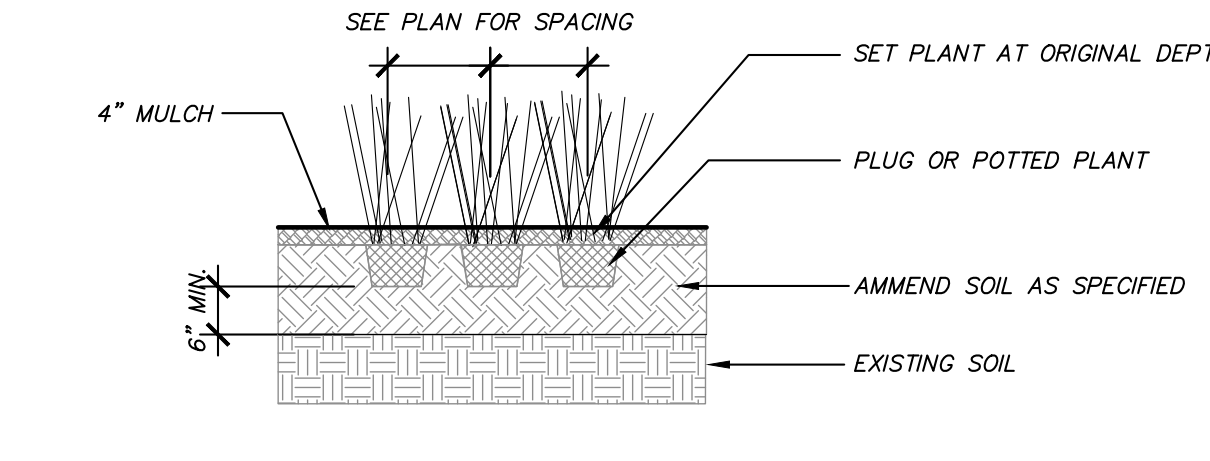
MODULAR BLOCK RETAINING WALL DETAIL
(N.T.S.)

- 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 BALTER).
 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.



TREE 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 (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.
 - 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.
 - CEGAR STAKES, MIN. 3" DIA., LENGTH VARIES. 3 STAKES @ 120 DEG. PER MAJOR TREE. STAKES SHALL CLEAR ROOT BALL.



PERENNIAL / ORNAMENTAL GRASS PLANTING DETAIL
(N.T.S.)

- SEE PLAN FOR SPACING
- SET PLANT AT ORIGINAL DEPTH
- 4" MULCH
- PLUG OR POTTED PLANT
- AMMEND SOIL AS SPECIFIED
- EXISTING SOIL

GENERAL SITE SEEDING NOTES:

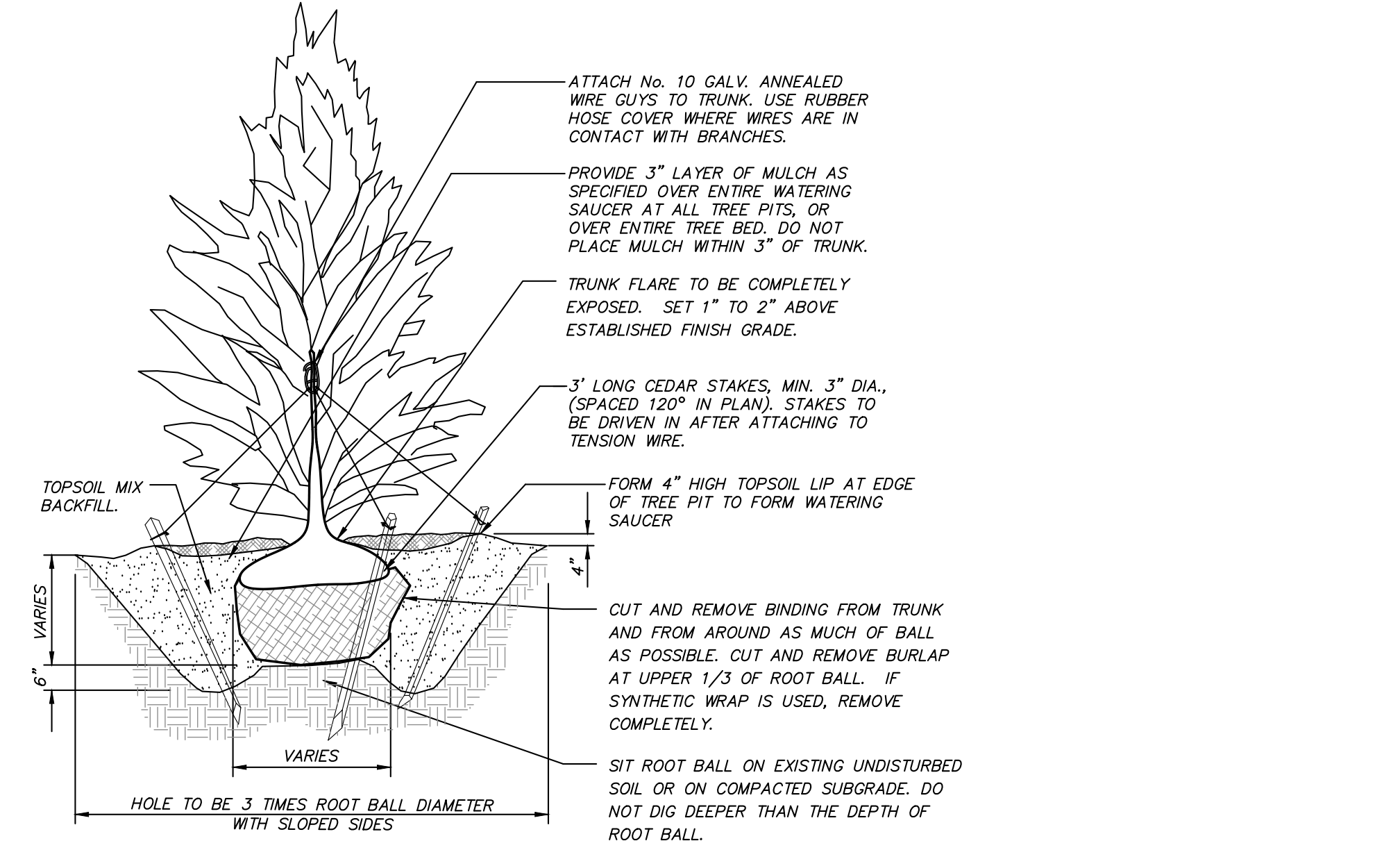
1. All proposed seeded areas to receive 4" min. depth of topsoil. Soil amendments and fertilizer application rates shall be determined based on specific testing of topsoil material.
2. Upon final grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation 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 phosphorus) 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 (ERINX-156) from Ernst Conservation Seeds of Meadville, PA.
 - C. Seed Mix for Meadow areas as shown on the drawings, including tops of berms and back slopes 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 #1 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.

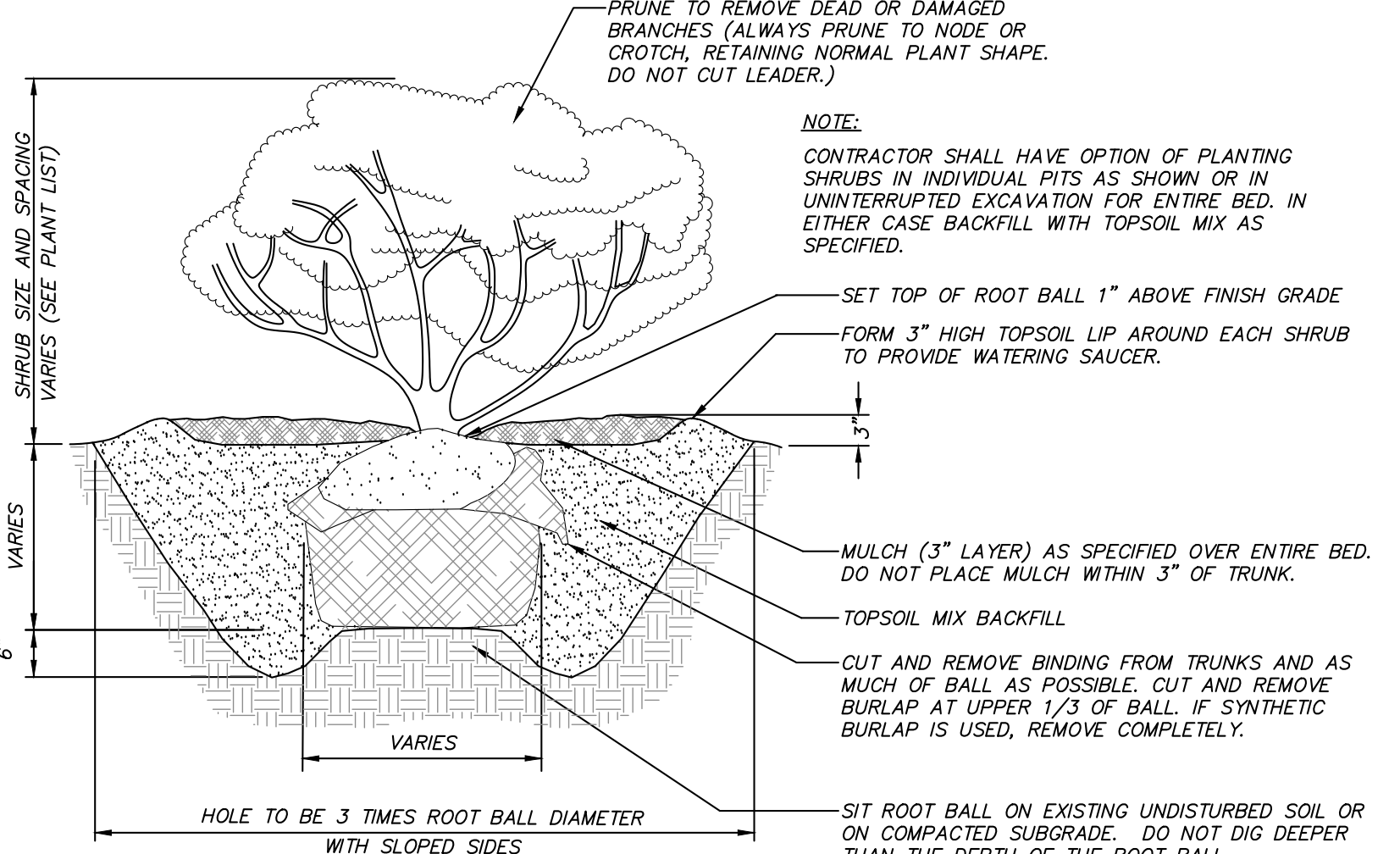
GENERAL SITE SEEDING NOTES:

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 phosphorus) fertilizer or equivalent.
 - mulch: salt hay or small grain straw applied at a rate of 90 lbs./1000s.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. Seed Mix #1 for areas as shown on the drawings, including tops of berms and back slopes 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.
4. Seed Mix #2 for areas as shown on the drawings in stormwater basins with no standing water at a rate of 18 lbs per acre: Erosion Control/Restoration Mix for Detention Basins and Moist Sites from New England Wetland Plants, Inc. of Amherst, MA.
5. Seed Mix #3 for all other disturbed areas not specified as seed mix #1 or #2. Primarily 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%
6. Seed mixes to be planted between March 21 and May 20, or between August 15 and October 15 or as directed by project representative.
7. 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 Specification For Erosion and Sediment Control, latest edition.
8. Grass seed mix may be applied by either mechanical or hydroseeding methods. Seeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1". Hydroseeding shall be performed using materials and methods as approved by the site engineer.



EVERGREEN TREE 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.
- ATTACH No. 10 GALV. ANNEALED WIRE GUY TO TRUNK. USE RUBBER HOSE COVER WHERE WIRES ARE IN CONTACT WITH BRANCHES.
 - 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.
 - TRUNK FLARE TO BE COMPLETELY EXPOSED. SET 1" TO 2" ABOVE ESTABLISHED FINISH GRADE.
 - 3" LONG CEDAR STAKES, MIN. 3" DIA., (SPACED 120° IN PLAN), STAKES TO BE DRIVEN IN AFTER ATTACHING TO TENSION WIRE.
 - FORM 4" HIGH TOPSOIL LIP AT EDGE OF TREE PIT TO FORM WATERING SAUCER.
 - 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.

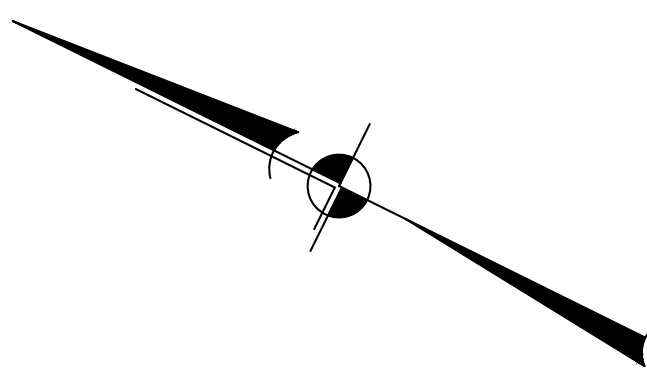


SHRUB PLANTING DETAIL
(N.T.S.)

- 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.
- PRUNE TO REMOVE DEAD OR DAMAGED BRANCHES (ALWAYS PRUNE TO NODE OR CROTCH, RETAINING NORMAL PLANT SHAPE. DO NOT CUT LEADER.)
 - SET TOP OF ROOT BALL 1" ABOVE FINISH GRADE.
 - FORM 3" HIGH TOPSOIL LIP AROUND EACH SHRUB TO PROVIDE WATERING SAUCER.
 - MULCH (3" LAYER) AS SPECIFIED OVER ENTIRE BED. DO NOT PLACE MULCH WITHIN 3" OF TRUNK.
 - TOPSOIL MIX BACKFILL.
 - CUT AND REMOVE BINDING FROM TRUNKS AND AS MUCH OF BALL AS POSSIBLE. CUT AND REMOVE BURLAP AT UPPER 1/3 OF BALL. IF SYNTHETIC BURLAP IS USED, REMOVE COMPLETELY.
 - SIT ROOT BALL ON EXISTING UNDISTURBED SOIL OR ON COMPACTED SUBGRADE. DO NOT DIG DEEPER THAN THE DEPTH OF THE ROOT BALL.

| | | | |
|----------------|-----------|---|--------|
| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | JFR |
| NO. | DATE | REVISION | BY |
| | | | |
| PROJECT: | | CITY OF BEACON, DUTCHESS COUNTY, NEW YORK | |
| DRAWING: | | DETAILS | |
| PROJECT NUMBER | 19131.100 | PROJECT MANAGER | J.J.C. |
| DATE | 8-27-19 | DRAWN | J.F.R. |
| SCALE | AS NOTED | CHECKED BY | A.D.T. |
| DRAWING NO. | SHEET | | |
| D-2 | 8 | | 11 |

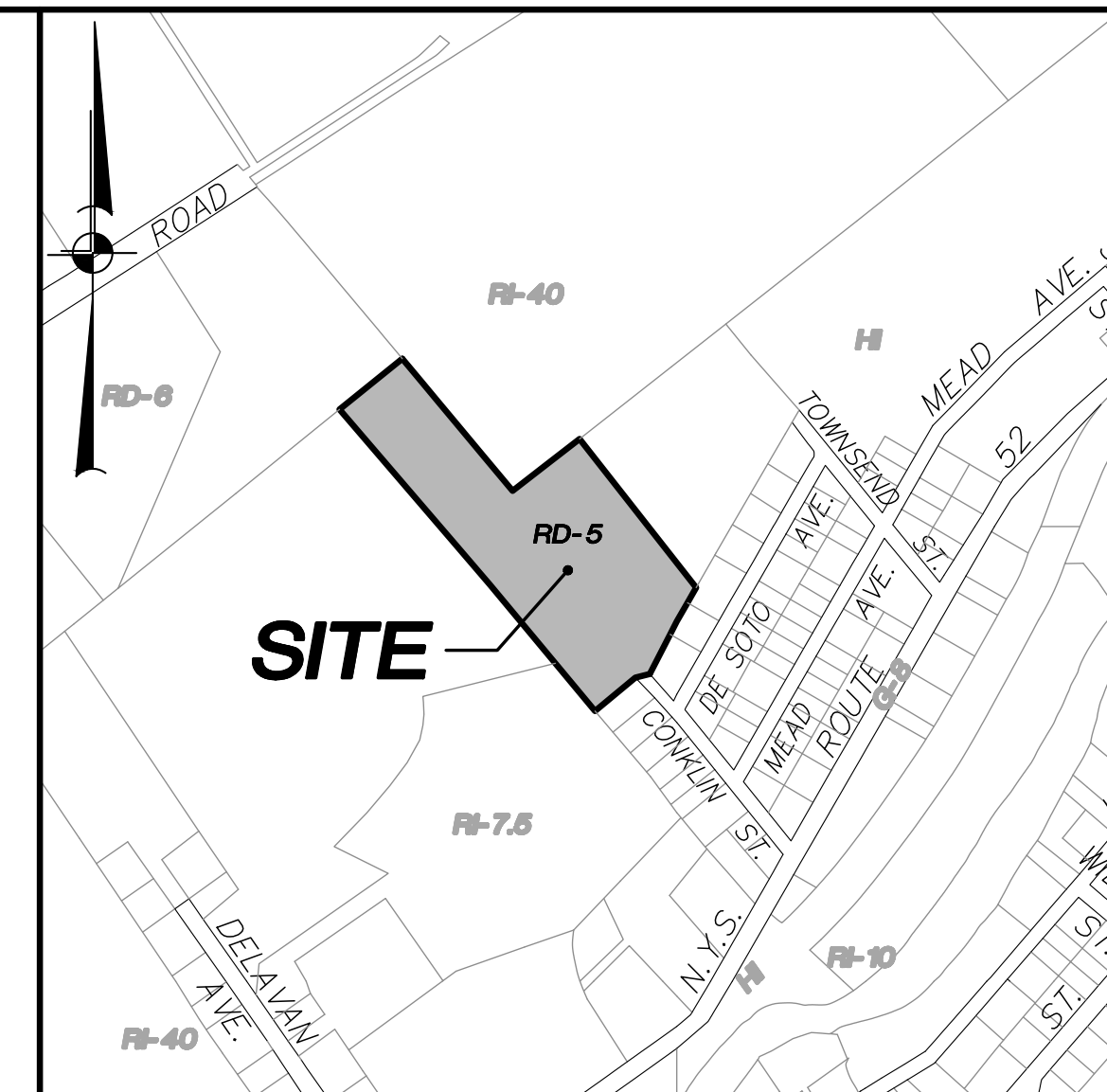
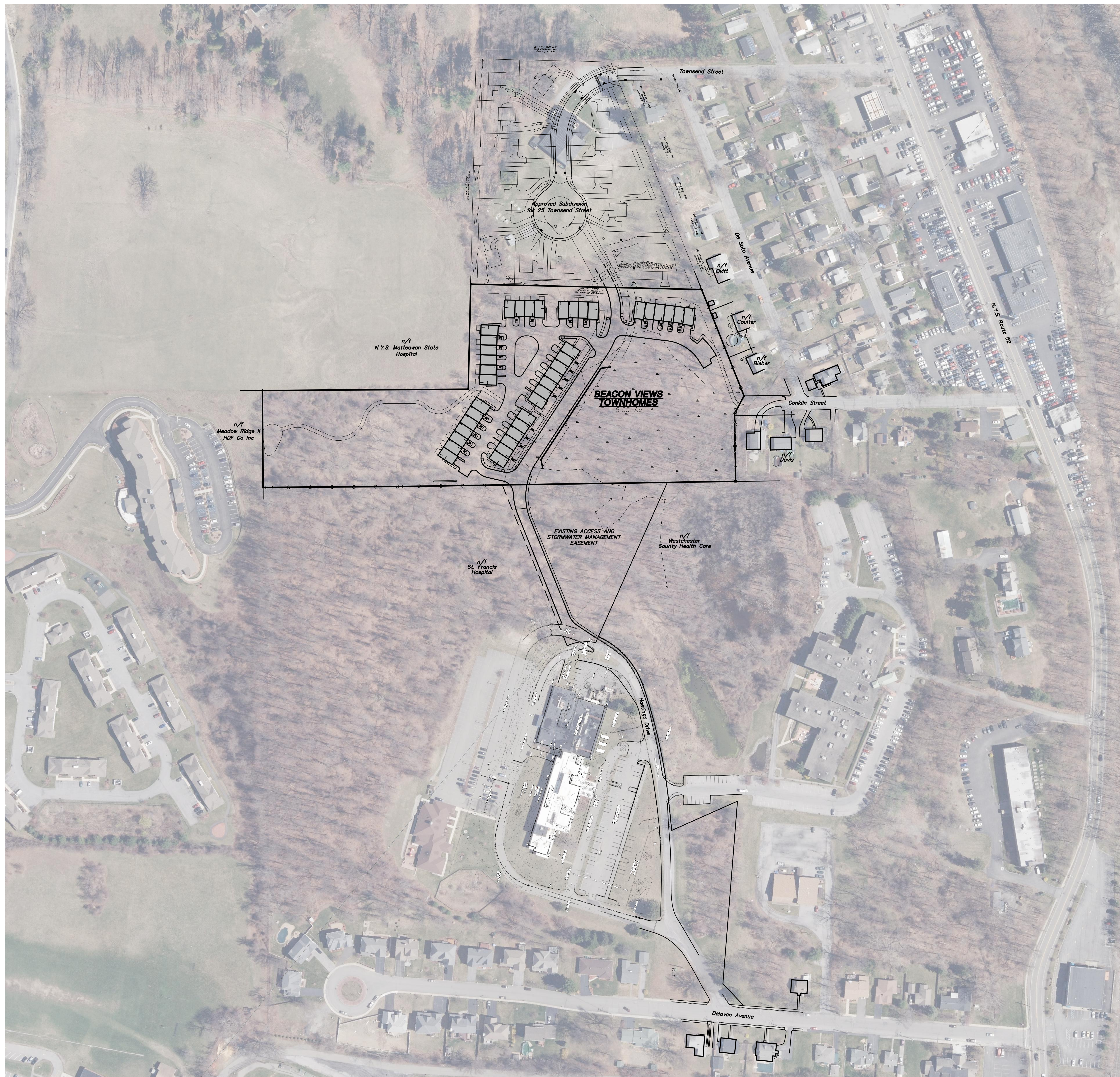
ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2209 OF ARTICLE 145 OF THE EDUCATION LAW.



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

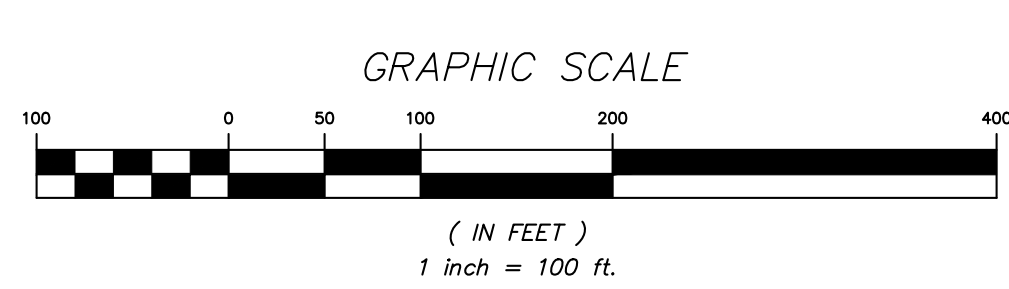
Record Owner: Highlands at Beacon, LLC
2847 Church Street
Pine Plains, NY 12567

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

- General Notes:**
- 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.
 - Topography shown on these plans are based upon aerial photography dated April 14, 2003 and is photogrammetrically 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'.
 - 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.
 - 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 & 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 |

- Site Access Notes:**
- The applicant seeks to utilize the proposed connection to the right of way through the approved subdivision on 25 Townsend Street as its primary means of access for the Beacon Views Properties.
 - The road shown in the existing easement on the Highland Meadows Senior Housing Property would be utilized as an emergency access only, in this case.
 - In the event there is a delay in the construction of the road in the approved 25 Townsend Street right of way, the applicant would exercise the easement over the Highland Meadows Senior Housing Property, and utilize the proposed road thereon as the primary access to the site, until such time as the 25 Townsend Street road was constructed. At which time the road through the Highland Meadows Senior Housing Property easement would be gated and transitioned to emergency access only, as stated above.



Site Plan

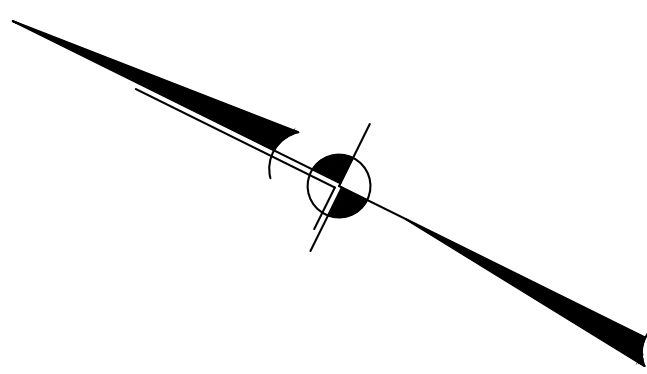
Approved by resolution of the Beacon Planning Board on the ---th day of XXX, 2019.

Chairman, City Planning Board _____ Date _____

| | | | |
|----------------|-----------|--|---|
| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | JFR |
| NO. | DATE | REVISION | BY |
| | | | 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. |
| DATE | 8-27-19 | DRAWN BY | J.F.R. |
| SCALE | 1" = 100' | CHECKED BY | A.D.T. |
| DRAWING NO. | SHEET | | |
| CS-1 | 1 | | 11 |

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2209 OF ARTICLE 145 OF THE EDUCATION LAW.

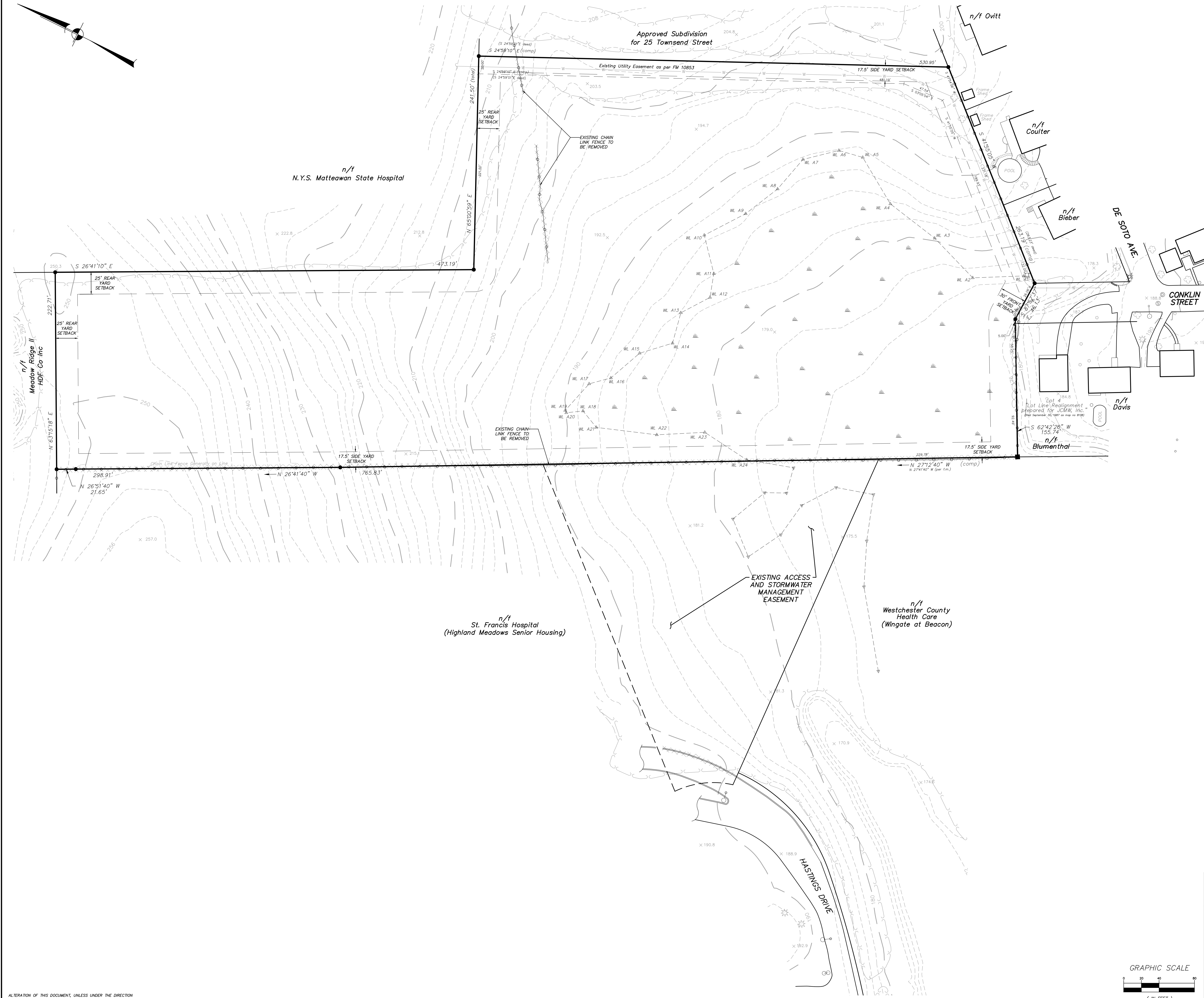
20190820 10:00:00 AM C:\Users\jfr\OneDrive\Documents\19131.100\19131.100_11.dwg



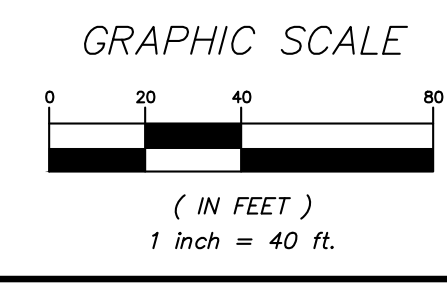
| LEGEND | |
|--------|------------------------------|
| | EXISTING PROPERTY LINE |
| | EXISTING EASEMENT |
| | EXISTING CHAIN LINK FENCE |
| | EXISTING EDGE OF PAVEMENT |
| | EXISTING WETLAND |
| | EXISTING WETLAND FLAG |
| | EXISTING TREE LINE |
| | EXISTING 10' CONTOUR |
| | EXISTING 2' CONTOUR |
| | EXISTING SPOT GRADE |
| | EXISTING ITEMS TO BE REMOVED |

UNIT DENSITY CALCULATIONS (RD-5)
 Based on note "a" 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 | = 40 Units |



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| NO. | DATE | REVISION | JFR |
|-----|---------|--------------------------------|-----|
| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | JFR |
| | | REVISION | BY |

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ENGINEERING, SURVEYING &
LANDSCAPE ARCHITECTURE, P.C.

3 Garrett Place
Carmel, NY 10512
(845) 225-9690
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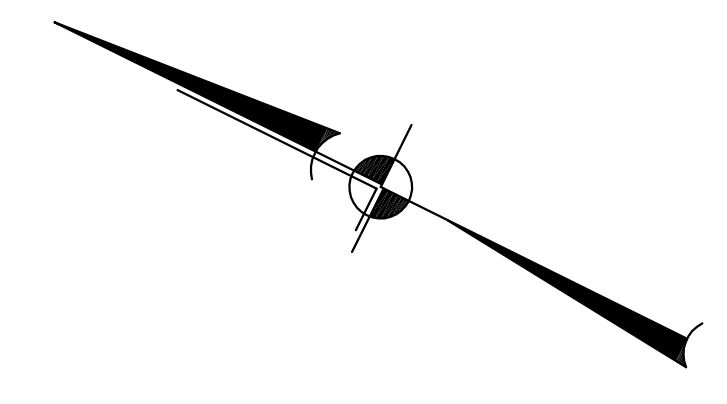
PROJECT: **BEACON VIEWS**
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

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. | BY: | 2 |
| SCALE: 1" = 40' | CHECKED BY: A.D.T. | DATE: | 11 |

EX-1





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' | 30' |
| Minimum Side: | 10' | 35' |
| Total of 2: | 20' | 75' |
| Rear: | 25' | 25' |
| Minimum Distance Between Buildings on the Same Lot: | 30' | 24' |
| 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% | 8.1% |
| Other uses: | 30% | 0% |
| Maximum No. of Dwelling Units per Building | 16 | 7 |

* Seeking relief from minimum distance as part of terms of conservation subdivision

PARKING REQUIREMENTS:

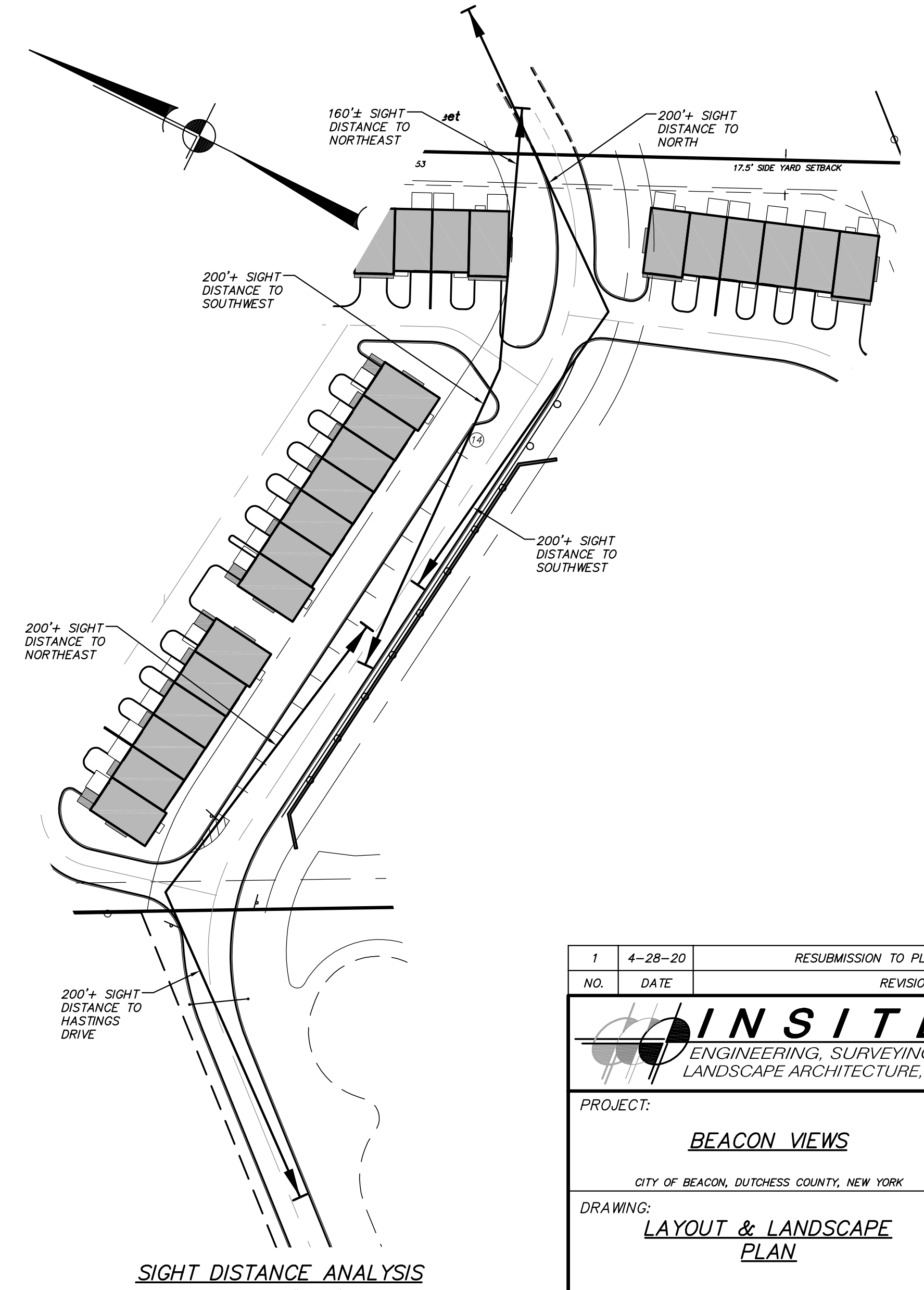
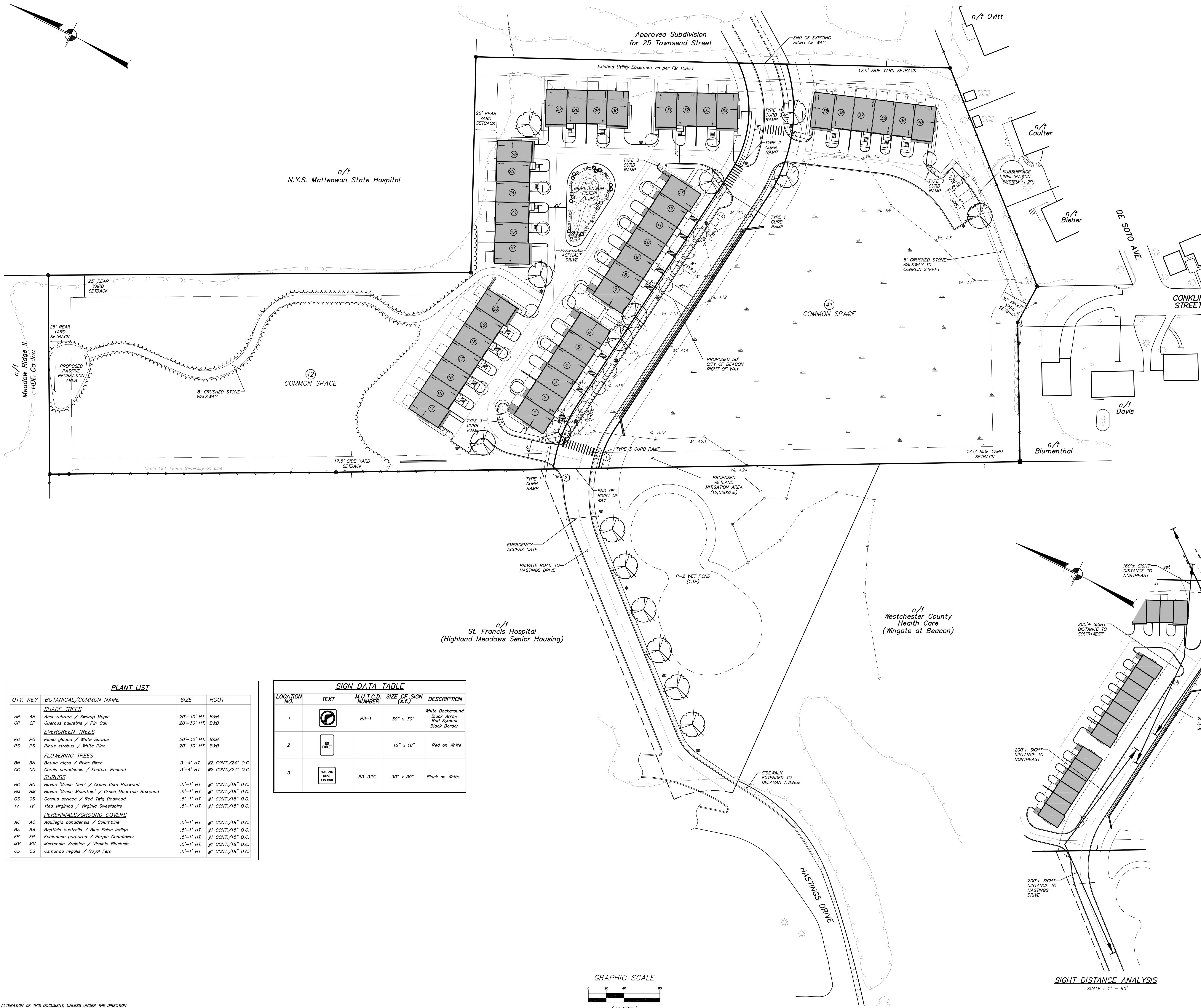
| | |
|--|-----------------------|
| 2 per Dwelling Unit + .25 Spaces per Bedroom | = 110 Spaces |
| Garage Spaces | = 80 Spaces |
| Driveway Spaces | = 40 Spaces |
| Visitor Spaces | = 19 Spaces |
| | = 139 Spaces Provided |

RECREATION AREAS SUMMARY

| | |
|--|---------------------|
| Required SF @ 2,000 for First 20 Units | = 4,000 SF Required |
| Required 100 SF for Each Additional Unit | = 7,080 SF |
| Western Trail Passive Recreation Area | = 1,385 |
| Southern Trail to Conklin Street Area | = 8,465 SF Provided |

LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING CHAIN LINK FENCE
- EXISTING EDGE OF PAVEMENT
- EXISTING WETLAND
- EXISTING WETLAND FLAG
- EXISTING TREE LINE
- PROPOSED SIGN
- PROPOSED DOOR LOCATION
- PROPOSED # OF STALLS TO BE STRIPED
- PROPOSED CONCRETE CURB
- PROPOSED EDGE OF SIDEWALK
- PROPOSED RETAINING WALL
- PROPOSED PAINTED STOPBAR
- PROPOSED CROSSWALK
- PROPOSED LANDSCAPING
- PROPOSED GUIDE RAIL
- PROPOSED POST MOUNTED LIGHT

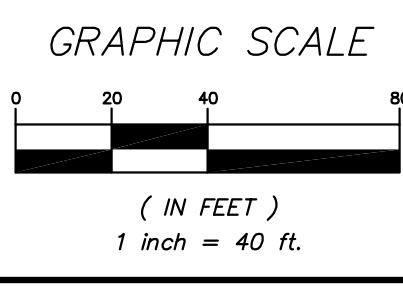


PLANT LIST

| 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 | | | | |
| BC | BC | 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 Sweetpire | .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 | Osunda 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 | | R3-1 | 30" x 30" | White Background Black Arrow Red Symbol Black Border |
| 2 | | | 12" x 18" | Red on White |
| 3 | | R3-32C | 30" x 30" | Black on White |



| NO. | DATE | REVISION | BY |
|-----|---------|--------------------------------|-----|
| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | JFR |

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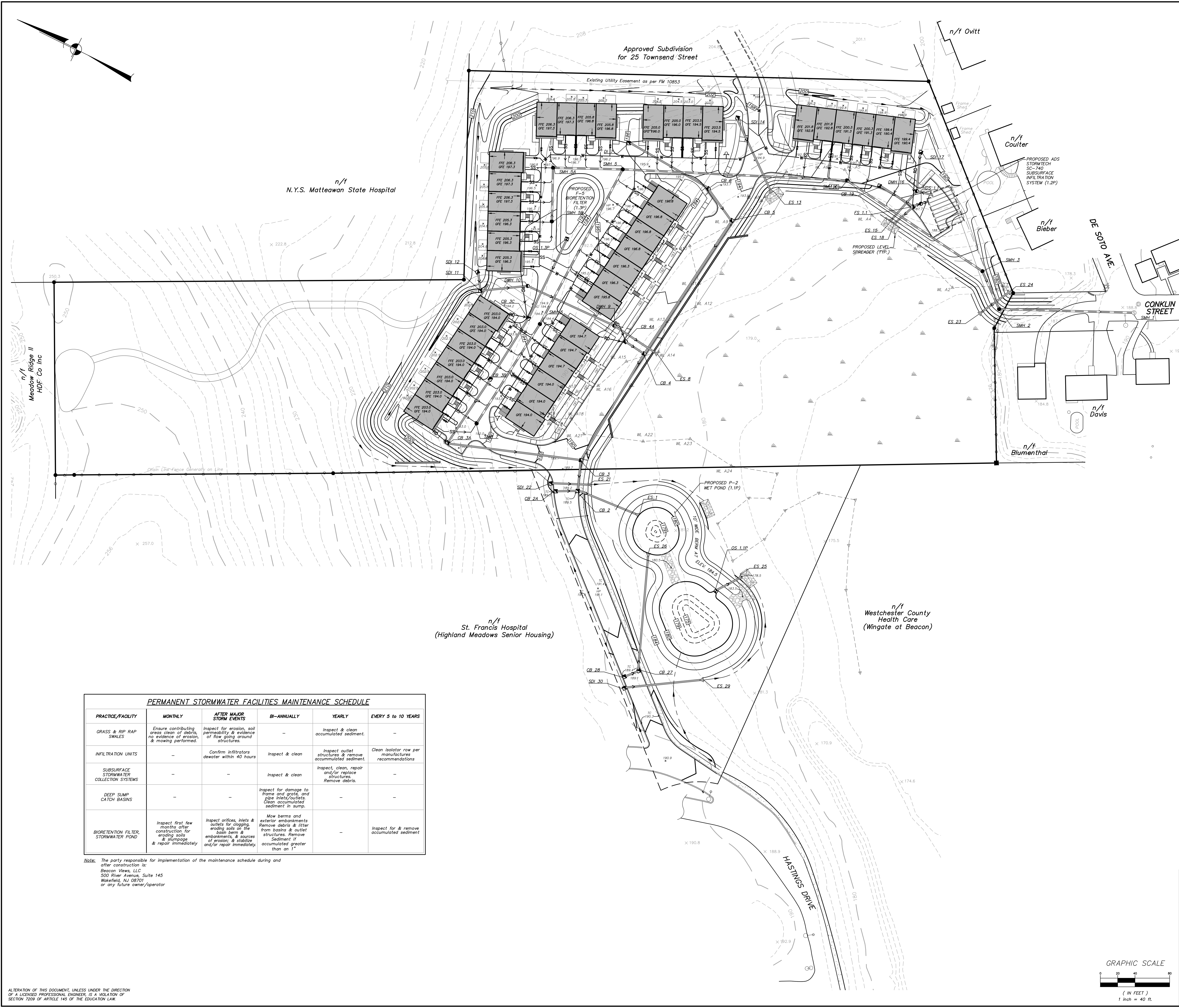
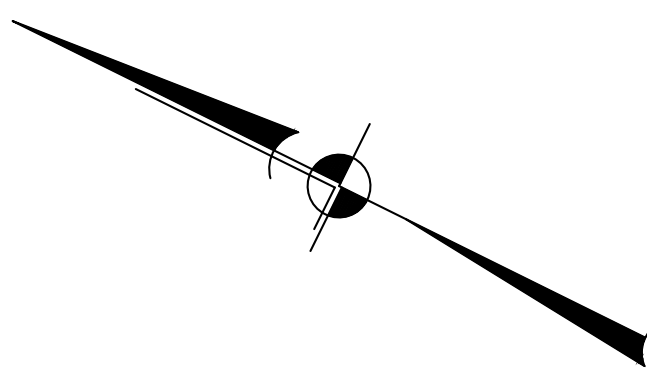
PROJECT: **BEACON VIEWS**
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING: **LAYOUT & LANDSCAPE PLAN**

| PROJECT NUMBER | PROJECT MANAGER | J.J.C. | DRAWING NO. | SHEET |
|----------------|-----------------|--------|-------------|-------|
| 19131.100 | J.F.R. | J.F.R. | SP-1 | 3 |

DATE: 8-27-19
SCALE: AS SHOWN
CHECKED BY: A.D.T.

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2209 OF ARTICLE 145 OF THE EDUCATION LAW.



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 12" WATER MAIN
- 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 (SIZE AS NOTED)
- PROPOSED 8" PVC SDR 35 SEWER MAIN
- PROPOSED 4" PVC SDR 35 SEWER SERVICE
- PROPOSED 8" DIP CLASS 52 WATER MAIN
- PROPOSED X" DIP WATER SERVICE LINE
- PROPOSED GRASS SWALE

PROPOSED SEWER TABLE

| STRUCTURE | RM | INV. | PIPE | LENGTH | SLOPE |
|-----------|-------|----------------------|--------|----------|-------|
| SMH 7 | 192.2 | 188.0 | 8" PVC | 136 L.F. | 0.8% |
| SMH 6 | 194.4 | IN 186.9 OUT 186.8 | 8" PVC | 203 L.F. | 0.8% |
| SMH 5 | 196.1 | IN 183.2 OUT 185.1 | 8" PVC | 259 L.F. | 0.8% |
| SMH 4 | 198.4 | IN 181.0 OUT 182.8 | 8" PVC | 48 L.F. | 1.1% |
| SMH 3 | 184.0 | IN 181.4 OUT 181.3 | 8" PVC | 188 L.F. | 0.8% |
| SMH 2 | 184.0 | IN 180.9 OUT 180.8 | 8" PVC | 48 L.F. | 0.8% |
| SMH 1 | 188.8 | 178.9 | 8" PVC | 156 L.F. | 1.2% |
| SMH 5B | 195.8 | 191.6 | 8" PVC | 62 L.F. | 0.8% |
| SMH 5A | 196.5 | IN 191.1 OUT 191.0 | 8" PVC | 81 L.F. | 7.2% |
| SMH 5 | 196.1 | IN 185.2 OUT 185.1 | 8" PVC | 81 L.F. | 7.2% |

PROPOSED DRAINAGE TABLE

| STRUCTURE | RM | INV. | PIPE | LENGTH | SLOPE |
|-----------|-------|----------------------|----------|----------|-------|
| DI 7 | 195.9 | 192.8 | 12" HDPE | 106 L.F. | 2.1% |
| CB 5 | 193.5 | 190.8 | 12" HDPE | 46 L.F. | 1.1% |
| CB 4 | 191.2 | 187.6 | 15" HDPE | 184 L.F. | 1.1% |
| CB 3 | 189.7 | 187.6 | 15" HDPE | 143 L.F. | 1.0% |
| CB 2 | 189.0 | 182.3 | 24" HDPE | 35 L.F. | 1.1% |
| ES 1 | — | 180.0 | 24" HDPE | 76 L.F. | 3.0% |
| CB 4A | 191.3 | 188.1 | 12" HDPE | 26 L.F. | 1.9% |
| CB 4 | 191.3 | 187.6 | 12" HDPE | 26 L.F. | 1.9% |
| CB 2A | 189.0 | 185.8 | 12" HDPE | 25 L.F. | 2.0% |
| CB 2 | 189.0 | 185.3 | 12" HDPE | 25 L.F. | 2.0% |
| OS 1, 3P | 193.5 | 188.2 | 12" HDPE | 102 L.F. | 1.1% |
| CB 3C | 194.2 | IN 187.1 OUT 186.5 | 15" HDPE | 83 L.F. | 1.1% |
| CB 3B | 193.0 | 186.0 | 15" HDPE | 88 L.F. | 1.0% |
| CB 3A | 192.7 | 185.1 | 15" HDPE | 155 L.F. | 1.0% |
| CB 3 | 189.7 | 183.5 | 15" HDPE | 155 L.F. | 1.0% |
| SDI 22 | 189.9 | 186.7 | 15" HDPE | 47 L.F. | 1.5% |
| ES 21 | — | 186.0 | 15" HDPE | 47 L.F. | 1.5% |
| SDI 12 | 203.5 | 200.3 | 12" HDPE | 22 L.F. | 15.9% |
| SDI 11 | 200.0 | 196.8 | 12" HDPE | 55 L.F. | 8.7% |
| DMH 10 | 195.2 | 192.0 | 12" HDPE | 110 L.F. | 2.0% |
| DMH 9 | 193.0 | 189.8 | 12" HDPE | 60 L.F. | 1.2% |
| ES 8 | — | 182.5 | 12" HDPE | 60 L.F. | 1.2% |
| SDI 14 | 195.5 | 192.3 | 12" HDPE | 95 L.F. | 6.6% |
| ES 13 | — | 186.0 | 12" HDPE | 95 L.F. | 6.6% |
| SDI 17 | 190.5 | 187.1 | 15" HDPE | 45 L.F. | 8.0% |
| DMH 16 | 188.1 | 183.5 | 15" HDPE | 47 L.F. | 1.1% |
| ES 15 | — | 183.0 | 15" HDPE | 47 L.F. | 1.1% |
| CB 19 | 189.3 | 186.1 | 12" HDPE | 46 L.F. | 3.0% |
| FS 1.1 | 187.7 | 184.7 | 12" HDPE | 30 L.F. | 5.7% |
| ES 18 | — | 183.0 | 12" HDPE | 30 L.F. | 5.7% |
| FS 1.1 | 187.7 | 184.7 | 8" HDPE | 10 L.F. | 2.0% |
| HDS 1.1 | 187.8 | 184.5 | 8" HDPE | 10 L.F. | 2.0% |
| 1, 2P | — | 184.3 | 8" HDPE | 10 L.F. | 2.0% |
| 1, 2P | — | 184.3 | 8" HDPE | 19 L.F. | 1.1% |
| DMH 16 | 188.1 | 184.1 | 8" HDPE | 19 L.F. | 1.1% |
| ES 24 | — | 176.0 | 15" HDPE | 44 L.F. | 1.1% |
| ES 23 | — | 175.5 | 15" HDPE | 44 L.F. | 1.1% |
| OS 1, 1P | 183.5 | 179.0 | 24" HDPE | 34 L.F. | 1.5% |
| ES 25 | — | 178.5 | 24" HDPE | 34 L.F. | 1.5% |
| CB 28 | 188.9 | 185.7 | 12" HDPE | 18 L.F. | 2.8% |
| CB 27 | 188.9 | 185.2 | 12" HDPE | 137 L.F. | 3.8% |
| ES 26 | — | 180.0 | 12" HDPE | 137 L.F. | 3.8% |
| SDI 30 | 189.6 | 186.2 | 15" HDPE | 92 L.F. | 2.4% |
| ES 29 | — | 184.0 | 15" HDPE | 92 L.F. | 2.4% |

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 de-water within 40 hours | Inspect & clean | Inspect outlet structures & remove accumulated sediment. | Clean isolator row per manufacturer's 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. | — | — |
| BIORETENTION FILTER, STORMWATER POND | Inspect first few months after construction for eroding soils & sumpage & 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 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
 Waterford, NY 02091
 or any future owner/operator

| | | | |
|-----|---------|--------------------------------|-----|
| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | JFR |
| NO. | DATE | REVISION | BY |

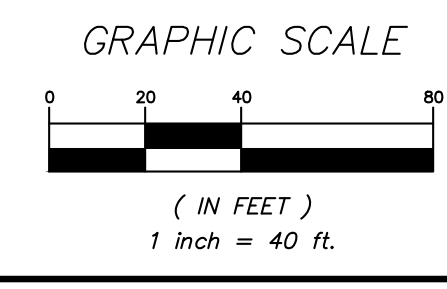
INSITE
 ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
 3 Garrett Place
 Carmel, NY 10512
 (845) 225-9690
 (845) 225-9717 fax
 www.insite-eng.com

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

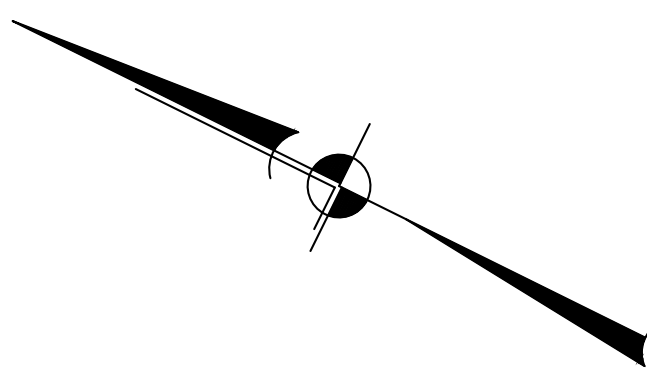
DRAWING: **GRADING & UTILITIES PLAN**

PROJECT NUMBER: 19131.100 PROJECT MANAGER: J.J.C.
 DATE: 8-27-19 DRAWN BY: J.F.R.
 SCALE: 1" = 40' CHECKED BY: A.D.T.

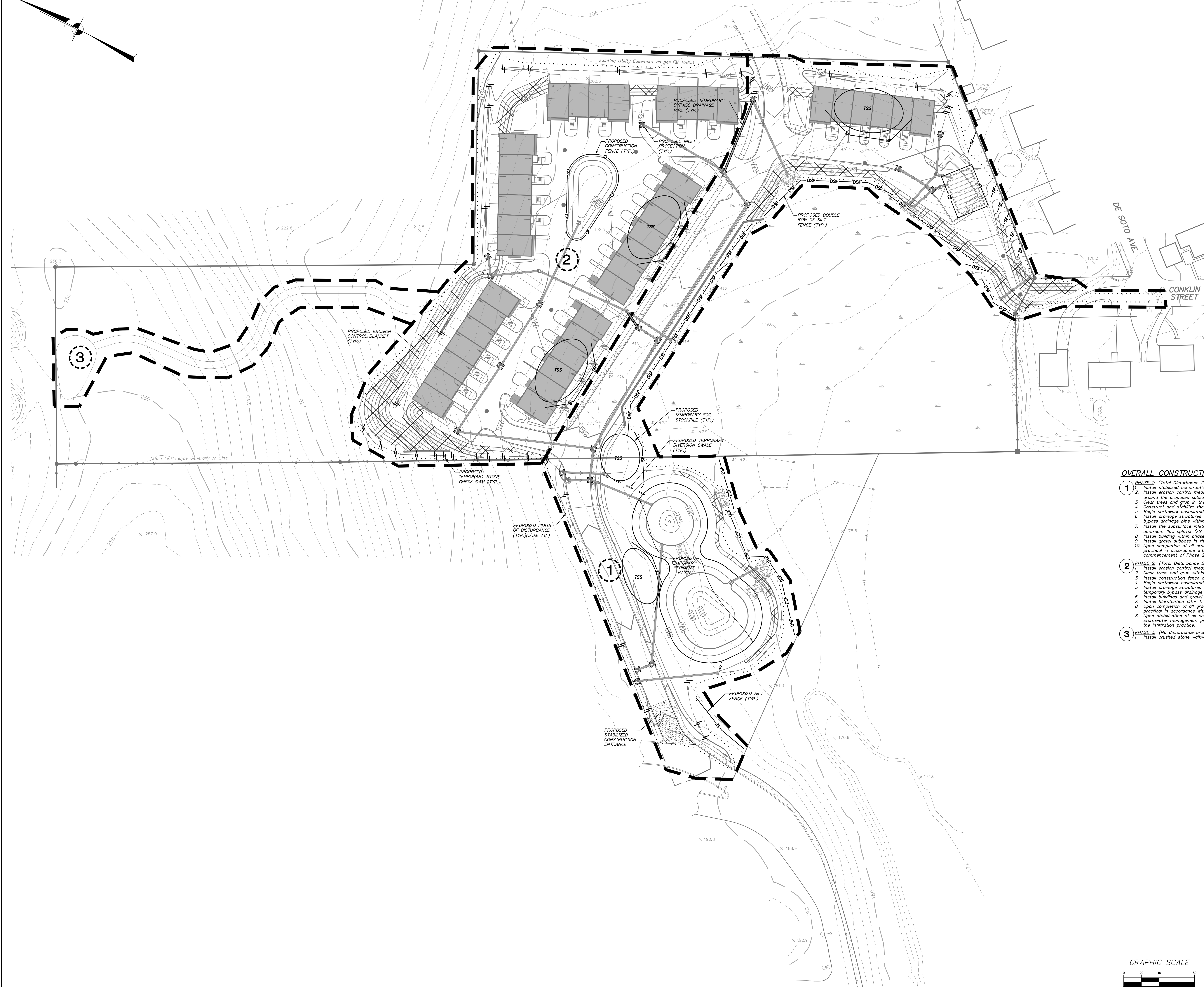
DRAWING NO. SHEET: **SP-2** 4/11



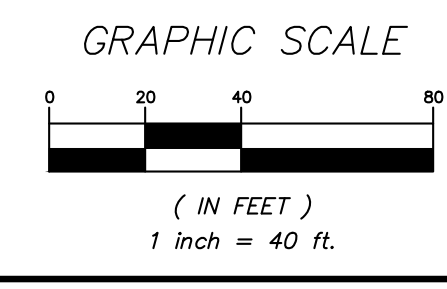
ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2209 OF ARTICLE 145 OF THE EDUCATION LAW.



| LEGEND | |
|--------|---|
| | EXISTING PROPERTY LINE |
| | EXISTING EASEMENT |
| | EXISTING CHAIN LINK FENCE |
| | EXISTING EDGE OF PAVEMENT |
| | EXISTING WETLAND FLAG |
| | EXISTING 10' CONTOUR |
| | EXISTING SPOT GRADE |
| | PROPOSED 10' CONTOUR |
| | PROPOSED 2' CONTOUR |
| | PROPOSED SEWER MANHOLE |
| | PROPOSED CATCH BASIN |
| | PROPOSED OUTLET STRUCTURE |
| | PROPOSED END SECTION |
| | PROPOSED FIRE HYDRANT |
| | 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 |
| | PROPOSED PHASING LINE |
| | PROPOSED PHASING NUMBER |



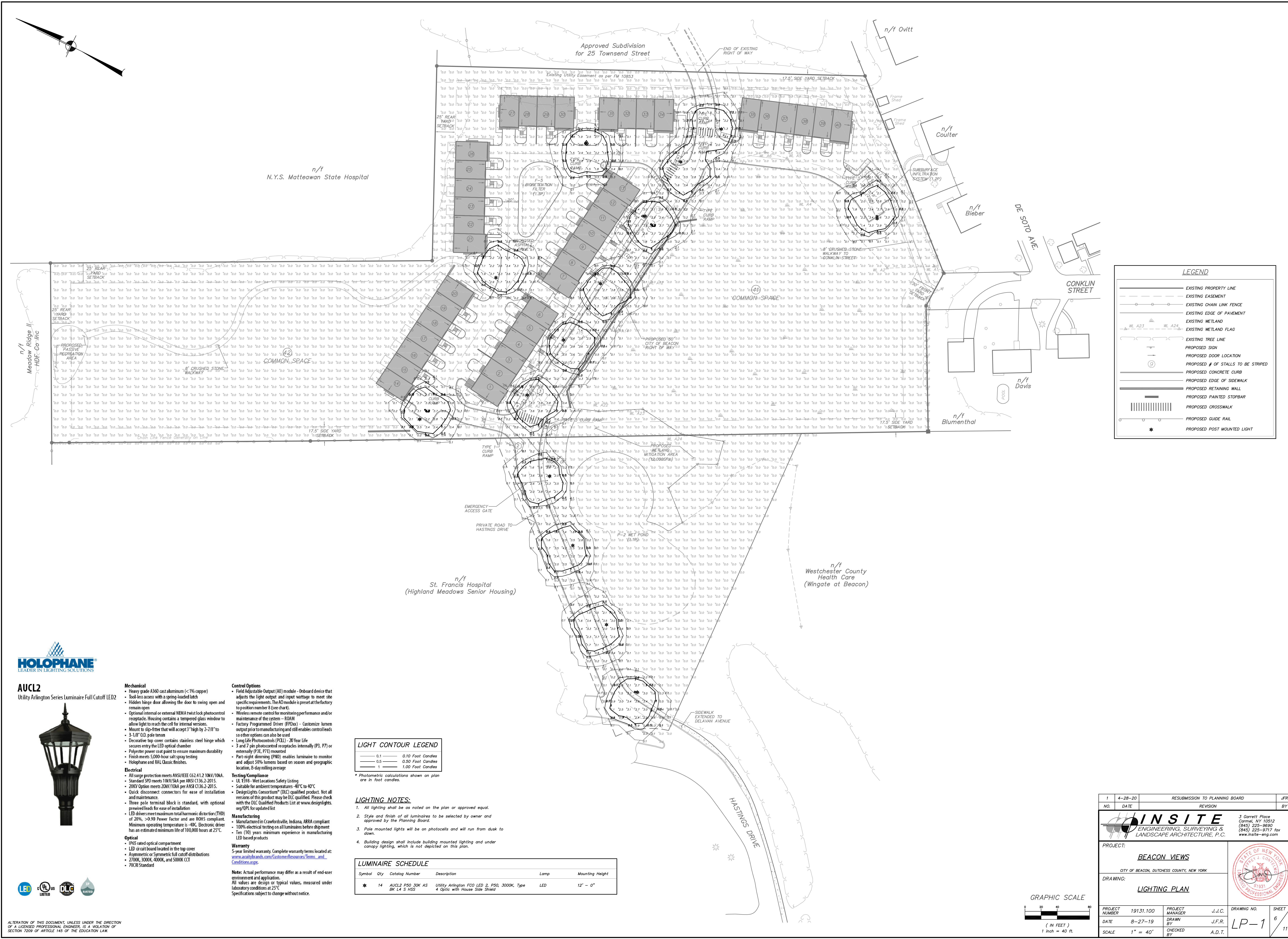
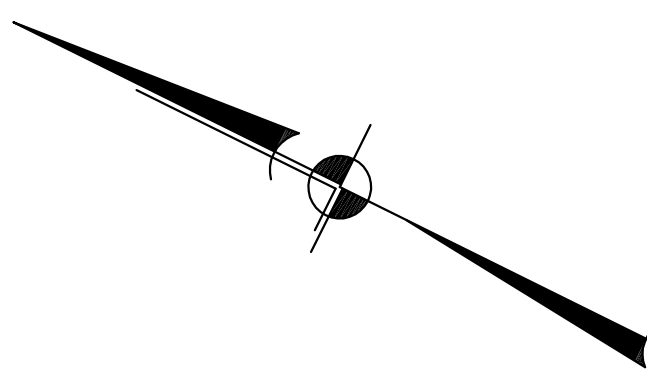
- OVERALL CONSTRUCTION SEQUENCE:**
- PHASE 1: (Total Disturbance 2.7 Ac. ±)**
 1. Install stabilized construction entrances in accordance with the notes and details at location shown on drawing.
 2. Install erosion control measures shown on the plan in accordance with the details. Install construction fence around the proposed subsurface infiltration system (1.2P).
 3. Clear trees and grub in the area of stormwater basin (1.1P).
 4. Construct and stabilize the temporary sediment basin in accordance with the notes and details.
 5. Begin earthwork associated with the road, parking area and building within limits of the phase.
 6. Install drainage structures with inlet protection as shown and pipes within limits of phase. Install temporary bypass drainage pipe within the phase to direct stormwater runoff to the temporary sediment basin.
 7. Install the subsurface infiltration system (1.2P) and plug the outlet pipe to the infiltration practice in the upstream flow splitter (FS 1.2).
 8. Install building within phase.
 9. Install gravel subbase in the proposed paved areas.
 10. Upon completion of all grading operations topsoil, seed, and mulch any and all disturbed areas as soon as practical in accordance with the sedimentation and erosion control notes. Phase 1 must be stabilized prior to the commencement of Phase 2.
 - PHASE 2: (Total Disturbance 2.6 Ac. ±)**
 1. Install erosion control measures shown on the plan in accordance with the details.
 2. Clear trees and grub within the limits of the phase.
 3. Install construction fence around the proposed bioretention filter (1.3P).
 4. Begin earthwork associated with the parking area and building.
 5. Install drainage structures with inlet protection as shown and pipes within the limits of the phase. Install temporary bypass drainage pipe within the phase to direct stormwater runoff to the temporary sediment basin.
 6. Install buildings and gravel subbase in the proposed paved areas.
 7. Install bioretention filter 1.3P.
 8. Upon completion of all grading operations topsoil, seed, and mulch any and all disturbed areas as soon as practical in accordance with the sedimentation and erosion control notes.
 9. Upon stabilization of all contributing area complete, convert the temporary sediment basin to the proposed stormwater management practice per the notes and details and remove plug from primary outlet in FS 1.2 to the infiltration practice.
 - PHASE 3: (No disturbance proposed in this phase)**
 1. Install crushed stone walkway and passive recreation area.



| NO. | DATE | REVISION | BY |
|-----|---------|--------------------------------|-----|
| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | JFR |

| | | | |
|--|-----------|---|--------|
| | | 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. |
| DATE | 8-27-19 | DRAWN BY | J.F.R. |
| SCALE | 1" = 40' | CHECKED BY | A.D.T. |
| DRAWING NO. | | SHEET | |
| SP-3 | | 5 | |
| | | 11 | |

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| LEGEND | |
|--------|------------------------------------|
| | EXISTING PROPERTY LINE |
| | EXISTING EASEMENT |
| | EXISTING CHAIN LINK FENCE |
| | EXISTING EDGE OF PAVEMENT |
| | EXISTING WETLAND FLAG |
| | EXISTING TREE LINE |
| | PROPOSED DOOR LOCATION |
| | PROPOSED # OF STALLS TO BE STRIPED |
| | PROPOSED CONCRETE CURB |
| | PROPOSED EDGE OF SIDEWALK |
| | PROPOSED RETAINING WALL |
| | PROPOSED PAINTED STOPBAR |
| | PROPOSED CROSSWALK |
| | PROPOSED GUIDE RAIL |
| | PROPOSED POST MOUNTED LIGHT |



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 photocell 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 5000-hour salt spray testing
 - Holographic and IRL 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 -40°C. Electronic driver has an estimated minimum life of 100,000 hours at 25°C.
- Optical**
- IRIS and optical compartment
 - LED or cut board located in the top cover
 - Asymmetric or Symmetric full cutoff distributions
 - 2700K, 3000K, 4000K, and 5000K CCT
 - 70CR Standard

- Control Options**
- Field Adjustable Output (AO) module - On-board device that adjusts the light output and input voltage 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 - R30M
 - Factory Programmed Driver (FPD) - Customize lumen output prior to manufacturing and still enables controller leads so other options can also be used
 - Long Life Photocell (PLL) - 20 Year Life
 - 3 and 7 pin photocell 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, ABRA 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.utilitybrands.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.

LIGHT CONTOUR LEGEND

| | |
|--|------------------|
| | 0.1 Foot Candles |
| | 0.5 Foot Candles |
| | 1.0 Foot Candles |

* Photometric calculations shown on plan are in foot candles.

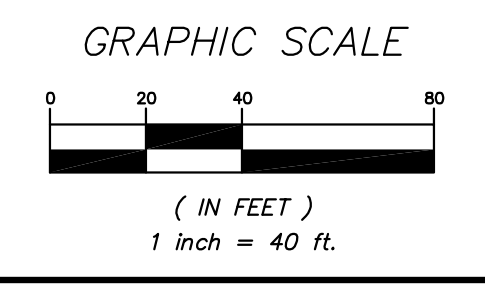
- LIGHTING NOTES:**
- All lighting shall be as noted on the plan or approved equal.
 - Style and finish of all luminaires to be selected by owner and approved by the Planning Board.
 - Pole mounted lights will be on photocells and will run from dusk to dawn.
 - Building design shall include building mounted lighting and under canopy lighting, which is not depicted on this plan.

LUMINAIRE SCHEDULE

| Symbol | Qty | Catalog Number | Description | Lamp | Mounting Height |
|--------|-----|------------------------------|--|------|-----------------|
| * | 14 | AUCL2 P50 30K AS BK L4 S HSS | Utility Arlington FCO LED 2, P50, 3000K, Type 4 Optic with House Side Shield | LED | 12' - 0" |



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| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | JFR |

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

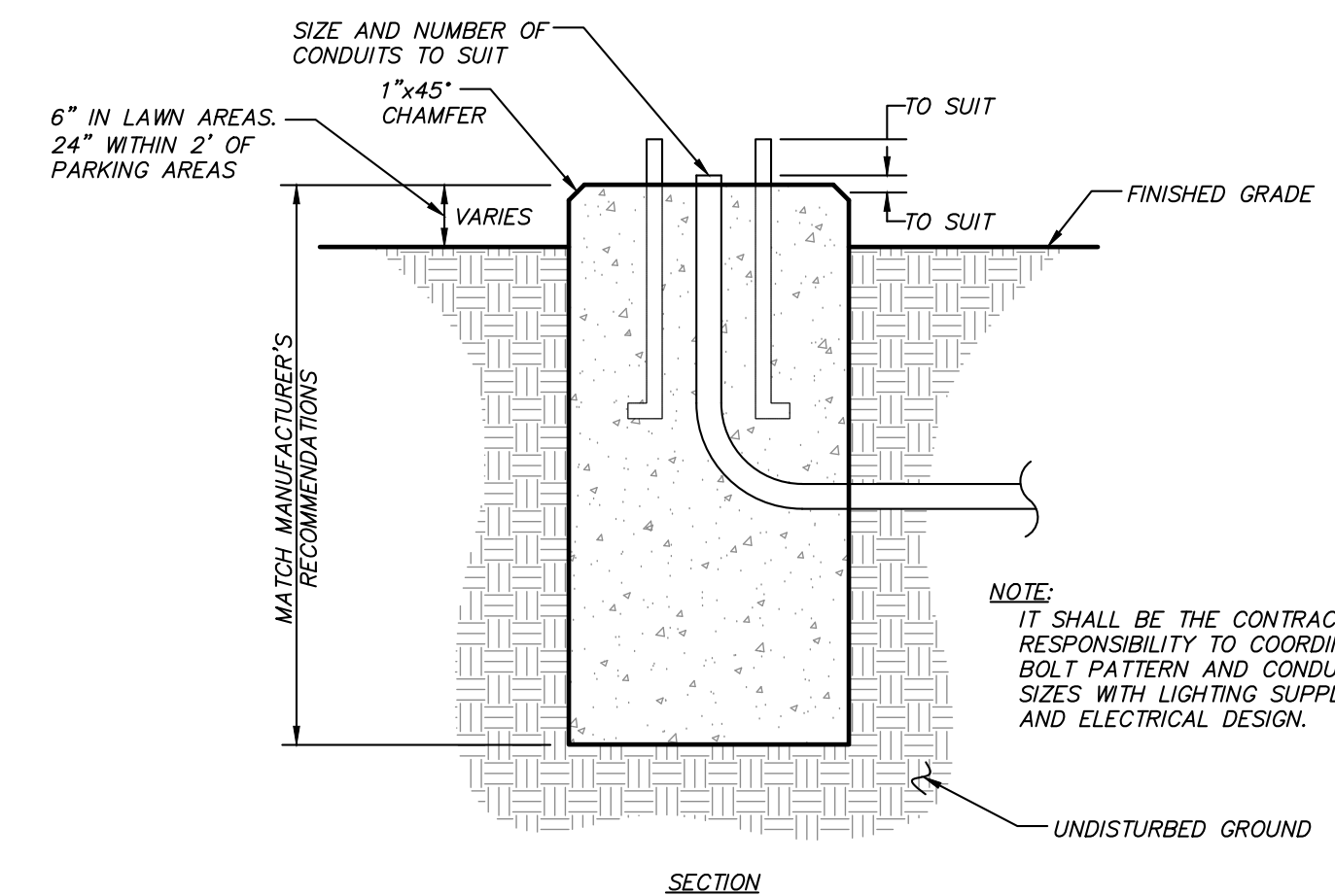
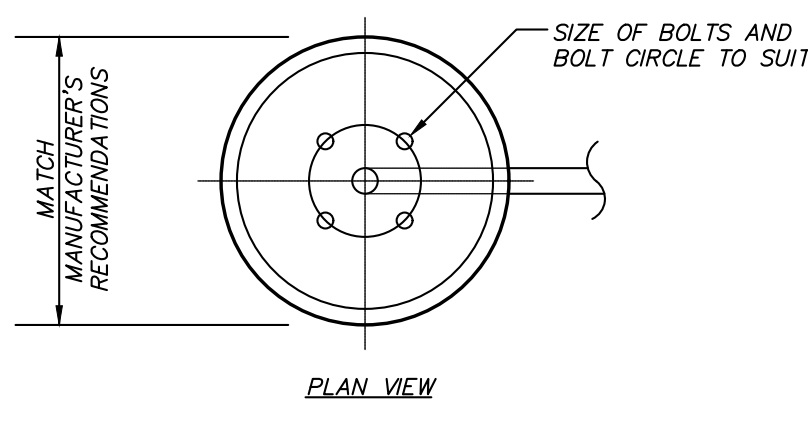
PROJECT: **BEACON VIEWS**
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING: **LIGHTING PLAN**

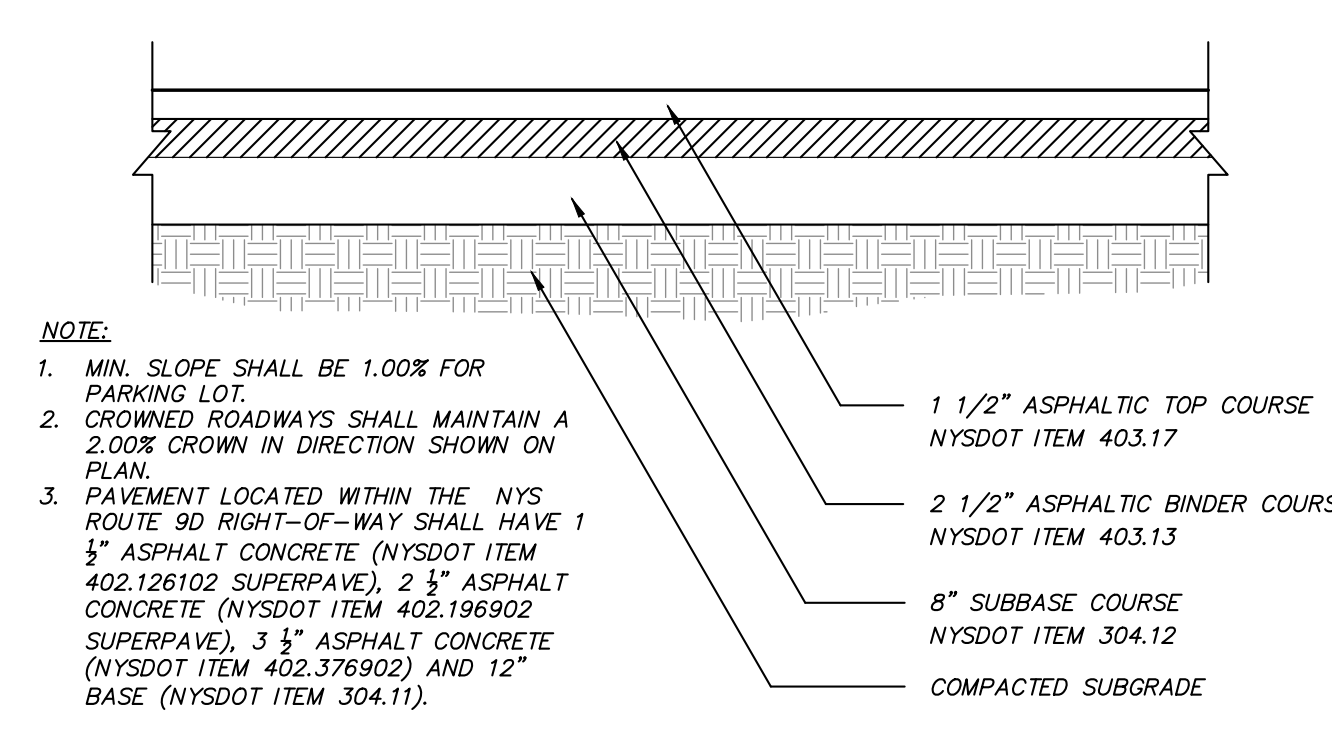
PROJECT NUMBER: 19131.100
DATE: 8-27-19
SCALE: 1" = 40'

PROJECT MANAGER: J.J.C.
DRAWN BY: J.F.R.
CHECKED BY: A.D.T.

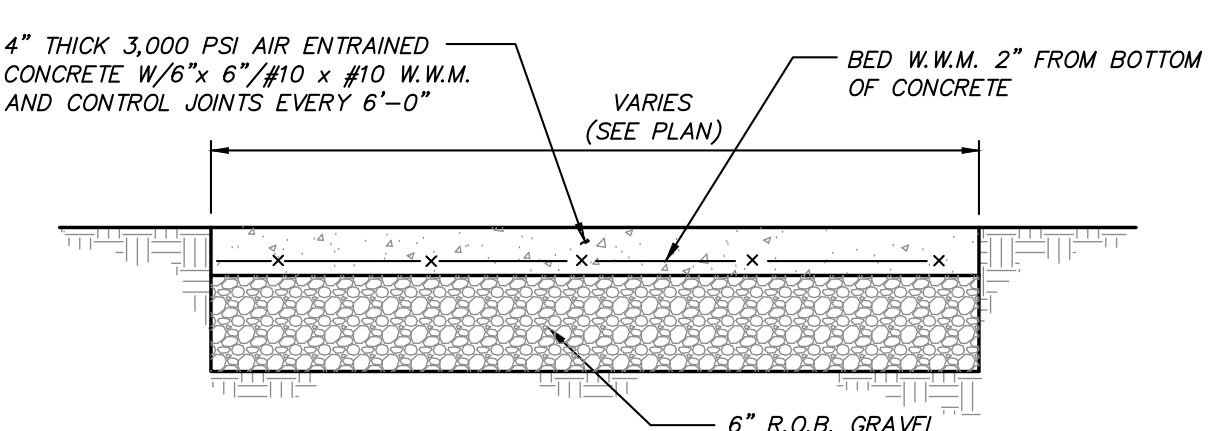
DRAWING NO. **LP-1**
SHEET **6** OF **11**



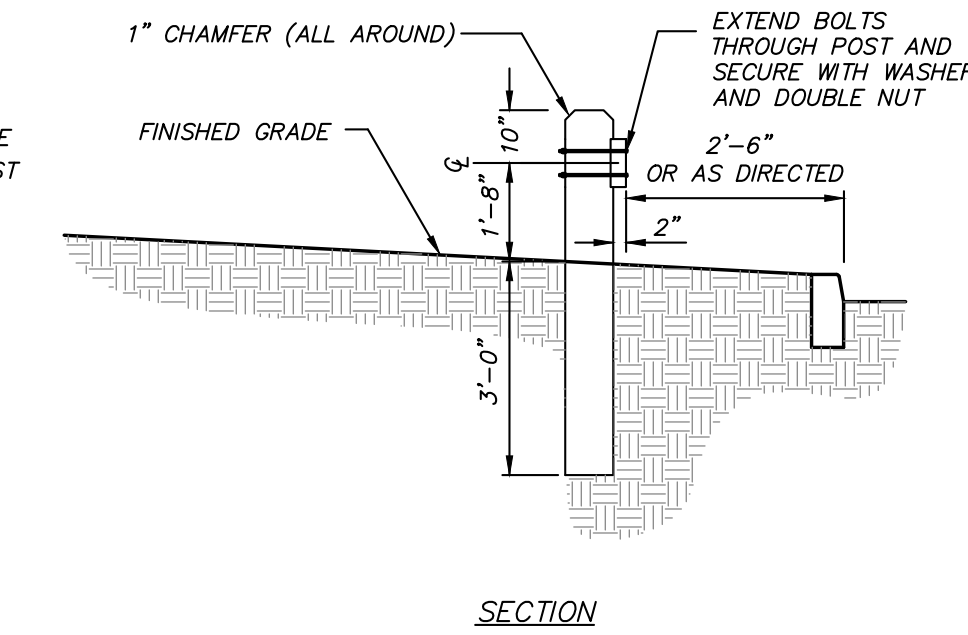
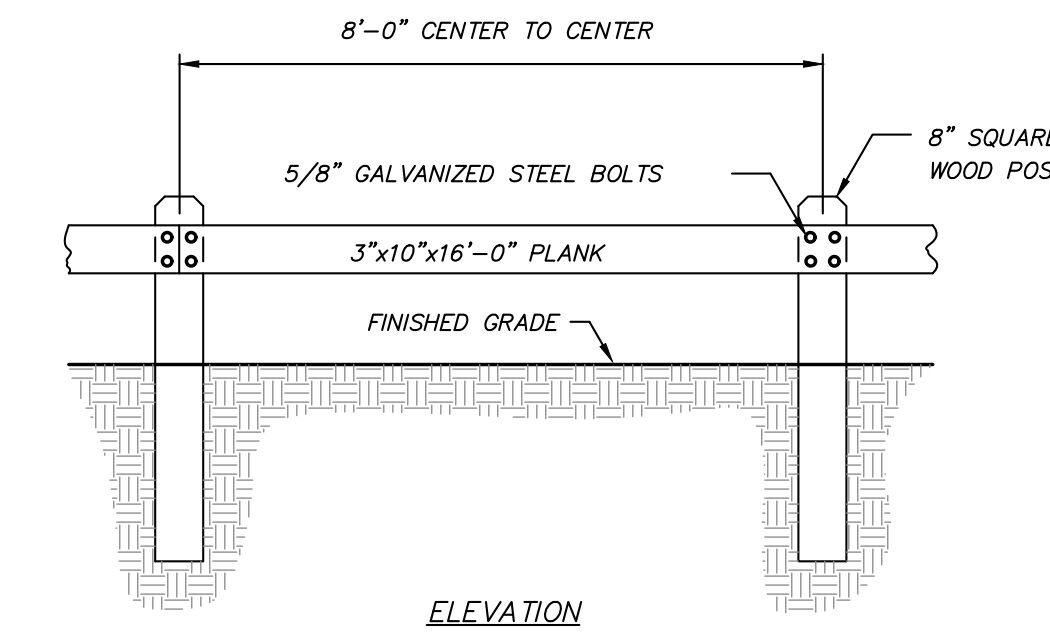
LIGHT POLE BASE DETAIL
(N.T.S.)



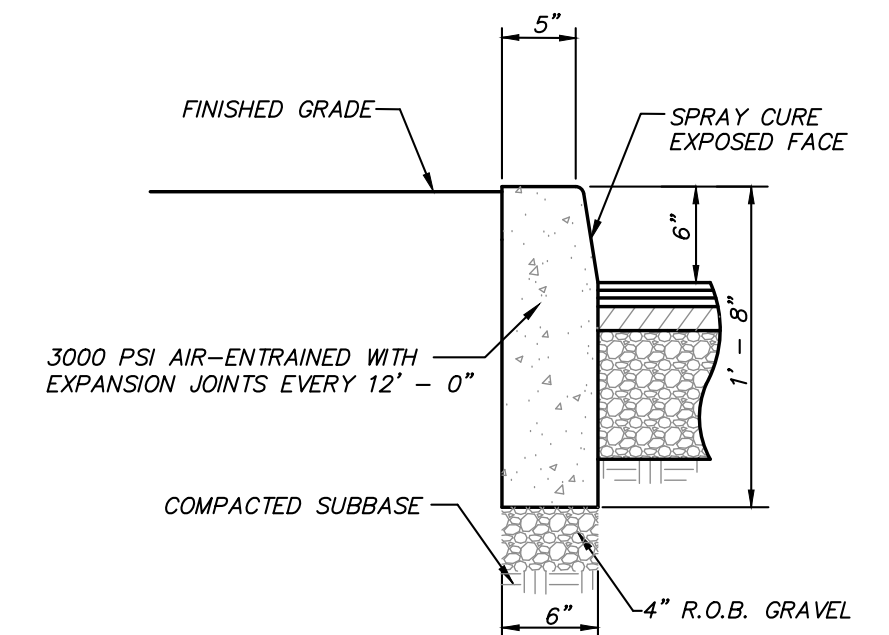
SITE PAVEMENT DETAIL
(N.T.S.)



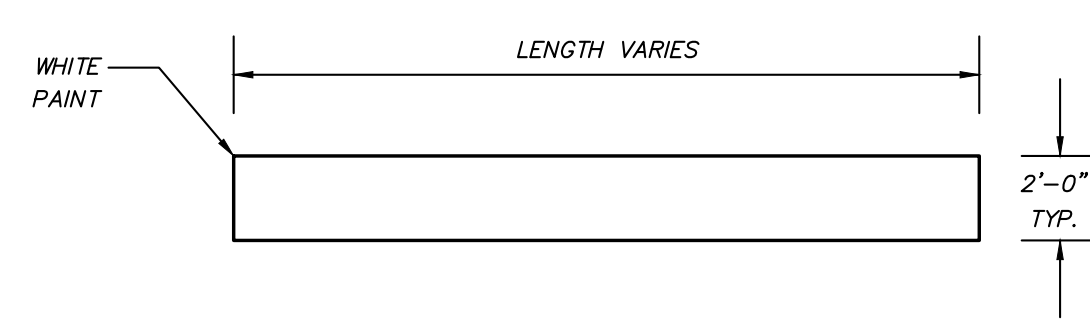
CONCRETE SIDEWALK DETAIL
(N.T.S.)



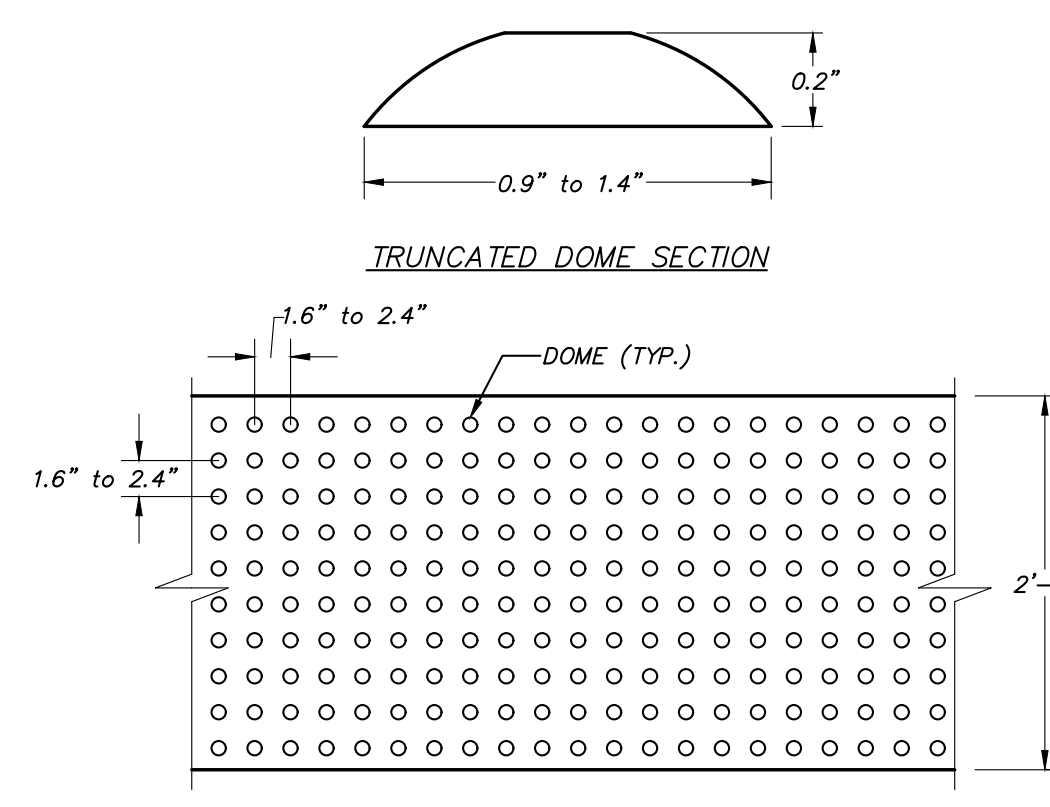
WOOD GUIDE RAIL DETAIL
(N.T.S.)



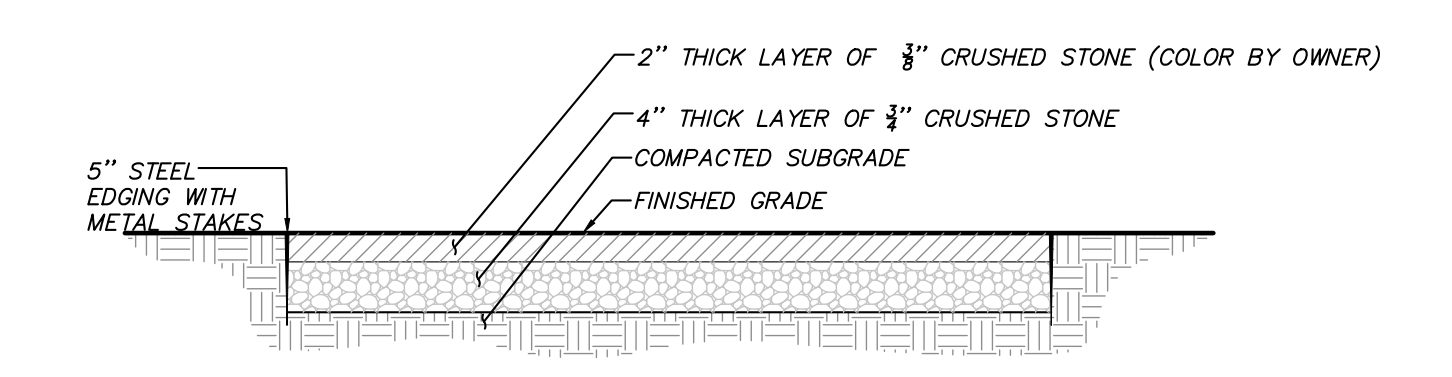
CONCRETE CURB DETAIL
(N.T.S.)



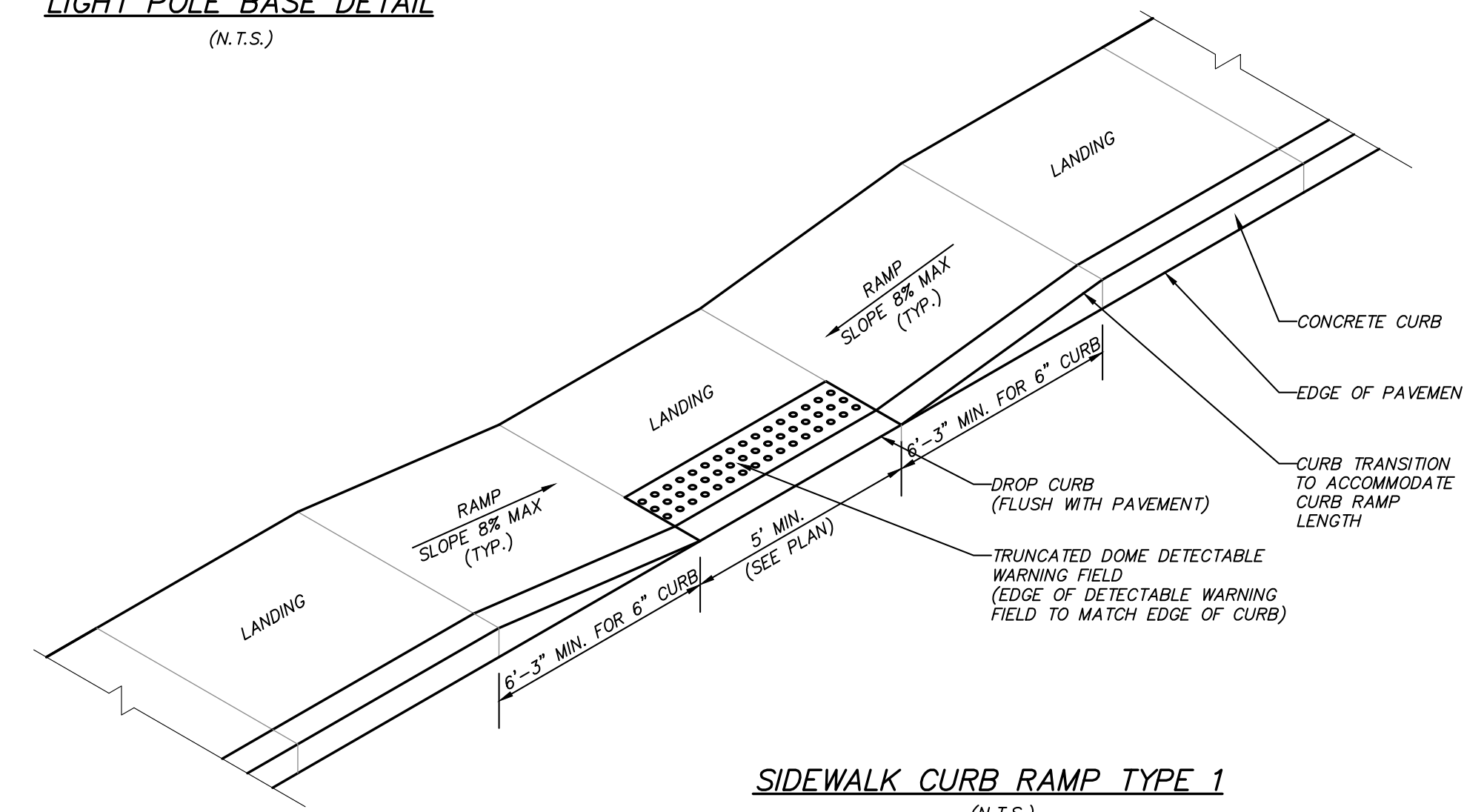
PAINTED STOP BAR DETAIL
(N.T.S.)



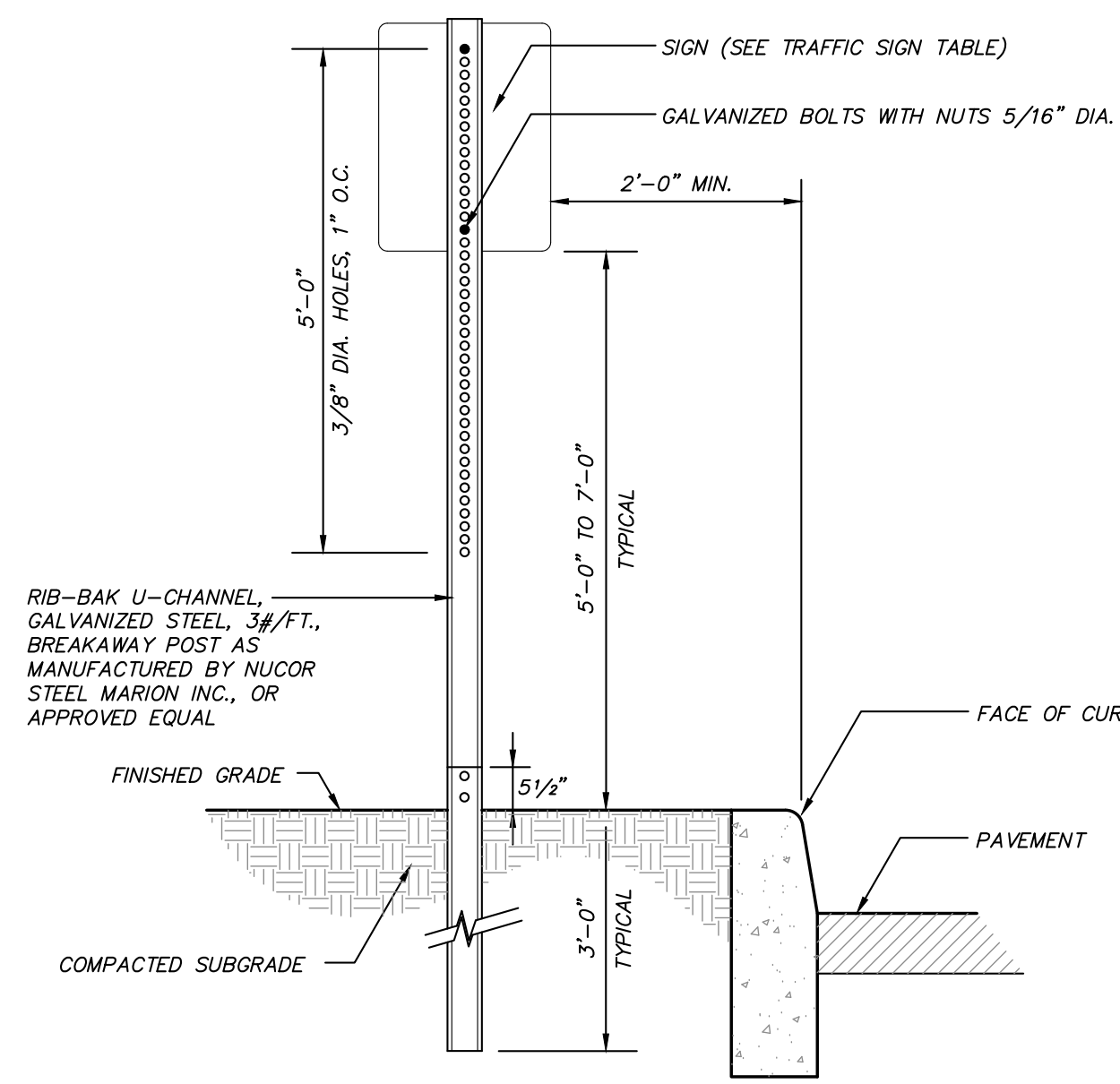
TRUNCATED DOME DETAIL
(N.T.S.)



GRAVEL WALKWAY DETAIL
(N.T.S.)



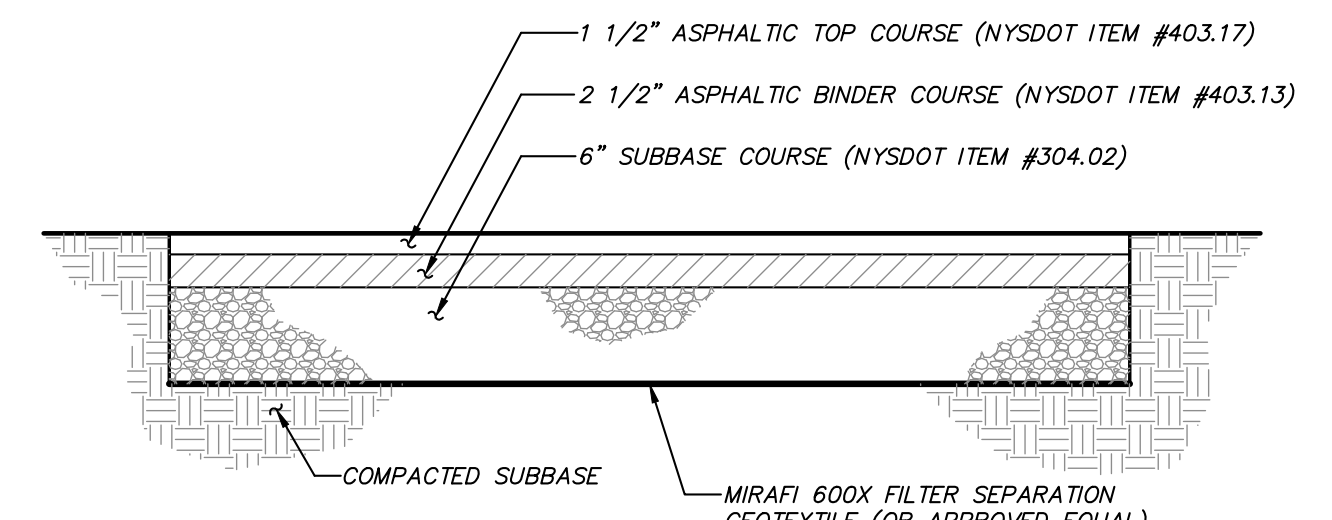
SIDEWALK CURB RAMP TYPE 1
(N.T.S.)



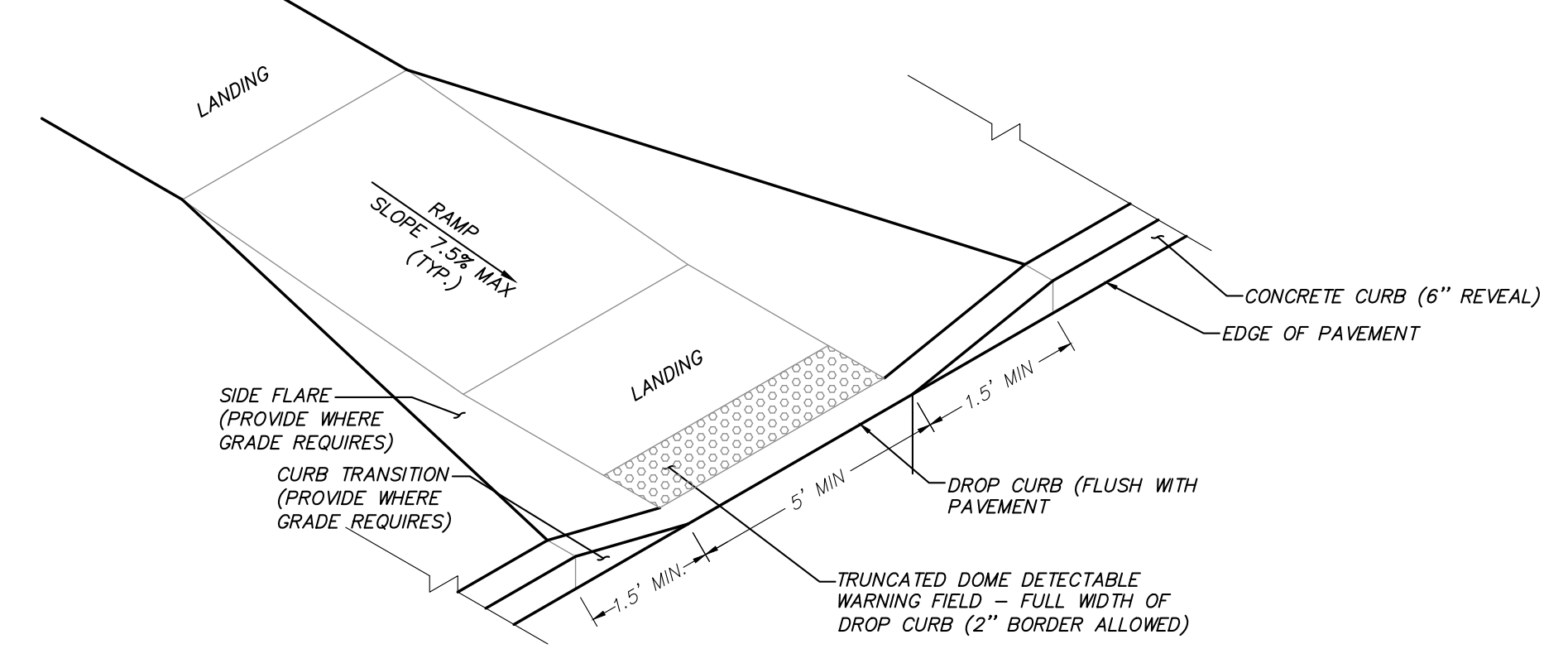
TRAFFIC SIGN DETAIL
(N.T.S.)

TRUNCATED DOME DETECTABLE WARNING FIELD NOTES:

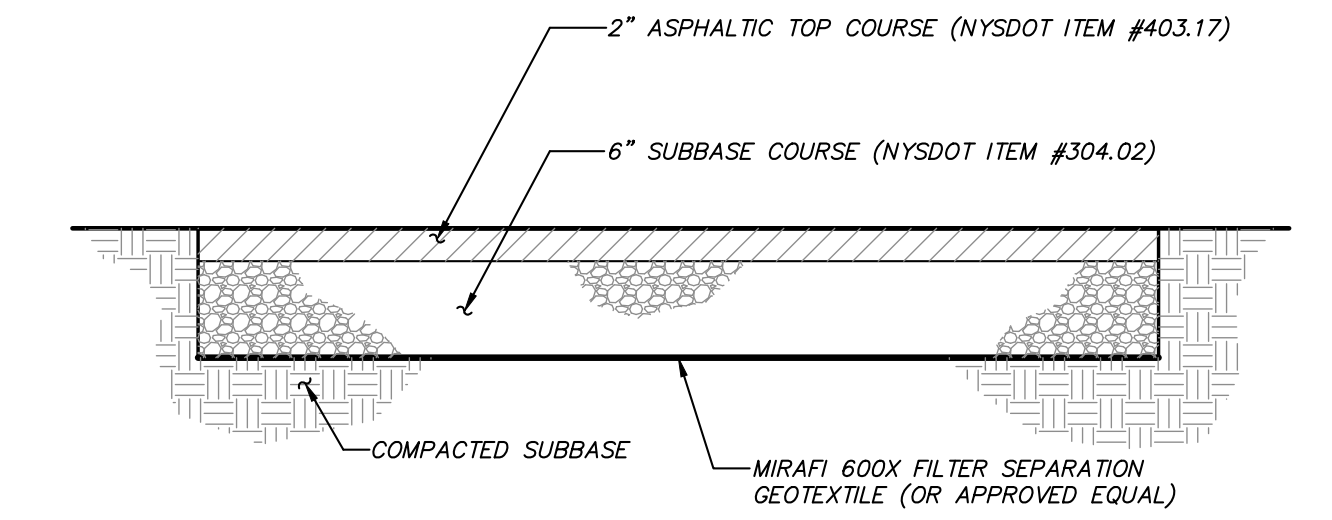
- The detectable warning field shall consist of raised truncated domes with a nominal diameter of 0.9 inches, a nominal height of 0.2 inches, and a nominal spacing of 2.35 inches on center in accordance with the most recent version of ANSI ICC 117.1.
- The details provided are not drawn to scale. The quantity of domes depicted on the detectable warning field (the domes and the entire 24 inch surface) is for illustration only.
- 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.
- Detectable warnings shall be located so that the edge of the warning field nearest to the roadway/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.
- Domes shall be aligned on a square grid in the predominant direction of travel.
- The detectable warning field shall be yellow.



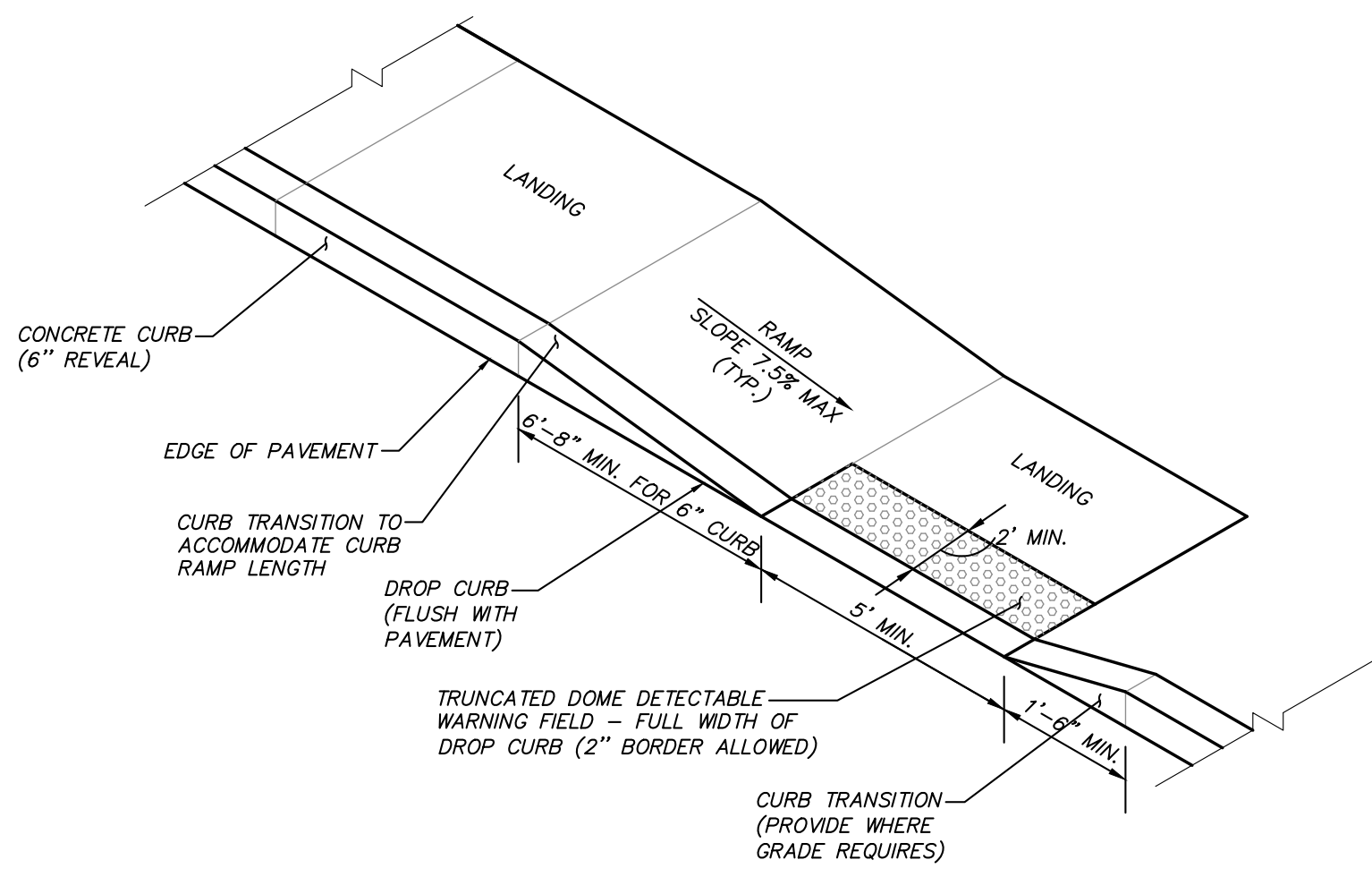
RIGHT OF WAY ASPHALT DETAIL
(N.T.S.)



SIDEWALK CURB RAMP TYPE 2
(N.T.S.)



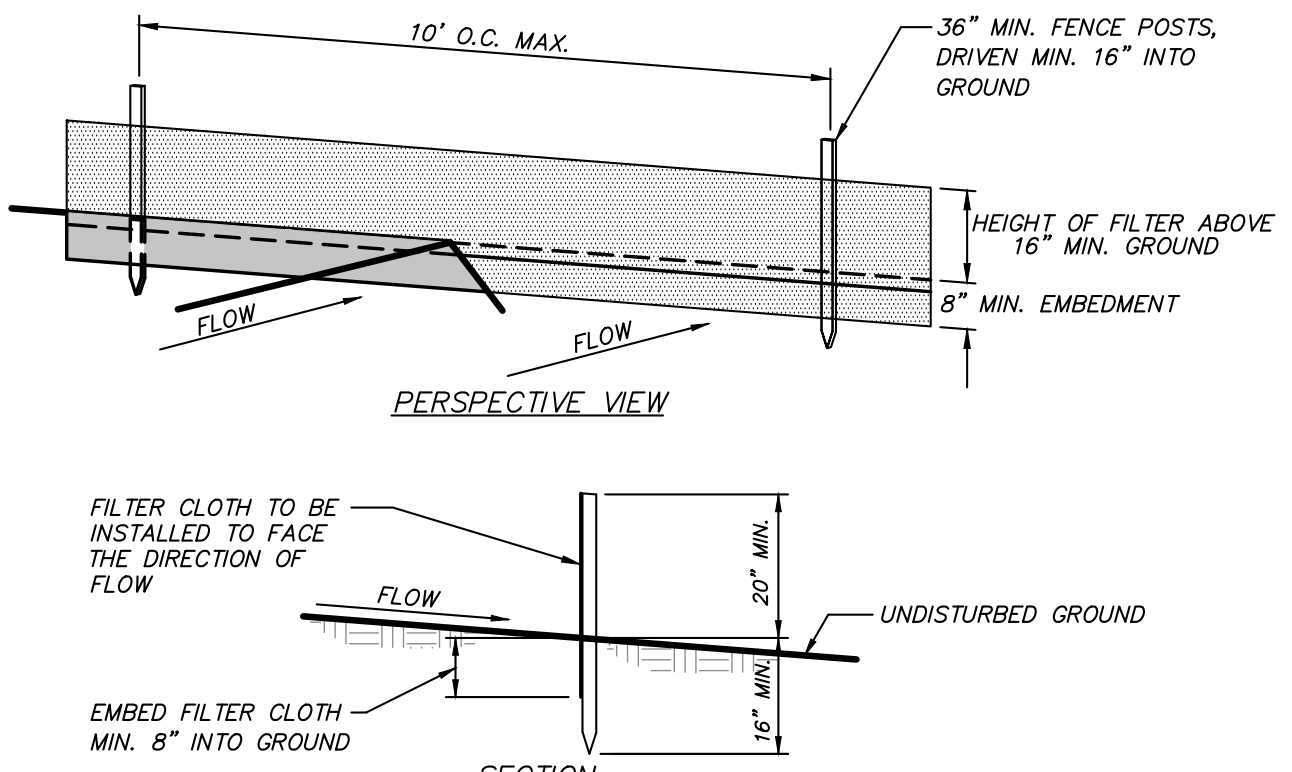
PRIVATE DRIVEWAY ASPHALT DETAIL
(N.T.S.)



SIDEWALK CURB RAMP TYPE 3
(N.T.S.)

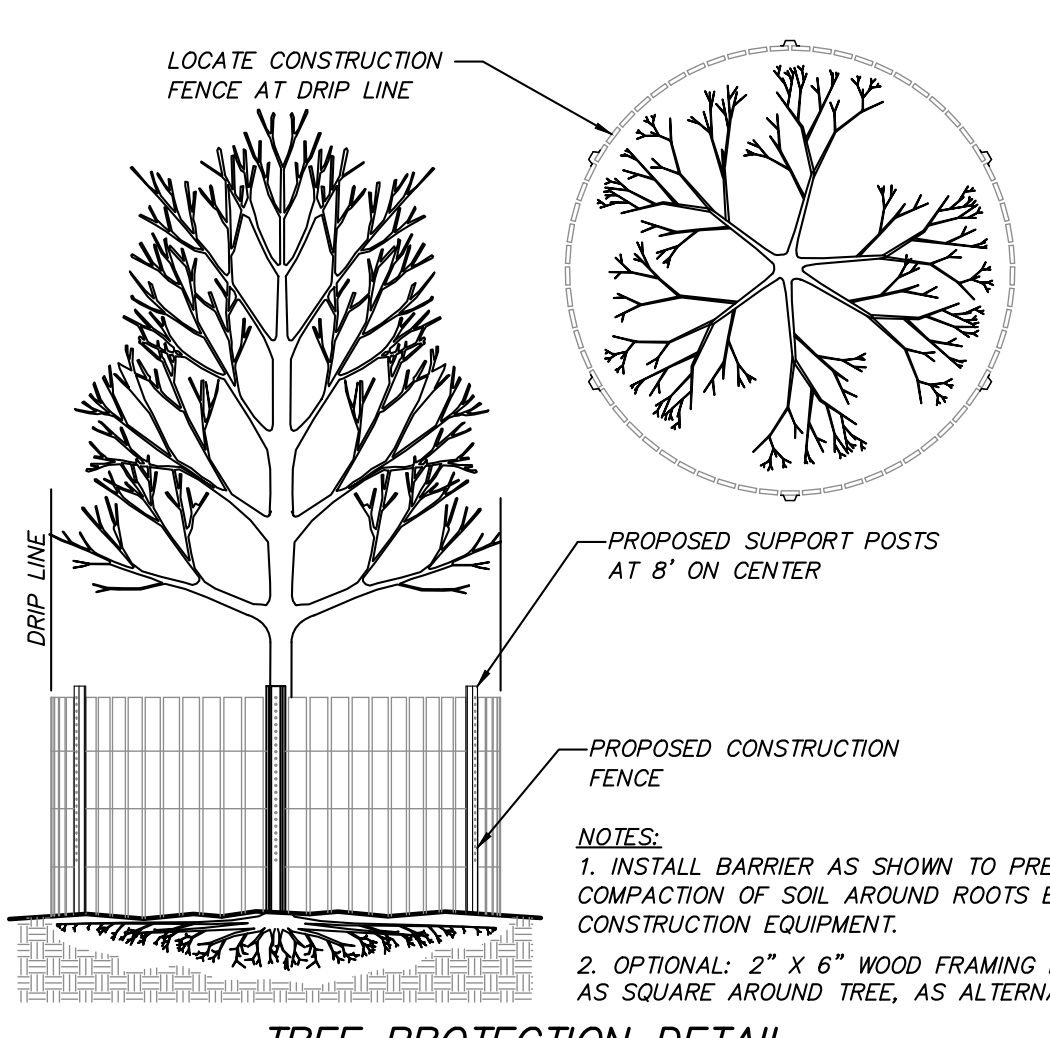
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| | | | |
|----------------|-----------|---|--------|
| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | JFR |
| NO. | DATE | REVISION | BY |
| | | | |
| PROJECT: | | 3 Garrett Place Carmel, NY 12012 (845) 225-9690 (845) 225-9717 fax www.insite-eng.com | |
| DRAWING: | | | |
| PROJECT NUMBER | 19131.100 | PROJECT MANAGER | J.J.C. |
| DATE | 8-27-19 | DRAWN BY | J.F.R. |
| SCALE | AS NOTED | CHECKED BY | A.D.T. |
| DRAWING NO. | | SHEET | |
| D-1 | | 7 | |
| | | 11 | |



- 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 'SULGES' DEVELOP IN THE SILT FENCE.

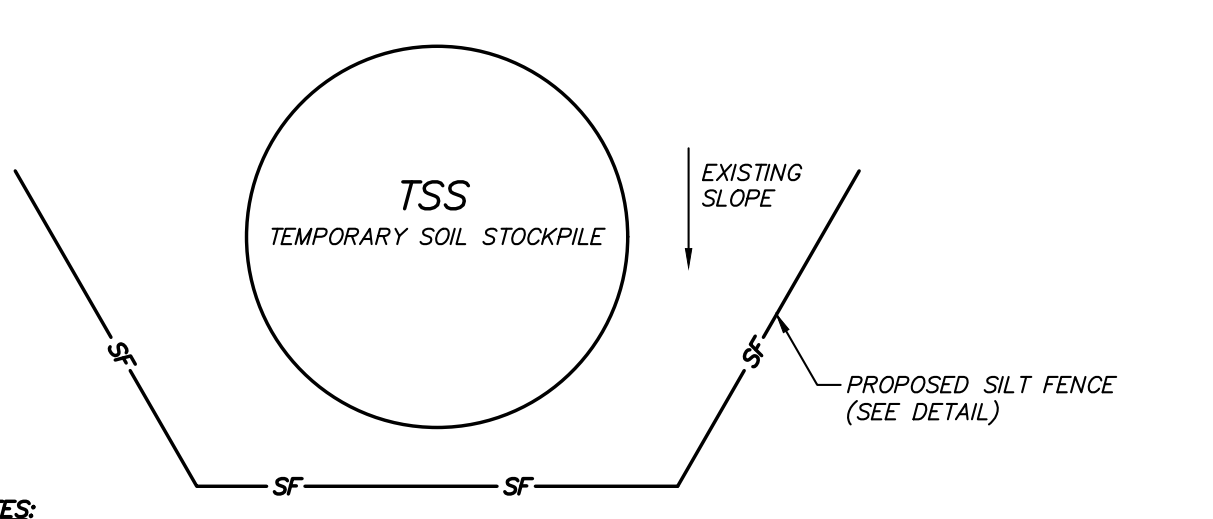
SILT FENCE DETAIL
(N.T.S.)



TREE PROTECTION DETAIL
(N.T.S.)

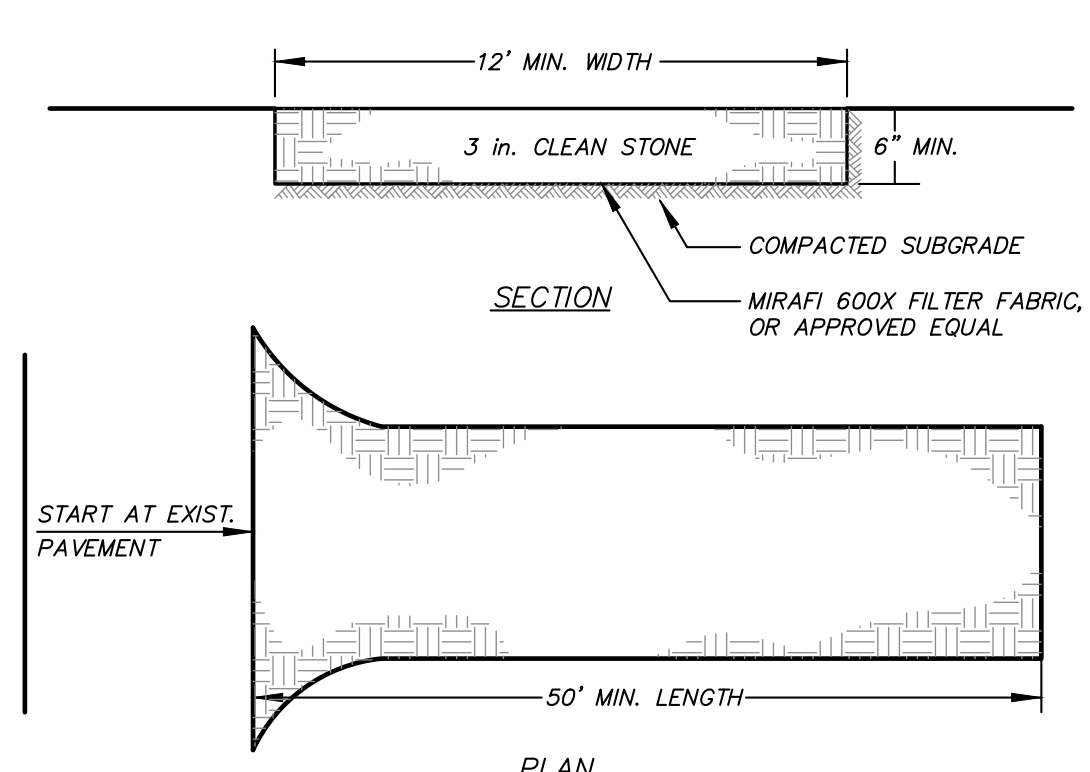
TREE PROTECTION NOTES:

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.



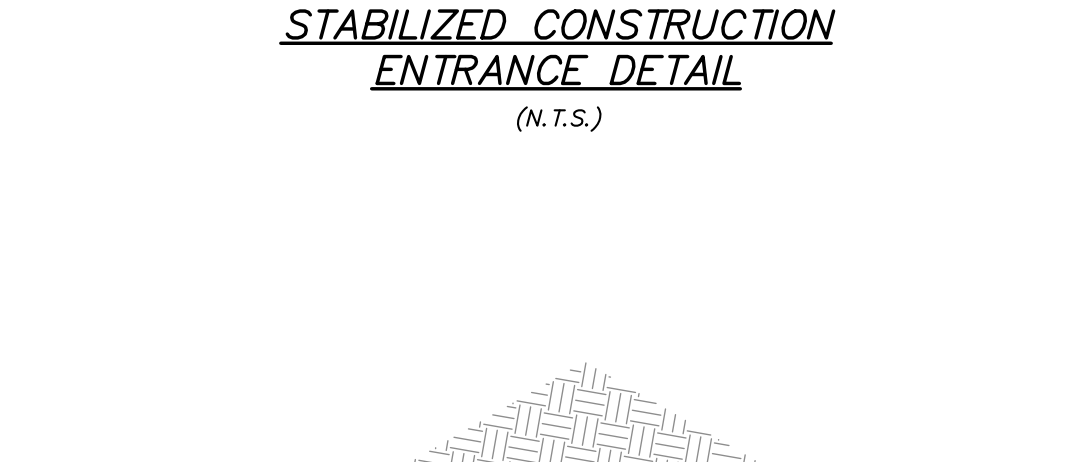
TEMPORARY SOIL STOCKPILE DETAIL
(N.T.S.)

- 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 STOCKPILES, EACH PILE SHALL BE IMMEDIATELY SEEDED WITH KEY PERENNIAL TALL FESCUE PERMANENT SEEDING.
 4. ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED ON THE DOWNGRADIENT SIDE.



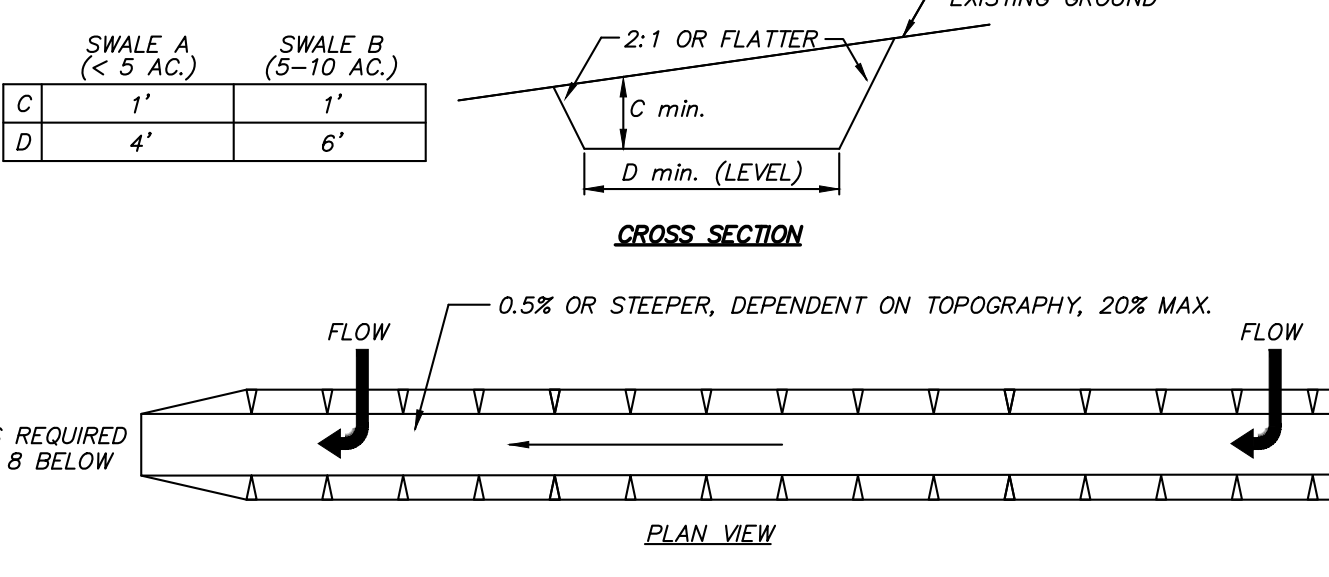
STABILIZED CONSTRUCTION ENTRANCE DETAIL
(N.T.S.)

- 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 FIRED 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 SKILLED, 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.



EXCAVATED DROP INLET PROTECTION 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



TEMPORARY SWALE DETAIL
(N.T.S.)

- 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 EXCELSION |
| 3 | 5.1-8.0% | SEED WITH JUTE OR EXCELSION; 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 EROSION CONTROL SWPPP CONTENTS:

- Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-20-001), all Stormwater Pollution Prevention Plans (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.1.a) of General Permit GP-20-001:
- a. Background information: The subject project consists of the construction of (7) 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 Bernardsville Soil Loam (S6), Canadigua Soil Loam (S3), and Nassau-Carleton Complex (Nec) as identified on the Soil Conservation Service Web Soil 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 Erosion and Sediment Control Maintenance Schedule has been provided. The Sedimentation and Erosion Control Notes contained herein 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 herein serve to satisfy this SWPPP requirement.
 - f. Temporary and permanent soil stabilization plan: The Sedimentation and Erosion Control Notes and Details provided herein 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-20-001. 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 materials 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."

REQUIRED POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS:

1. Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-20-001), all construction projects requiring 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 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 required SWPPP components is provided in accordance with Part III.B.2.a) 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 herein 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 herein 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 design 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 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 installation, operation 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-20-001.
3. All construction activities involving the removal or disturbance of soil are to be performed with appropriate measures to minimize erosion and contain sediment discharges within the site. Minimum soil erosion and sediment control measures 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.
4. Wherever feasible, natural vegetation shall be retained and protected. Disturbance shall be minimized in the areas of proposed development. No more than 5 acres of unprotected soil shall be exposed at any one time, unless prior authorization is granted by the MSA.
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 90 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 earthmoving activities.
8. All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded with a ryegrass 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 NYSDEC 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 operative.
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 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/Repair | Reseed to 80% Coverage |
| INLET PROTECTION | - | Inspect | Inspect | Clean/Repair/Remove | 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 Sumps/Remove Debris/Repair/Replace |
| 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 are permanently stabilized. Note: The party responsible for implementation of the maintenance schedule during and after construction is BEACON VIEWS, LLC, 500 RIVER AVENUE, WAREFIELD, NEW JERSEY 08701 and/or the current owner(s) of the subject property.

SOIL RESTORATION REQUIREMENTS^{1,2}
(ONSTE SOILS WITHIN THE LIMIT OF DISTURBANCE BELONG TO THE HYDROLOGIC SOIL GROUP (HSG) C/D)

| TYPE OF SOIL DISTURANCE | 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 - no change in grade | Apply 6" of topsoil | Protect area from any ongoing construction activities |
| Areas of cut or fill | Apply 6" of topsoil | Restoration ¹ |
| Heavy traffic areas on site (especially in a zone 25-50 feet around buildings but not within a 5 foot perimeter around foundation walls.) | Apply Full Soil Restoration ¹ (de-compaction and compost enhancement) ² | Keep construction equipment from crossing these areas. To protect newly installed practices from any ongoing construction activities construction a single phase operation fence area. |
| Areas where runoff or infiltration practices are applied | Restoration not required, but may be applied for appropriate practices. | Soil restoration is required on redevelopment projects in areas where existing impervious areas will be converted to pervious areas. |
| Redevelopment projects | Restoration is required on redevelopment projects in areas where existing impervious areas will be converted to pervious areas. | |

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 cutters making a narrow slit in the soil, a roller with many spines making indentations in the soil, or prongs which functions like a mini-subsoiler.
4. Per "Deep Ripping and De-compaction, 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 unfiltered stone/rock materials of four inches and larger size are cleaned off the site.
 - 5.4. Apply topsoil to a depth of 6 inches.
 - 5.5. Vegetate as required by Erosion & Sediment Control Note #8.
 - 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.

| | | | |
|---|-----------|--------------------------------|--------|
| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | JFR |
| NO. | DATE | REVISION | BY |
| | | | |
| PROJECT: BEACON VIEWS CITY OF BEACON, DUTCHESS COUNTY, NEW YORK | | | |
| DRAWING: DETAILS | | | |
| PROJECT NUMBER | 19131.100 | PROJECT MANAGER | J.J.C. |
| DATE | 8-27-19 | DRAWN BY | J.F.R. |
| SCALE | AS NOTED | CHECKED BY | A.D.T. |
| DRAWING NO. | D-3 | | |
| SHEET | 9 | | |
| | 11 | | |

SEWER TESTING PROCEDURES

TESTS FOR NON-PRESSURE PIPELINES FOR TRANSPORT OF SEWAGE

The leakage shall be determined by exfiltration, infiltration or low pressure air.

- Exfiltration Testing**
 - Exfiltration tests shall be made by filling a section of pipeline with water and measuring the quantity of leakage.
 - 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.
 - 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.
 - Should the requirement of 2 feet of water above the highest pipe subject any joint of the lower end of the test section to a differential head of greater than 11.5 feet, another method of testing shall be employed.
- Infiltration Testing**
 - 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.
 - Infiltration test shall be made by measuring the quantity of water leaking into a section of pipeline.
 - Measurement of the infiltration shall be by means of a calibrated weir constructed at the outlet of the section being tested.
- Allowable Leakage for Non-Pressure Pipelines**
 - 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 |
 - Regardless of the above allowable leakage, any spurring leaks detected shall be permanently stopped.

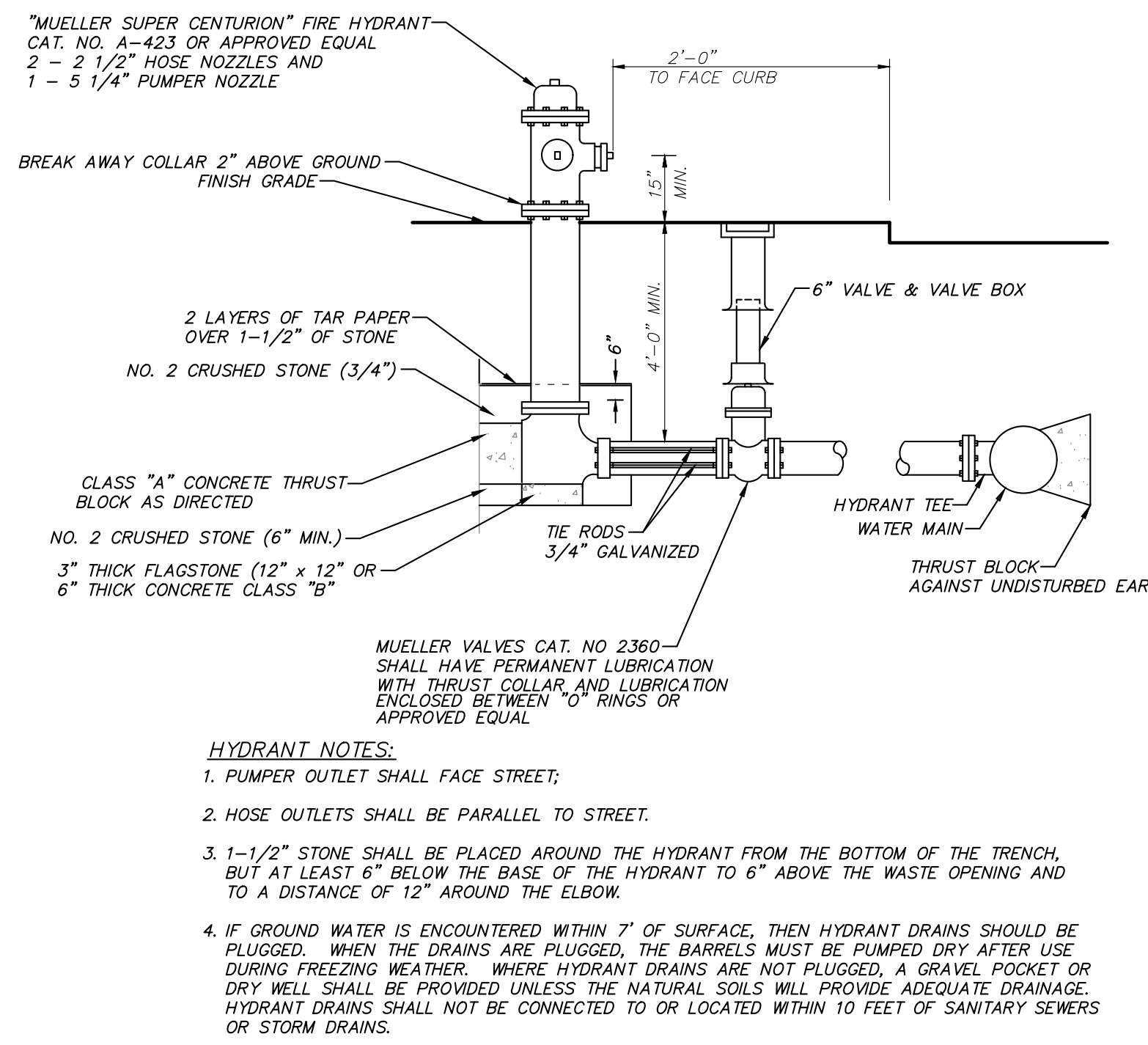
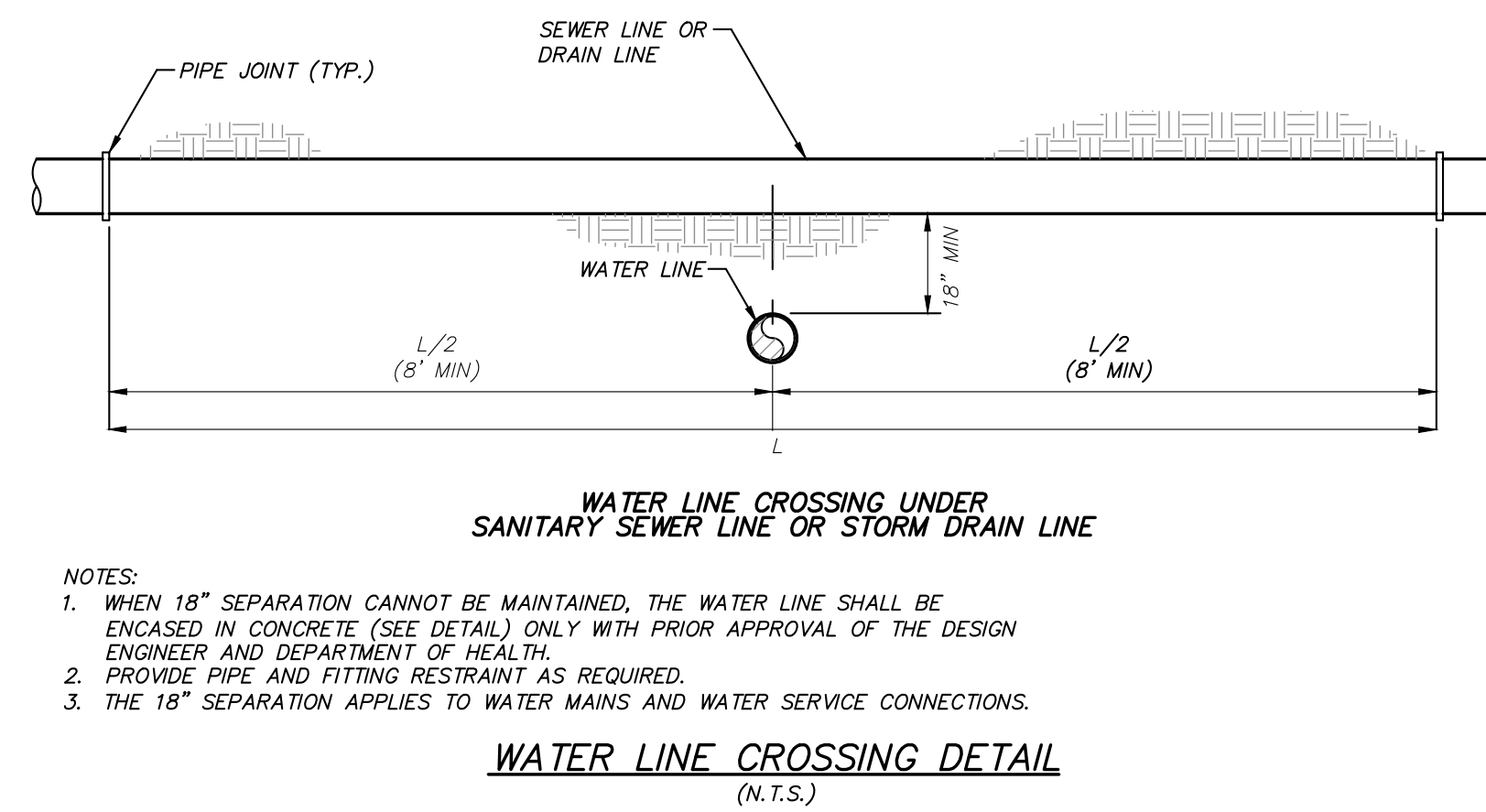
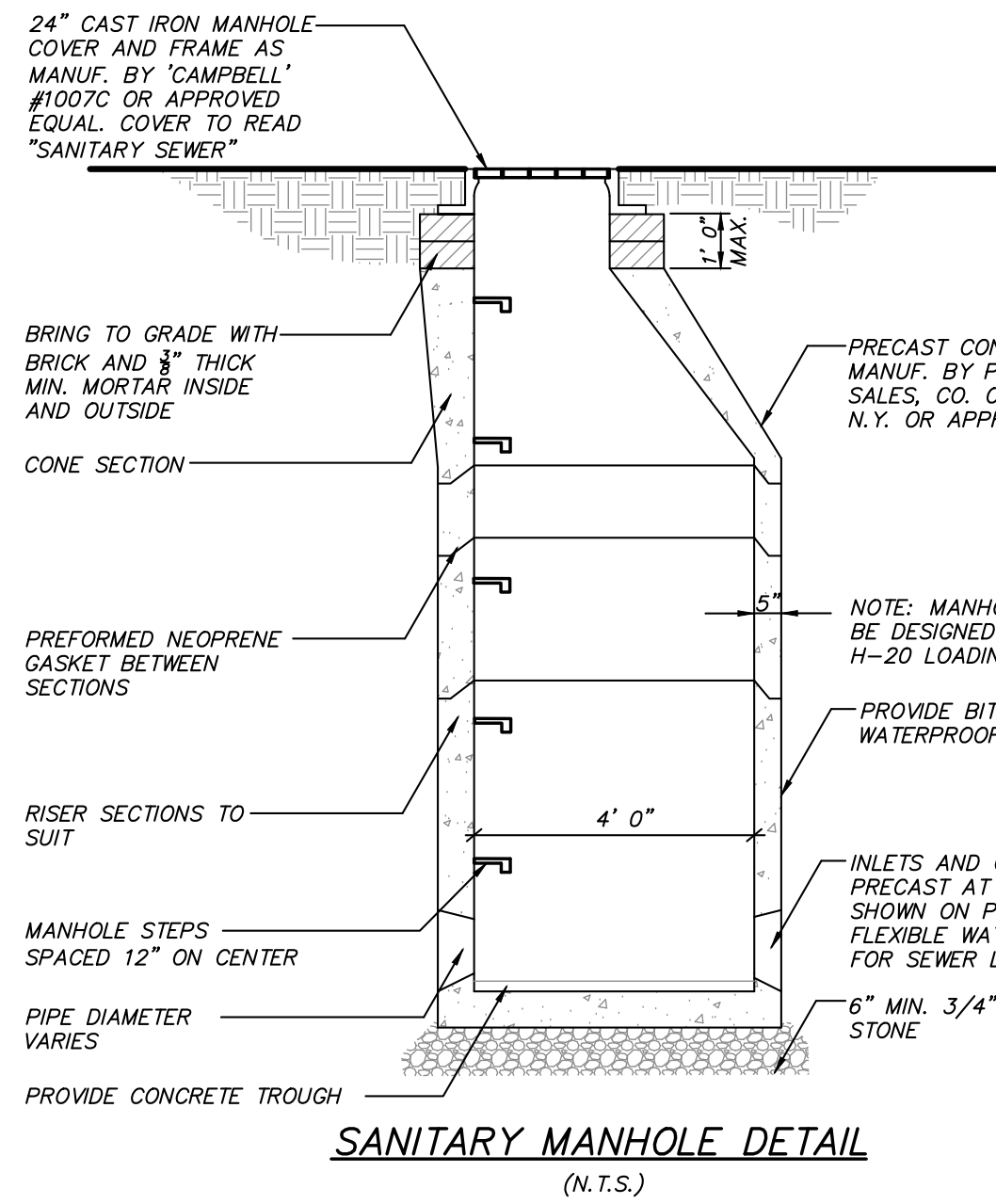
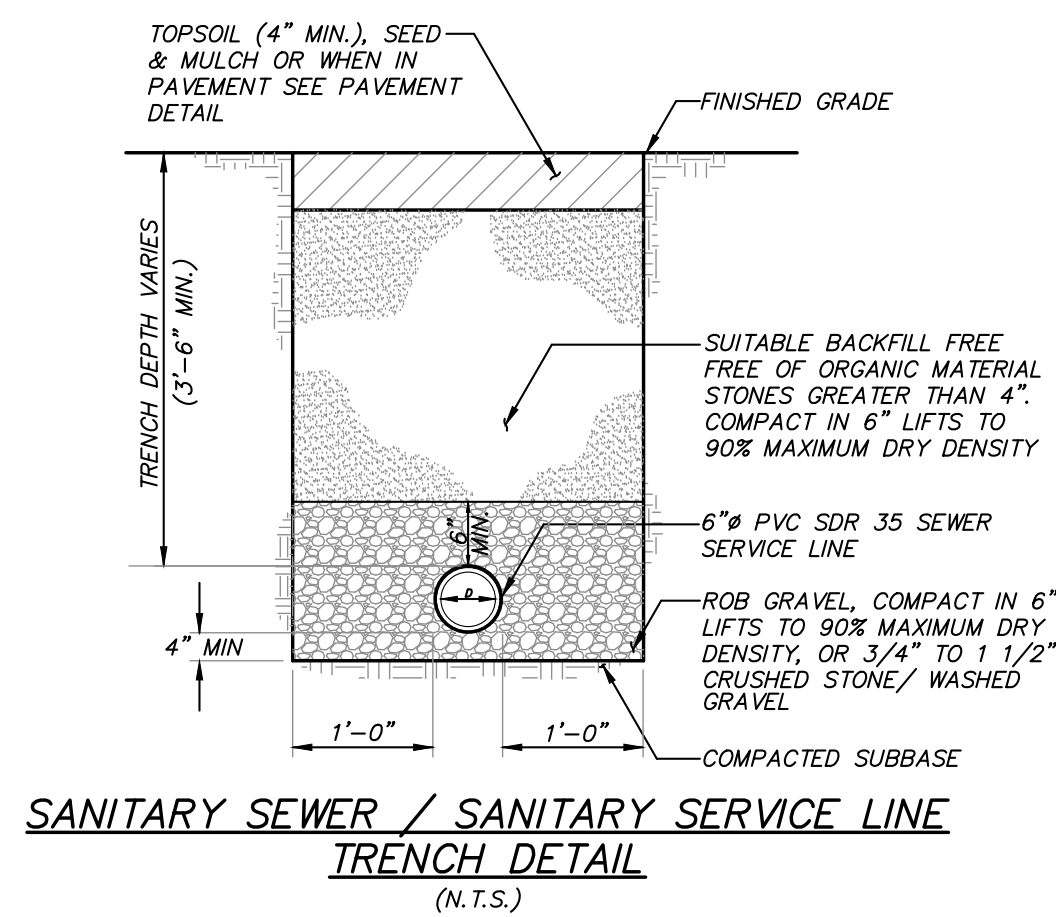
- Low Pressure Air Testing**
 - Air testing for acceptance shall not be performed until the backfilling has been completed.
 - Low pressure air tests shall conform to ASTM D1417-92, Section 8.2.2, Time-Pressure Drop Method for a 0.5 psi drop, except as specified herein and shall not be limited to type or size of pipe.
 - All sections of pipelines shall be cleaned and flushed prior to testing.
 - 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.
 - When groundwater is present, the average test pressure of 3 psig shall be above any back pressure due to the groundwater level.
 - The maximum pressure allowed under any condition in air testing shall be 10 psig. The maximum groundwater level for air testing is 1.3 feet above the top of the pipe.
 - The equipment required for air testing shall be furnished by the Contractor and shall include the necessary compressor, valves, gauges and plugs to allow the monitoring of the pressure, release of pressure and a separable test gauge.
 - The test gauge shall be sized to allow for the measuring of a 0.5 psig loss allowed during the test period and shall be on a separate line to the test section.

- Deflection Testing**
 - Deflection testing shall be performed 30 days after backfilling. The test shall be made by passing a ball or cylinder no less than 95% of the pipe diameter through the pipe. The test shall be performed without mechanical pulling devices.
- Manhole Testing**
 - General**
 - Each manhole shall be tested by vacuum testing.
 - Vacuum testing shall be performed after backfilling in accordance with the latest revision of ASTM C1244-11 as follows:
 - The test head shall be placed at the top of the manhole in accordance with the manufacturer's recommendations.
 - 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.
 - 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:

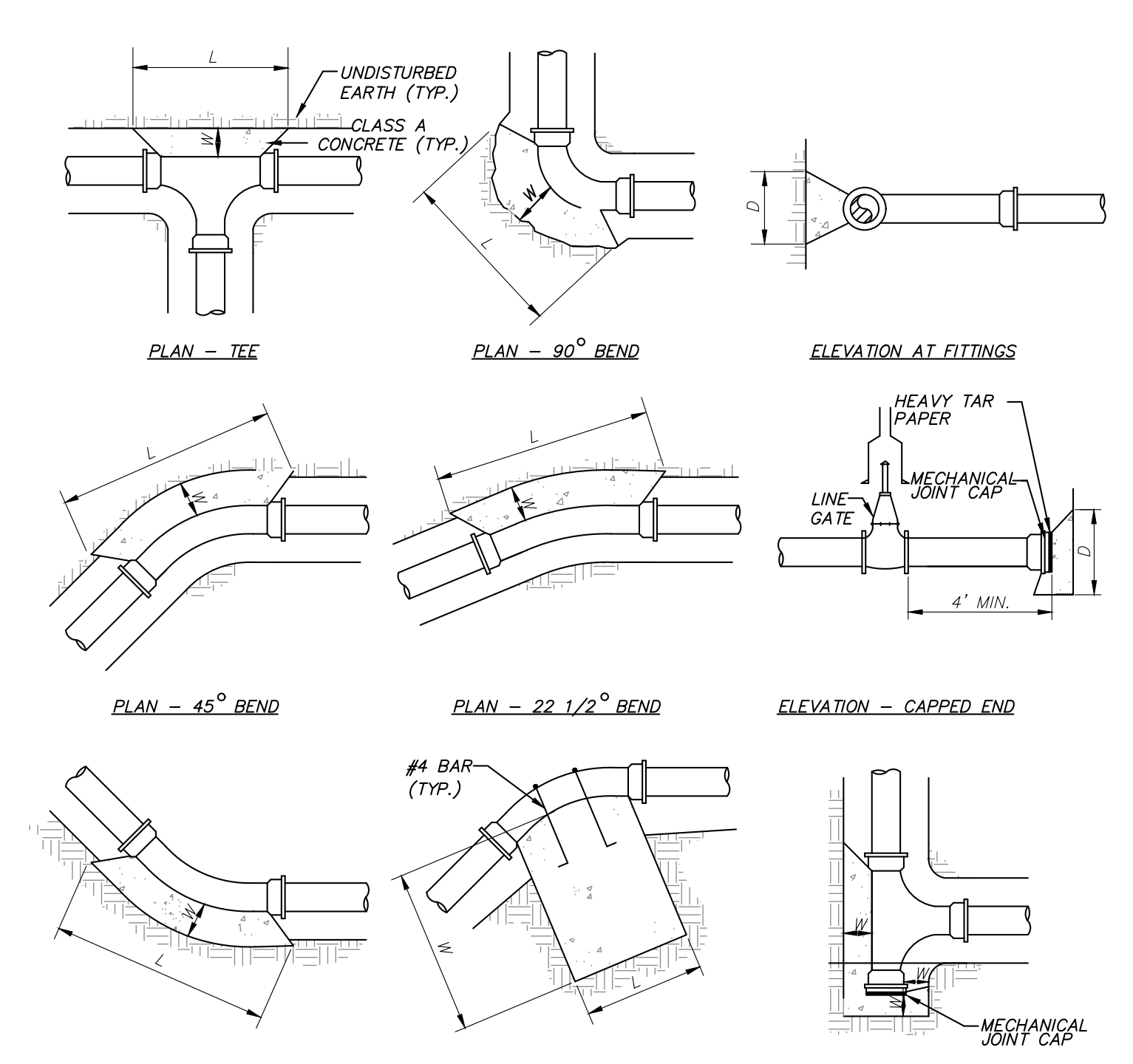
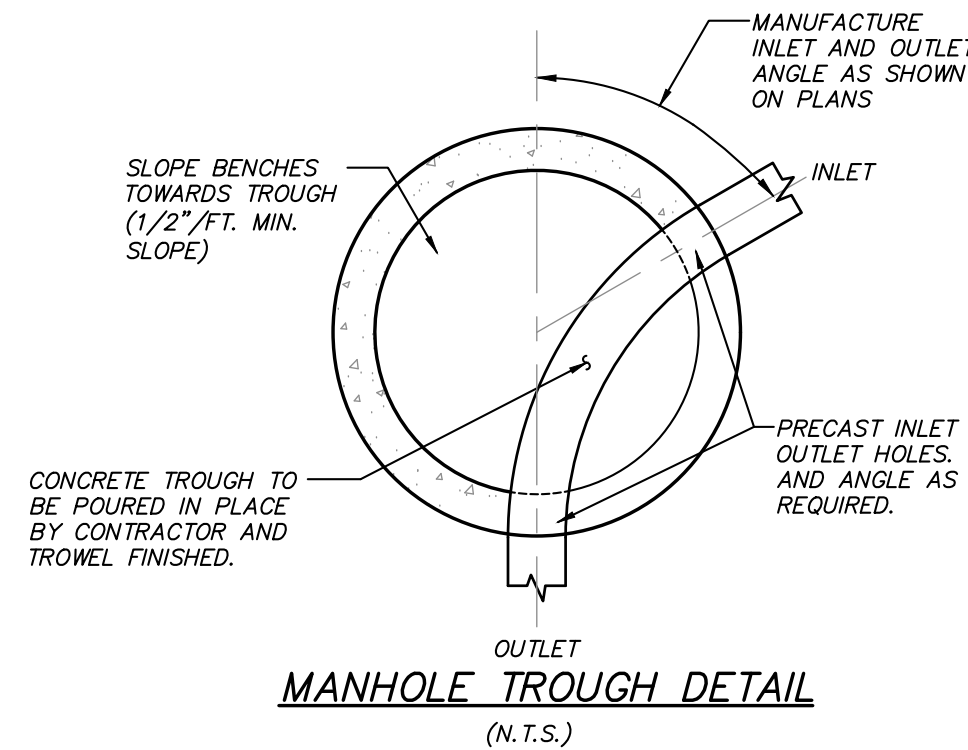
| Depth (ft) | Diameter (inches) | Time (seconds) |
|------------|-------------------|----------------|
| 8 or less | 48 | 60 |
| 10 | 20 | 26 |
| 12 | 25 | 33 |
| 14 | 30 | 39 |
| 16 | 35 | 46 |
| 18 | 40 | 52 |
| 20 | 45 | 59 |
| 20 | 50 | 65 |

- 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.



HYDRANT NOTES:

- PUMPER OUTLET SHALL FACE STREET.
- HOSE OUTLETS SHALL BE PARALLEL TO STREET.
- 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.
- 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.



THRUST BLOCK SCHEDULE

| PIPE SIZE | CAP/TEE | 2x 1/2" | 45° | 90° | W' |
|-----------|---------|---------|-----|------|----|
| 6" | 2' | 1.5' | 2' | 1.5' | 2' |
| 8" | 2' | 1.5' | 2' | 1.5' | 2' |

DUCTILE IRON PIPE WATER TESTING PROCEDURES

TESTS ON PRESSURE PIPING FOR TRANSPORT OF WATER

- Hydrostatic Pressure Test**

Hydrostatic testing shall be performed in accordance with the revision of AWWA C600, Section 5.2, "Hydrostatic Testing."

 - 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.
 - 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.
 - The test medium shall be water.
- Hydrostatic Leakage Test**
 - The leakage test shall be conducted concurrently with the pressure test.
 - 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 the allowable value for three consecutive 15-minute intervals. After this, the test pressure shall be maintained for at least another 15 minutes.
 - At the completion of the test, the pressure shall be released at the furthest point from the point of application.
 - 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.

The allowable leakage will be determined by the following formula:

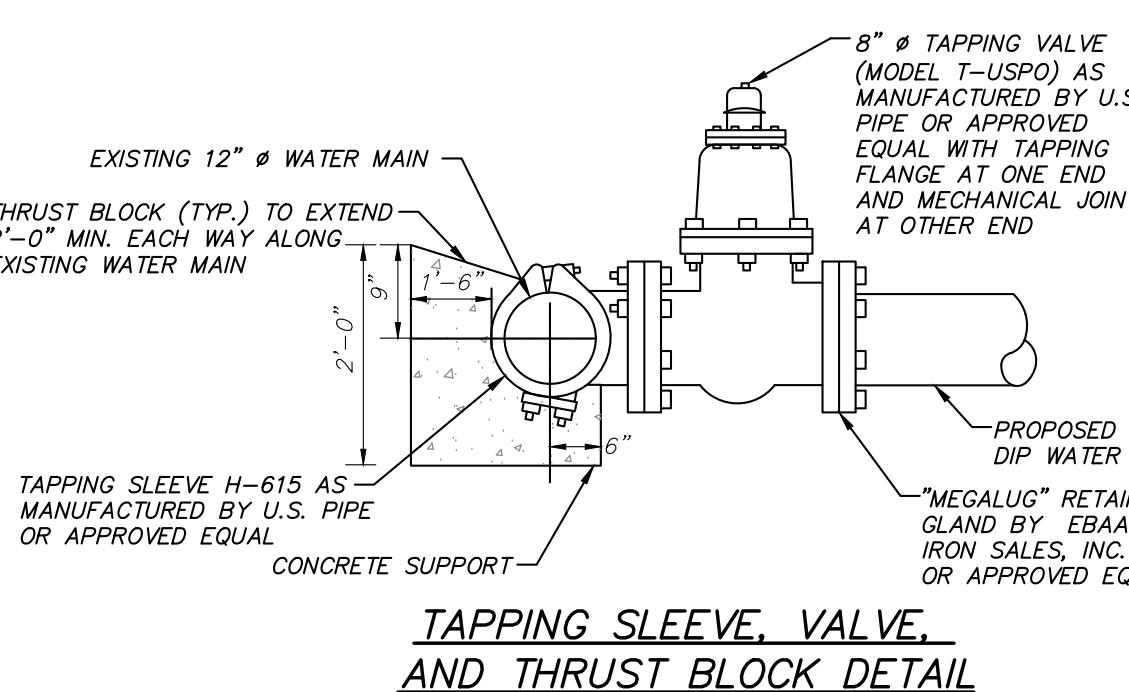
$$Q = \frac{LD\sqrt{P}}{148,000}$$

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)

- Regardless of the above allowables, any visible leaks shall be permanently stopped.
- The test medium shall be water.
- 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.

 - All work under this section shall be performed in the presence of the Design Engineer, or a representative of the public health authority having jurisdiction, as required.
 - 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.
 - 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.
 - Prior to chlorination, all dirt and foreign matter shall be removed by a thorough cleaning and flushing of the pipeline or structure.
 - The chlorine solution shall be introduced to pipelines through cap or plugs placed in the horizontal axis of the pipe, to structures by means of tubing extending directly into the structure, or other approved methods.
 - 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).
 - 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.
 - 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.
 - 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.
 - After the required retention of chlorinated water in the pipe or structure, 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.
 - 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.
 - 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.
 - 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.



Dutchess County Department of Health Notes:

- Standard Notes for Projects with Central Water & Sewer:**
- 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."
 - This plan is approved on meeting the appropriate and applied technical standards, guidelines, policies and procedures for arrangement of sewage disposal and water supply facilities.
 - Upon completion of the facilities, the finished works shall be inspected, tested, and certified complete to the DC EHSB 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 EHSB.
 - 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.
 - No cellar, footing, floor, garage, cooler or roof drains shall be discharged into the sewage collection system.
 - All buildings shall be constructed at an elevation high enough to ensure gravity flow to the sewage collection system.
 - All required Erosion & Sediment Control and Stormwater Pollution Prevention Water Quality & Quantity Control structures, permanent and temporary, are shown on the plans.
 - The DC EHSB shall be notified sixty days prior to any change in use; use changes may require re-approval by the DC EHSB.
 - 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(1) of Part 5 of the New York State Sanitary Code (10NYCRRS).
 - 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.
 - 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.
 - The retaining wall / slope stabilization details shown on the project plans are not certified for structural integrity by the DC EHSB.
 - The undersigned owners of the project's hereto state that they are familiar with this map, its contents and its legends and hereby consent to all said terms and conditions as stated herein.

Owner Signature _____ Date _____

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.)



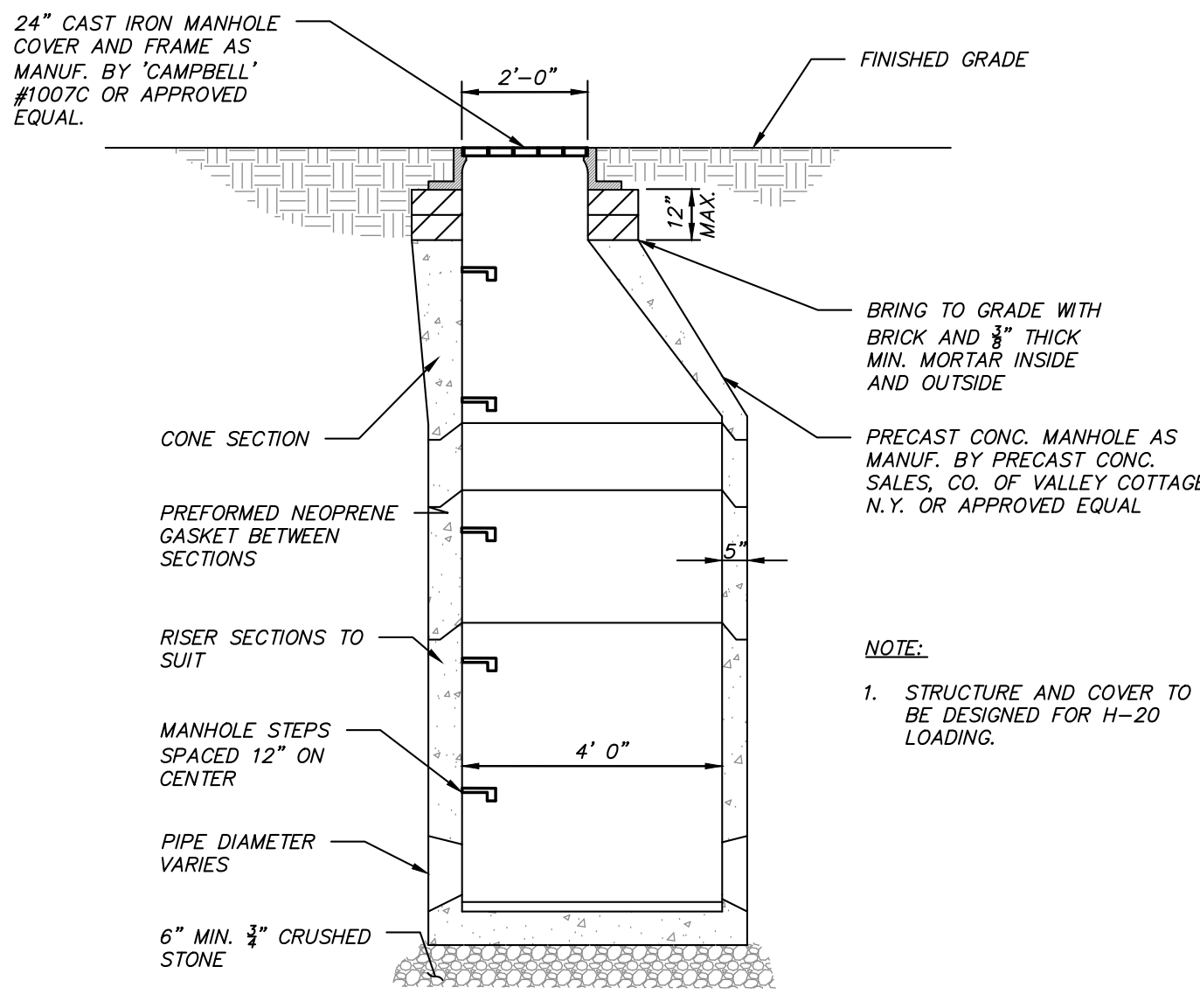
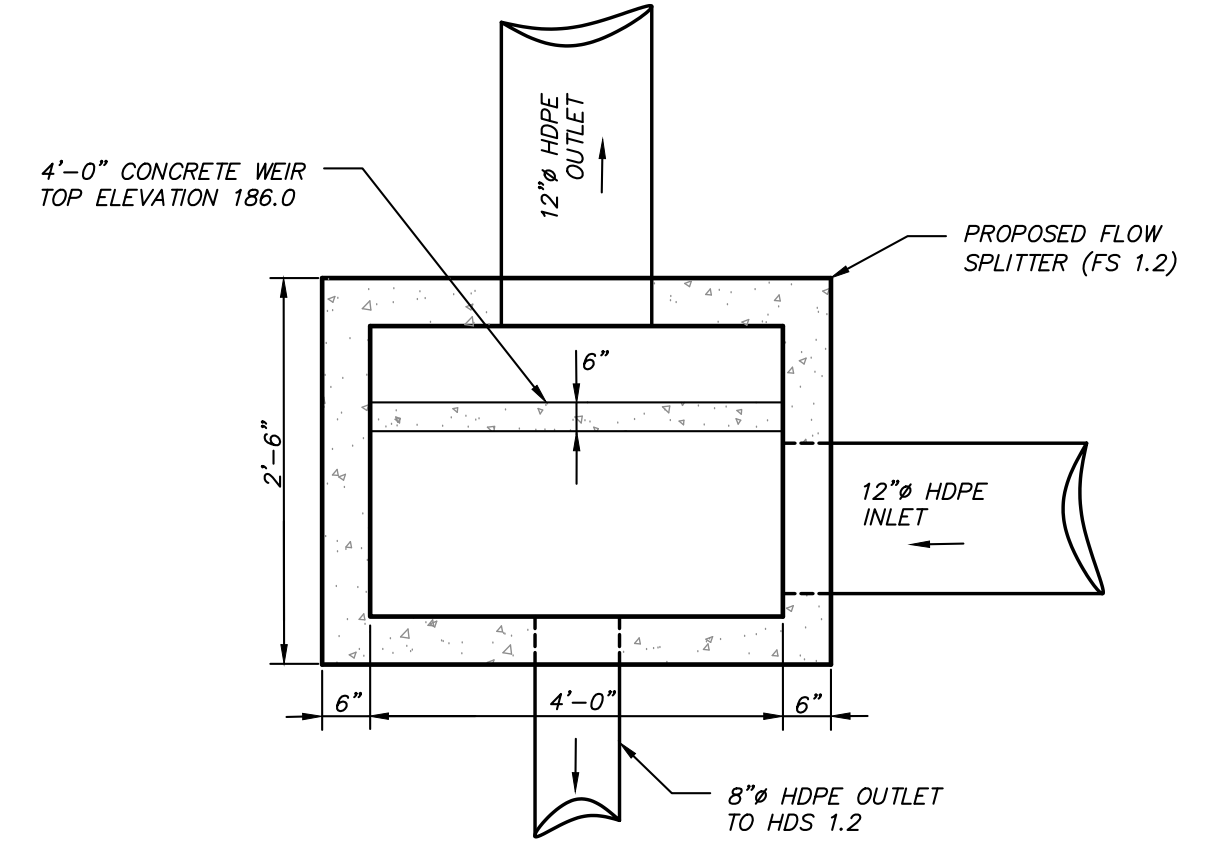
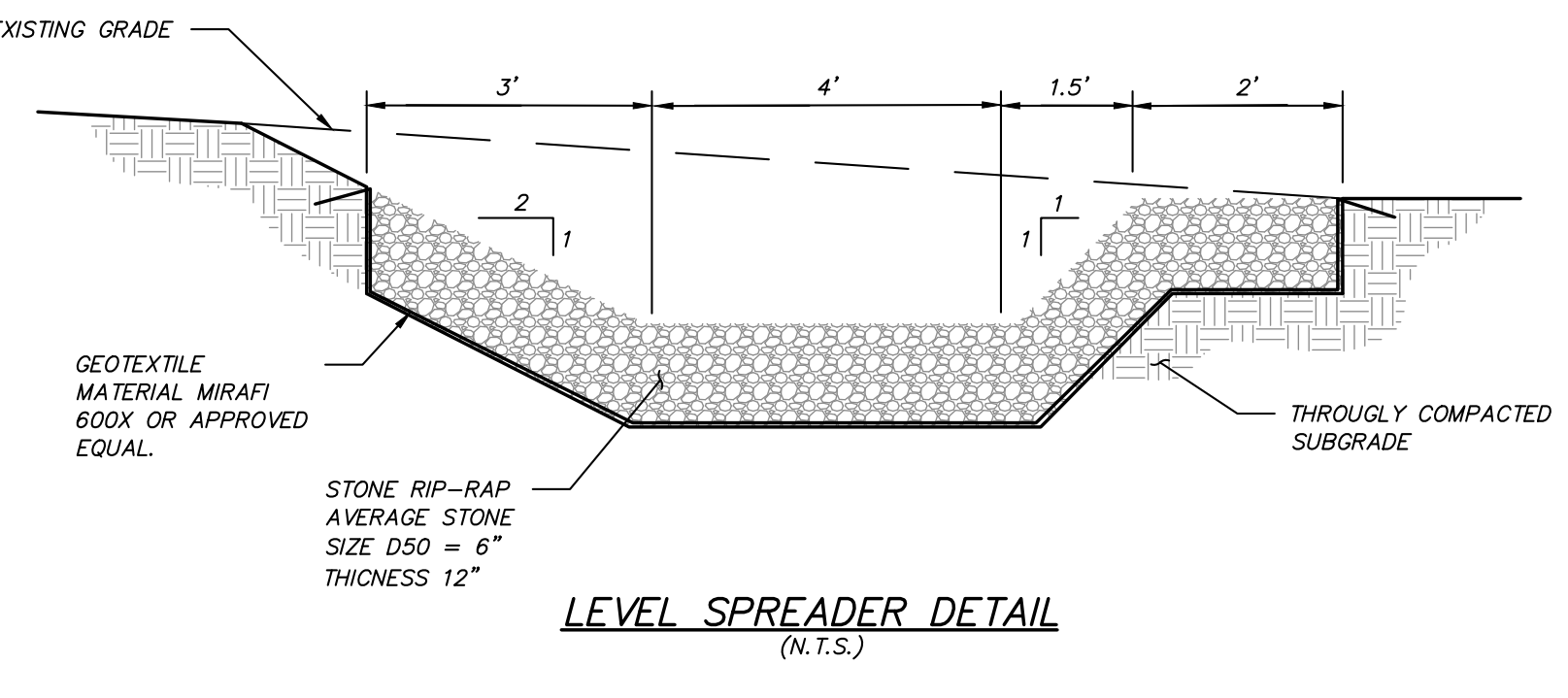
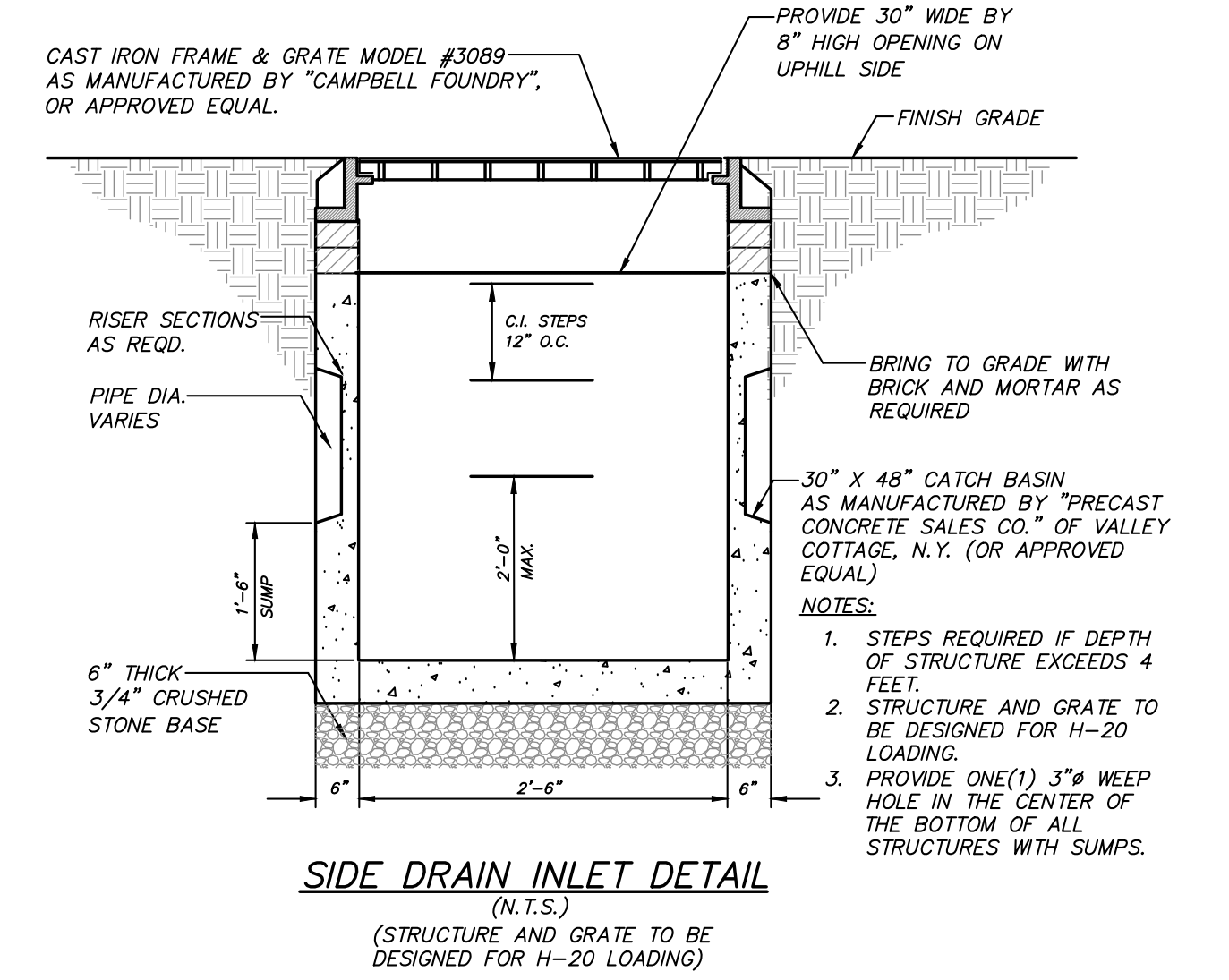
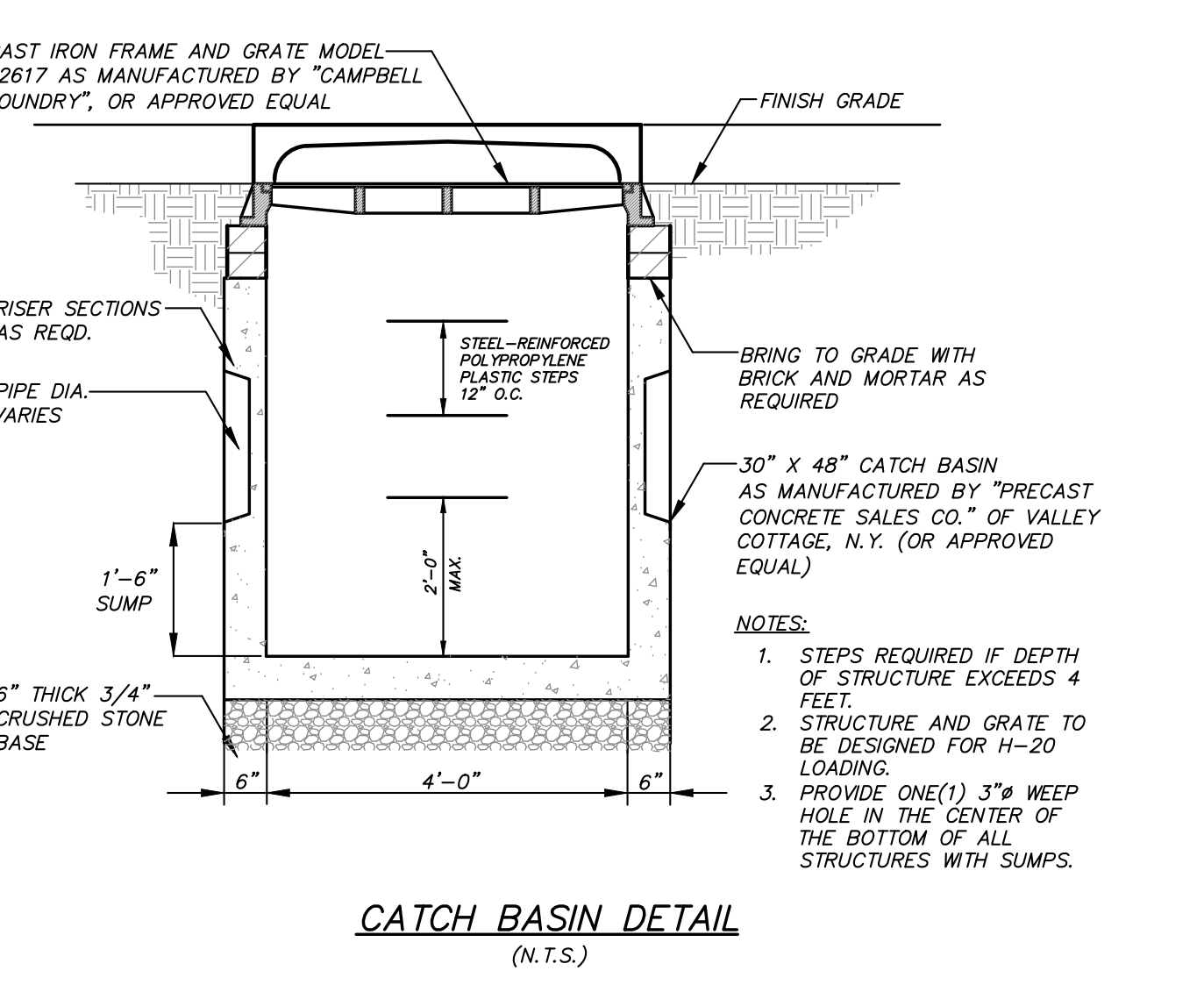
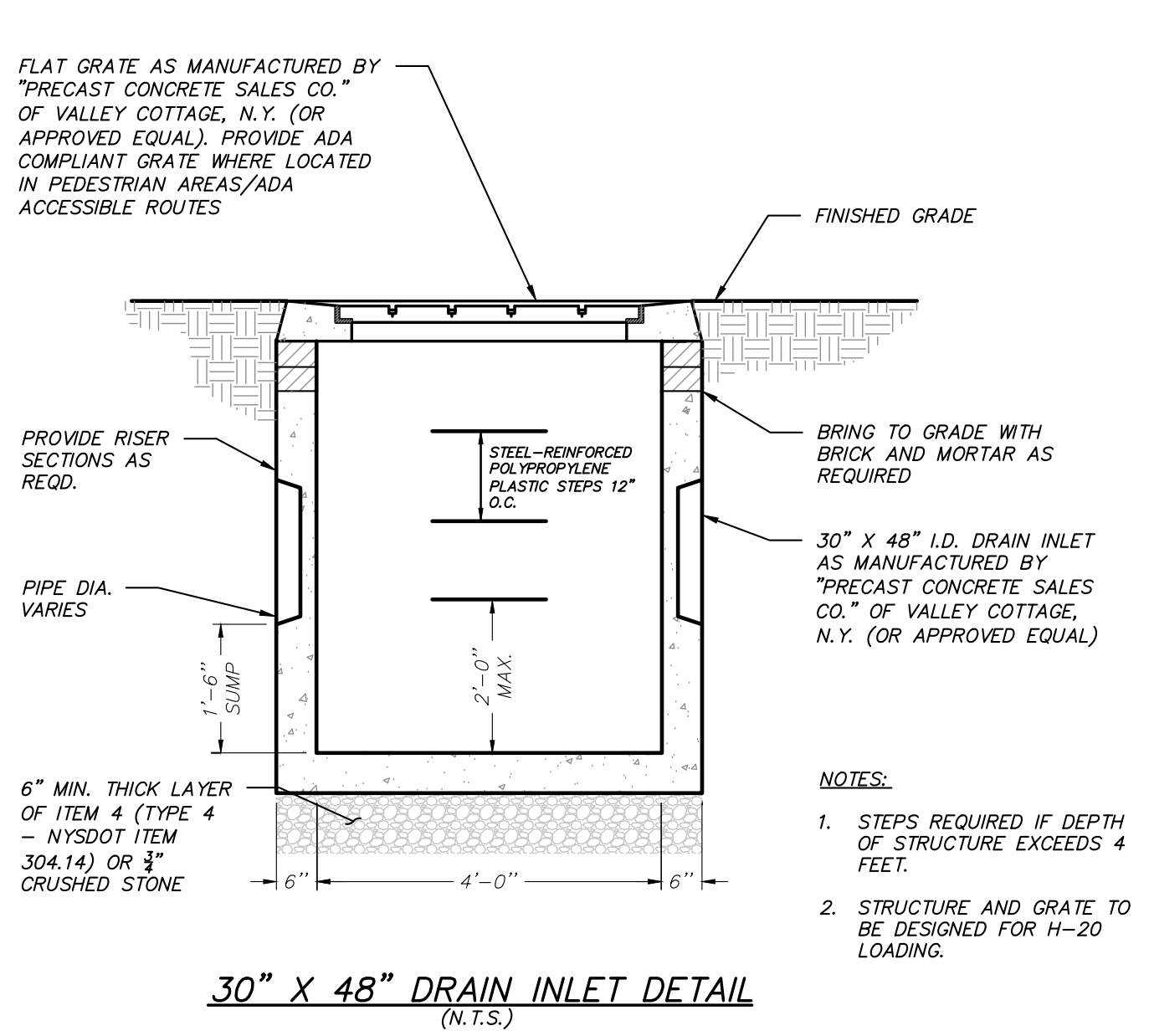
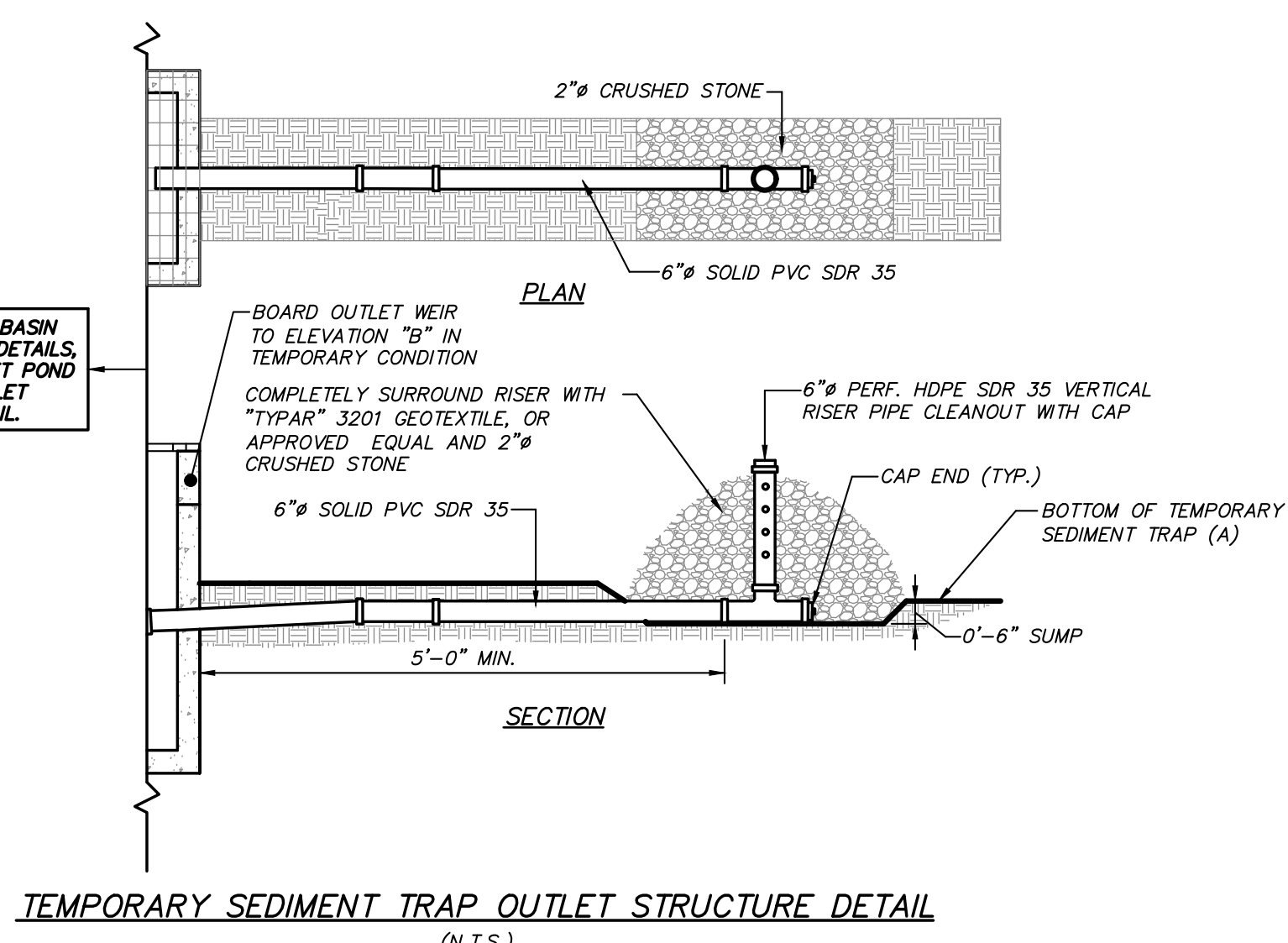
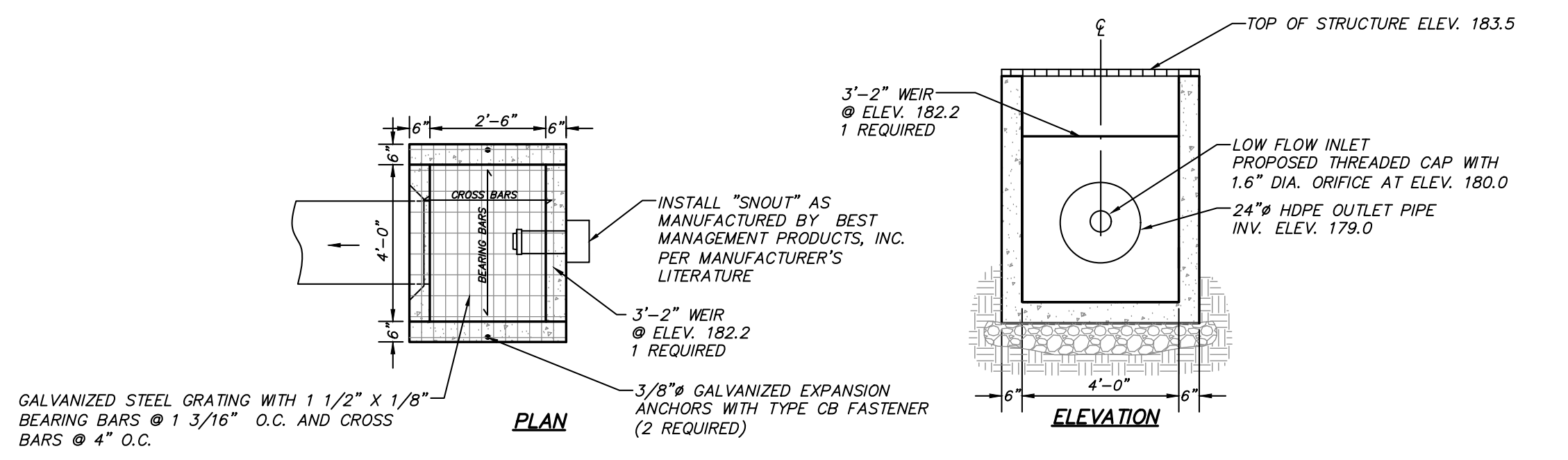
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3 Garrett Place
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PROJECT: **BEACON VIEWS**
 CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

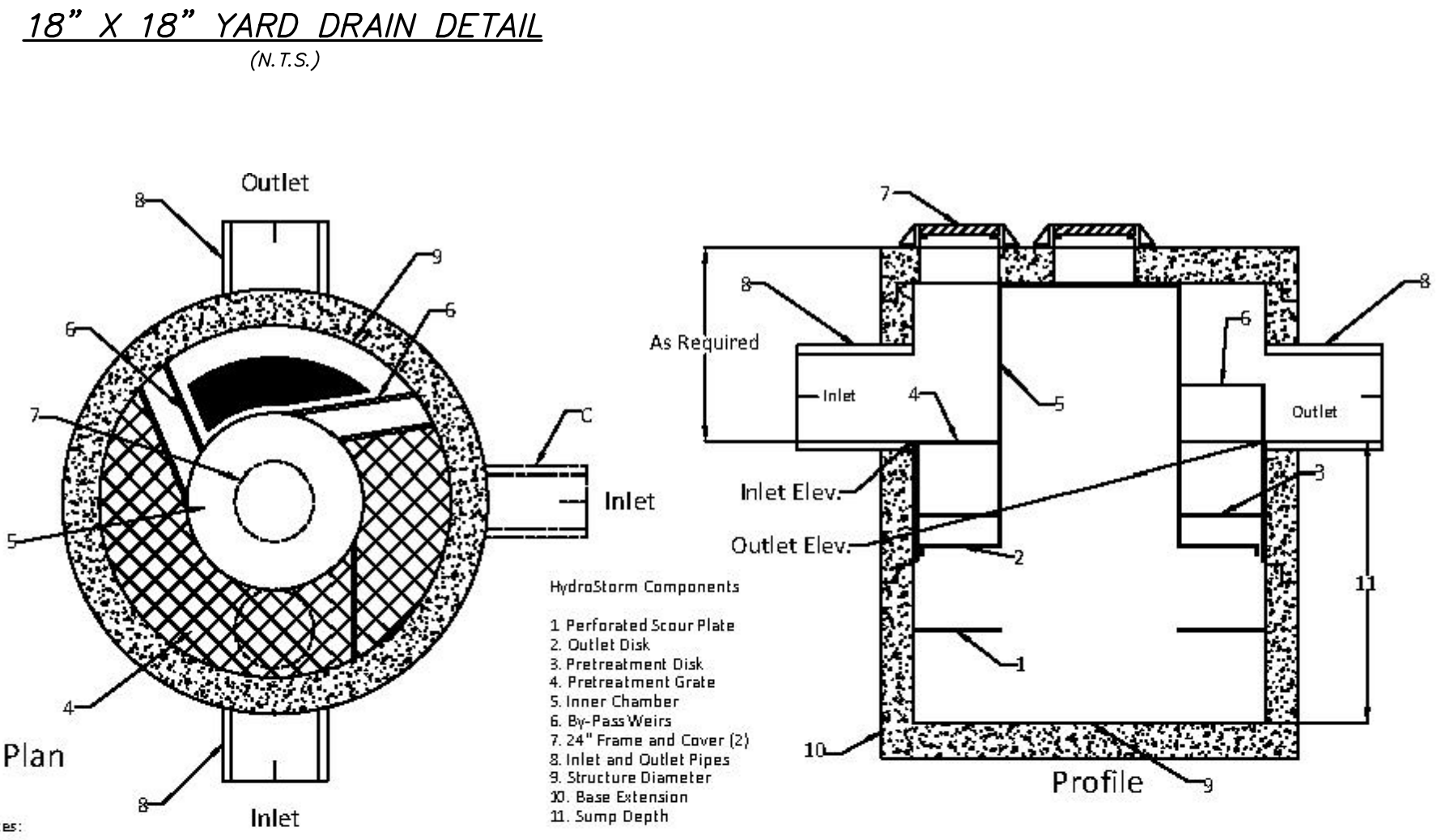
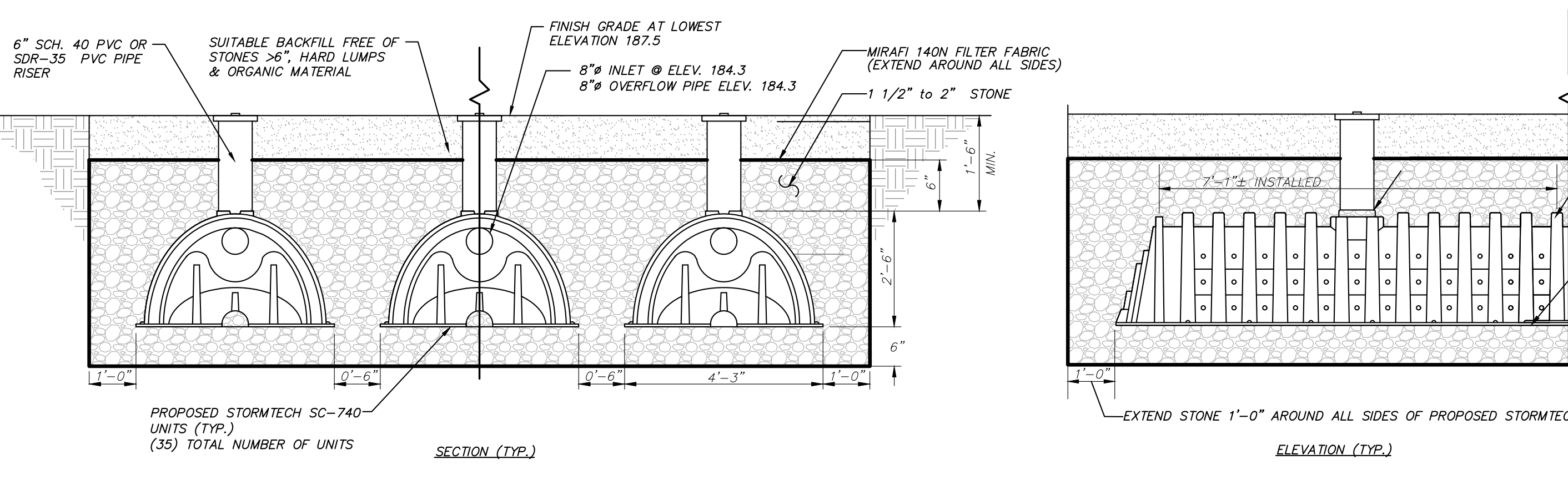
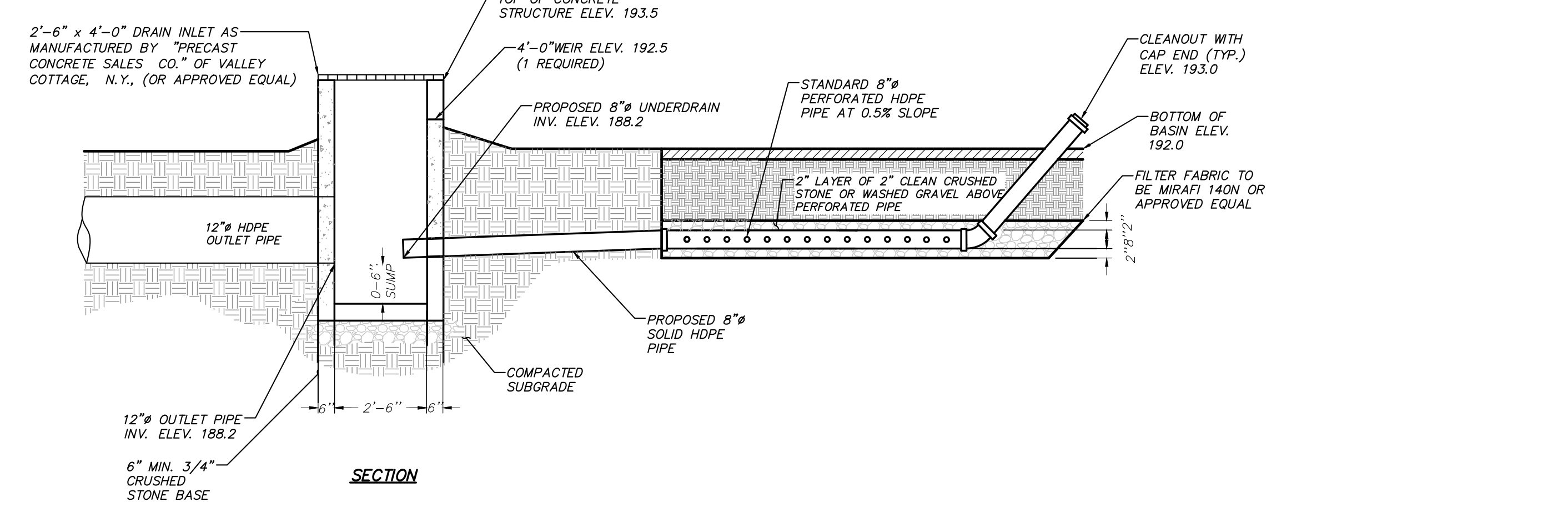
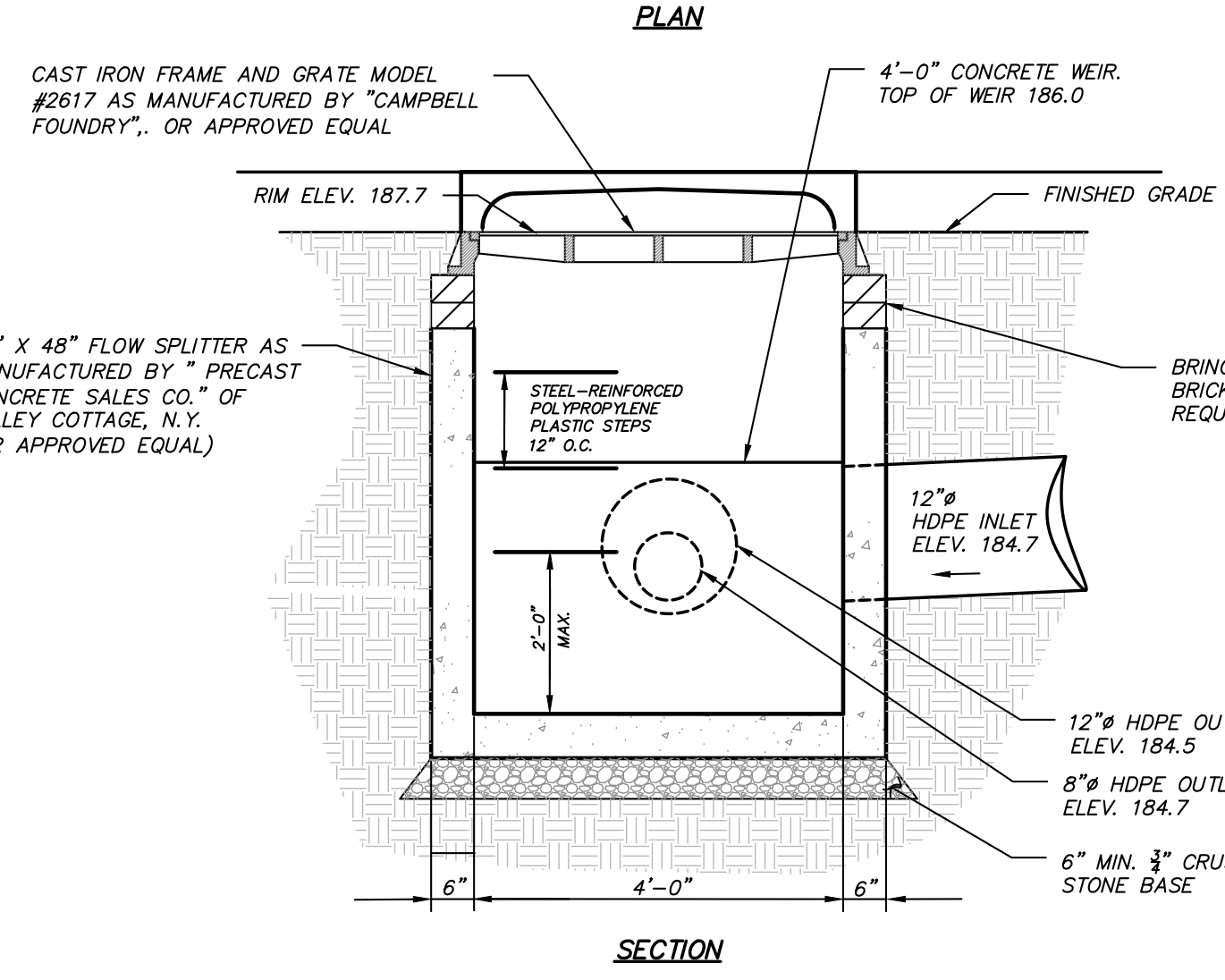
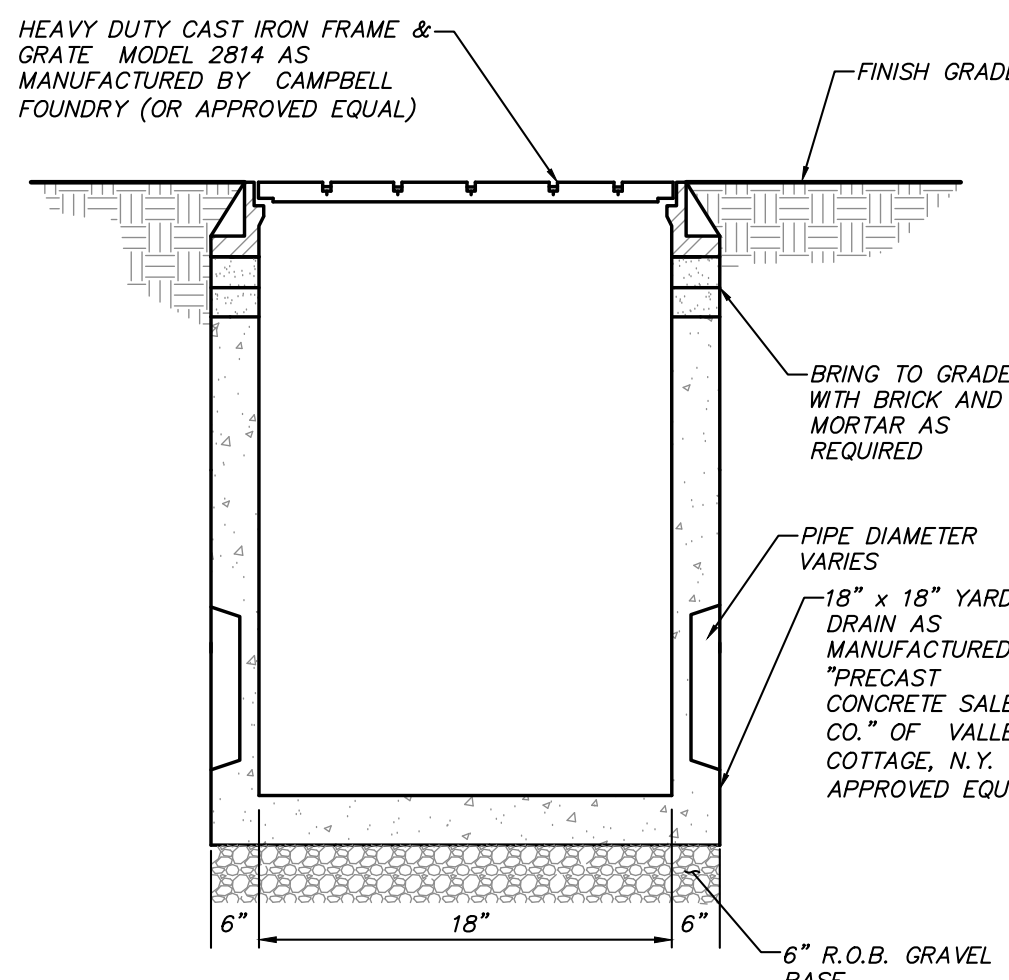
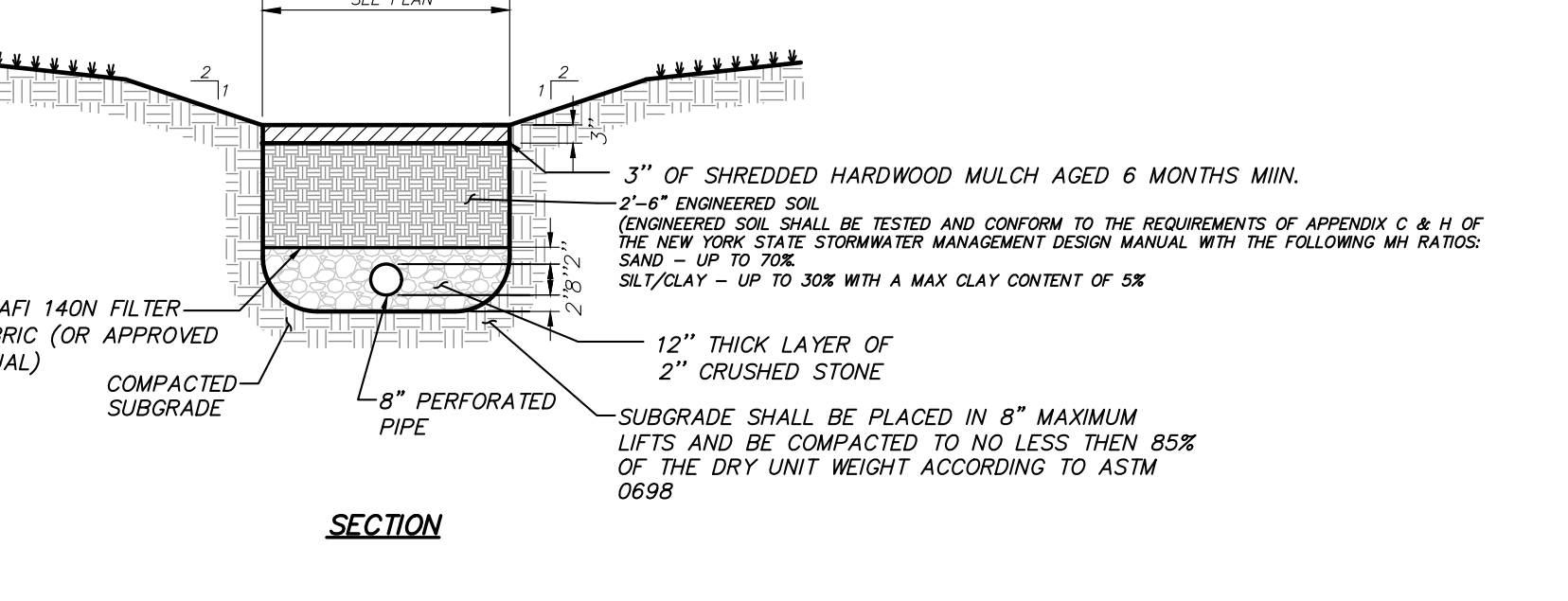
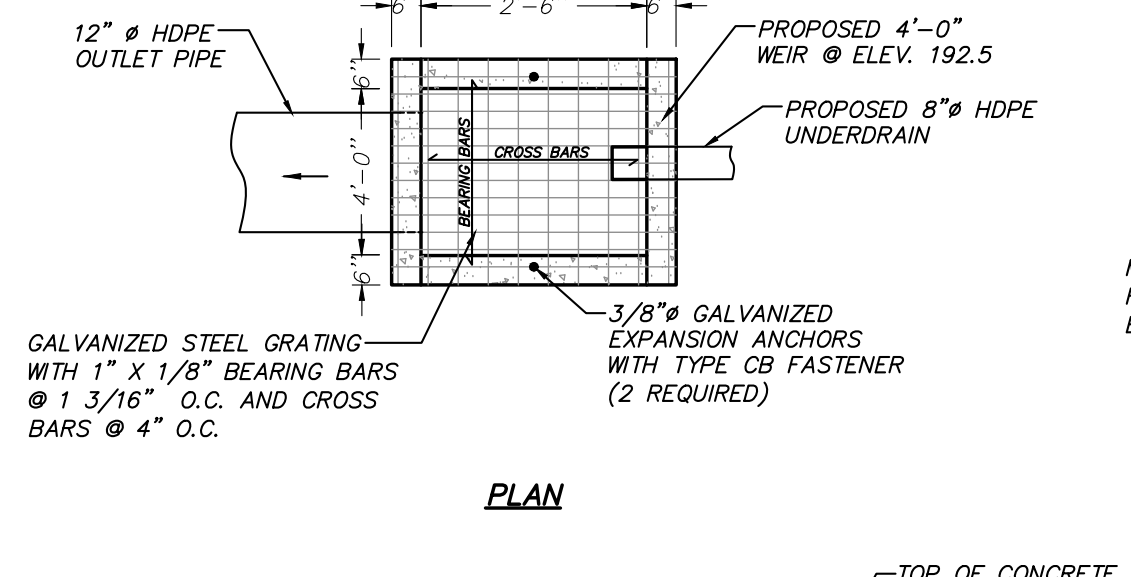
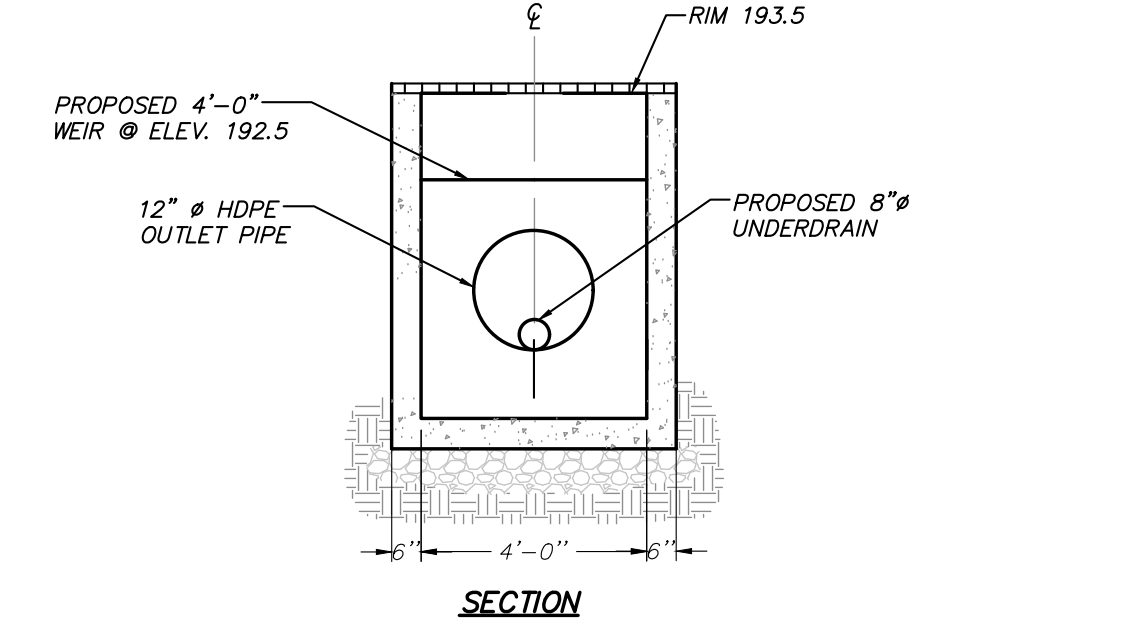
DRAWING: **DETAILS**

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|----------------|-----------|-----------------|--------|-------------|-------|
| PROJECT NUMBER | 19131.100 | PROJECT MANAGER | J.J.C. | DRAWING NO. | SHEET |
| DATE | 8-27-19 | DRAWN BY | J.F.R. | D-4 | 10 |
| SCALE | AS NOTED | CHECKED BY | A.D.T. | | 11 |



WET POND OUTLET NOTES

1. THE WET POND (1.1P) BASIN IS PROPOSED TO BE UTILIZED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION.
2. AFTER THE CONTRIBUTING AREAS TO THE BASIN HAVE BEEN PERMANENTLY STABILIZED, THE FOLLOWING SHALL BE ACCOMPLISHED:
 - A. CLEAN BASIN AND OUTLET STRUCTURE AND REMOVE 6" PERFORATED VERTICAL RISER PIPE, CRUSHED STONE AND FILTER FABRIC.
 - B. ADD THREADED CAP WITH ORIFICE AT DISCHARGE END OF 6" SOLID PVC SDR 35 PIPES PER DETAIL.
 - C. REPLACE THE PERFORATED PIPE AND CRUSHED STONE. DO NOT REPLACE FILTER FABRIC.
 - D. ESTABLISH THE FINAL VEGETATION IN THE BASIN IN ACCORDANCE WITH THE TYPICAL P-2 WET POND BASIN PLANTING DETAIL.
3. FOLLOWS: * WHEN INITIALLY USED AS THE TEMPORARY SEDIMENT BASIN DEWATERING DEVICE THE RISER SHALL BE WRAPPED WITH TYPAR 3201 GEOTEXTILE OR APPROVED EQUAL AND SURROUNDED WITH 2" STONE. THE TOP OF THE RISER SHALL BE SET AT THE SAME ELEVATION AS THE WEIRS AS SHOWN IN THE STORMWATER BASIN OUTLET STRUCTURE DETAILS.



HydroStorm Components

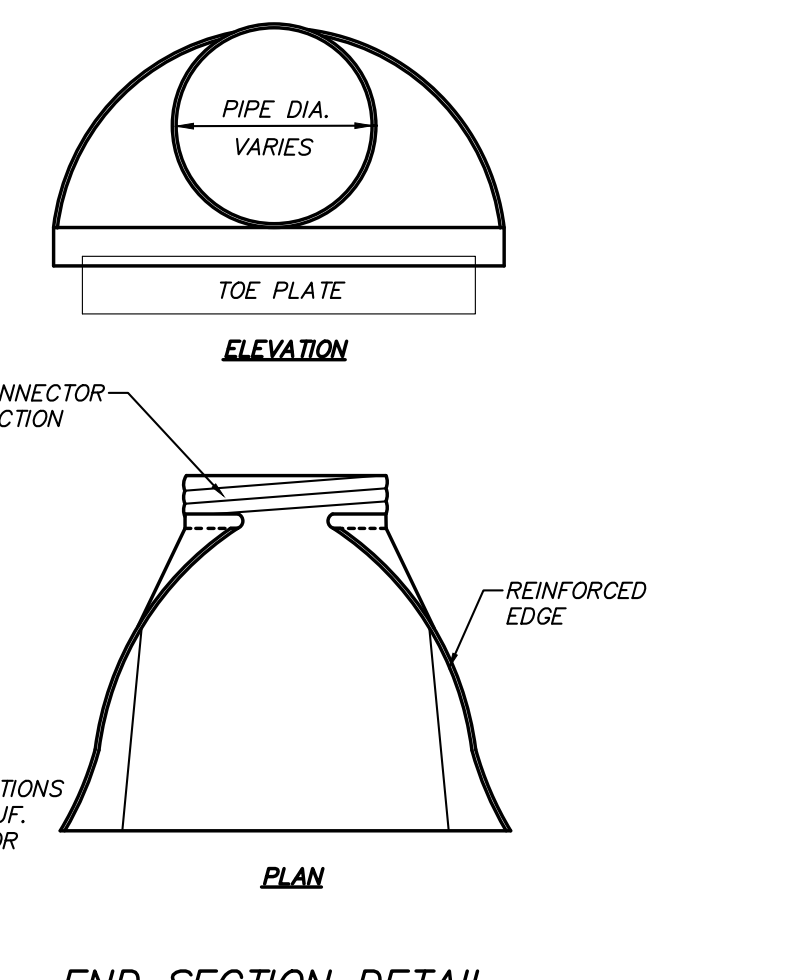
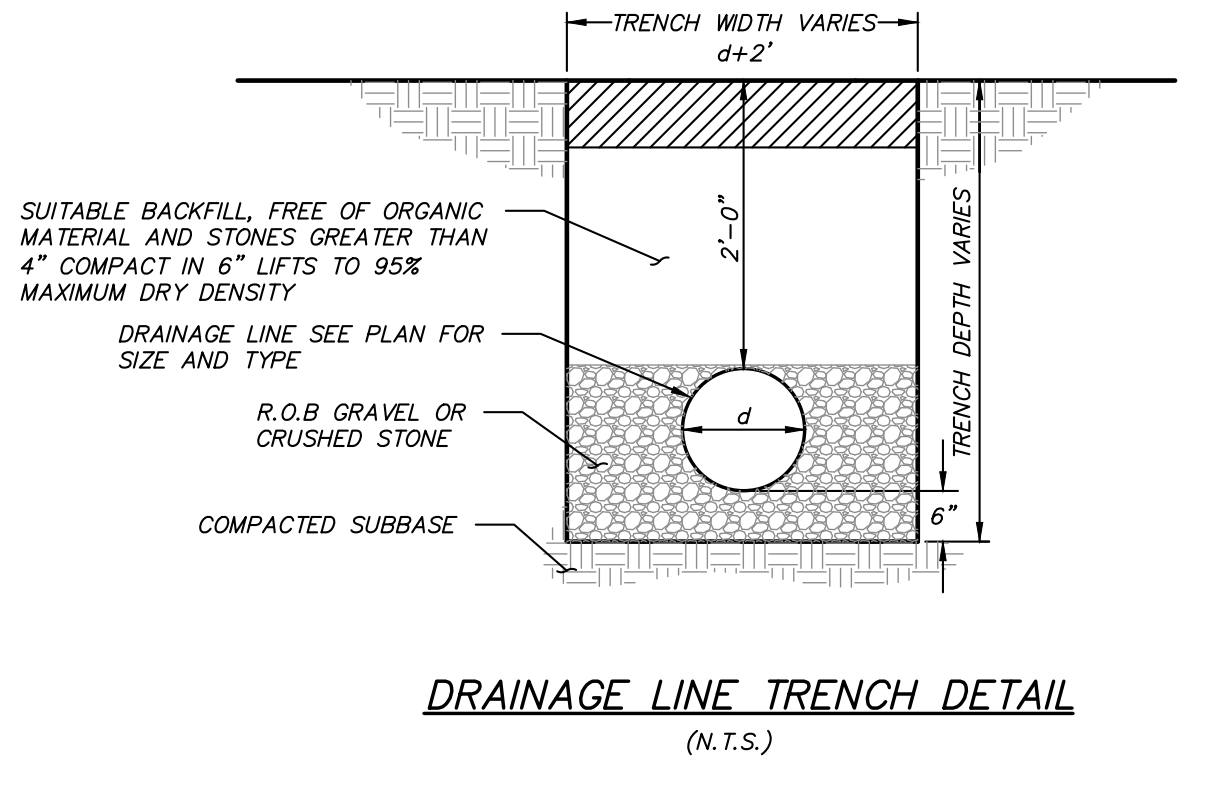
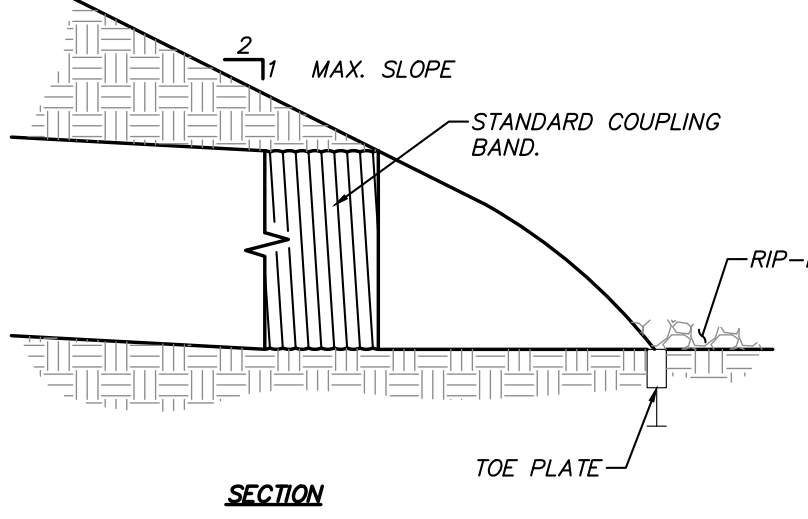
1. Perforated Scour Plate
2. Outlet Disk
3. Pretreatment Disk
4. Pretreatment Grate
5. Inner Chamber
6. Bottom Weir
7. 24" Frame and Cover (2)
8. Inlet and Outlet Pipes
9. Structure Diameter
10. Base Extension
11. Sump Depth

| Model | Diameter (ft) | Sump Depth (ft) | Inlet Chamber (ft) | Inner Chamber (ft) | Max. Pipe (ft) | Volume (gal) | Oil (gal) | Sediment (lb) |
|-------|---------------|-----------------|--------------------|--------------------|----------------|--------------|-----------|---------------|
| HS 7 | 7 | 6 | 3.5 | 42 | 1725 | 410 | 140 | 140 |
| HS 8 | 8 | 7 | 4 | 48 | 2630 | 635 | 220 | 220 |
| HS 9 | 9 | 7.5 | 4.5 | 54 | 3565 | 850 | 295 | 295 |
| HS 10 | 10 | 8 | 5 | 60 | 4700 | 1130 | 385 | 385 |
| HS 12 | 12 | 9.5 | 6 | 72 | 8035 | 1875 | 665 | 665 |

Note:

- Use a headloss K factor of 3.04 for hydraulic gradeline calculations.
- Sump depths shown are minimum. Additional depth can be added for site specific capacities.
- Multiple inlet pipes allowed.
- Drops allowed.
- Initial invert elevations should be the same or higher than the outlet invert elevation. Inlet can be up to 32" lower than outlet if pretreatment area is omitted. 12" must be added to sump depth if maximum overall treatment volume.
- Solid Cover shown. HydroStorm can be designed with an inlet grate if required.
- Oil capacities given are split capacities. Oil should be removed from the unit once at a depth of 12" or more is measured in the inner chamber.
- Sediment depths are maximum holding capacities and not recommended capacities for regular maintenance. Maintenance is recommended annually or once every 3 years.
- Capacities are rounded down to nearest 5 gallon h3.
- Base Extension not provided on standard units. Extensions can be provided if required due to groundwater/basement concerns at the request of the engineer of record.

HydroStorm by Hydroworks, LLC
 Patent Pending
 www.hydroworks.com
 888-290-7900



| | | | |
|-----|---------|--------------------------------|-----|
| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | JFR |
| NO. | DATE | REVISION | BY |

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 LANDSCAPE ARCHITECTURE, P.C.

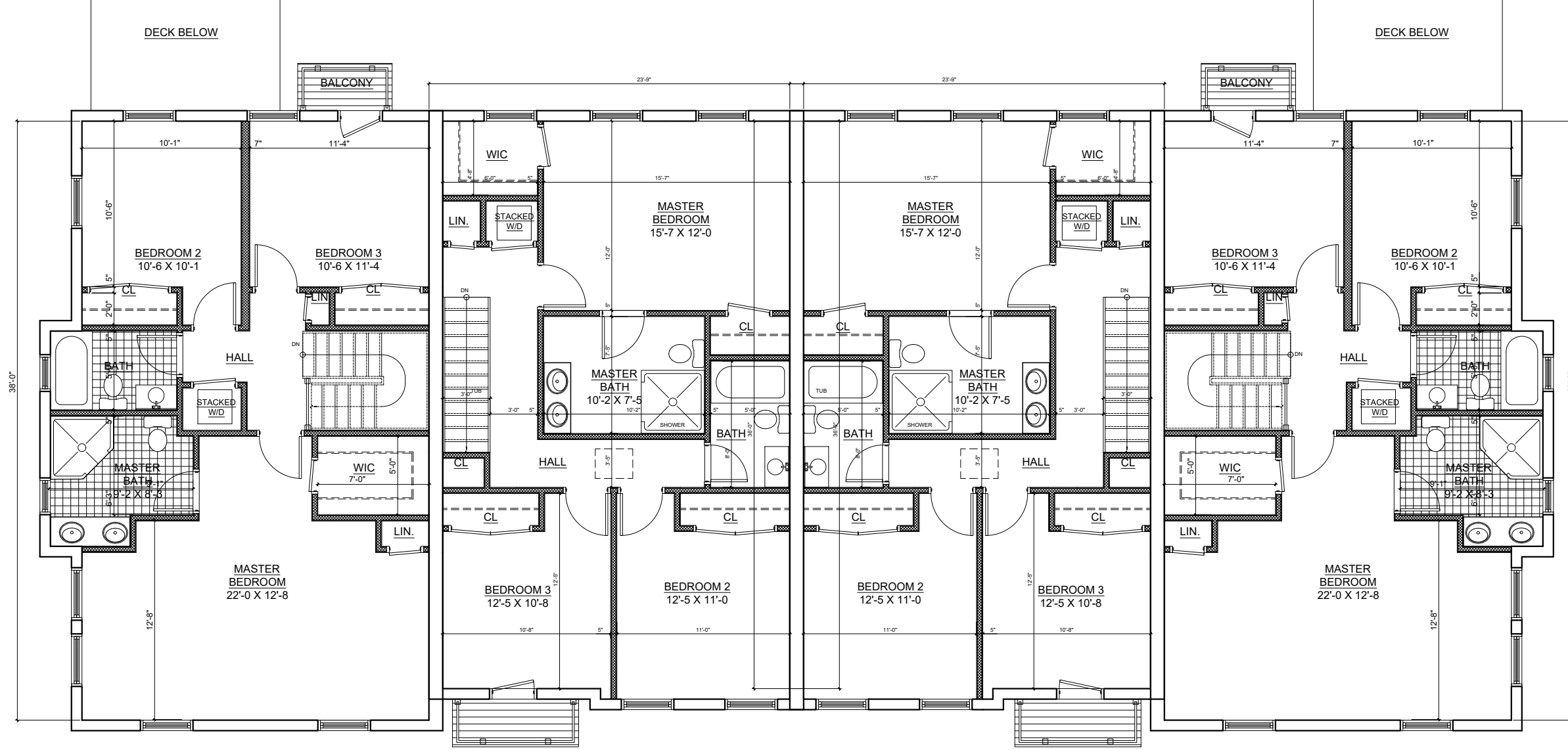
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 Carmel, NY 10512
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 (845) 225-9717 fax
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PROJECT: **BEACON VIEWS**
 CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

DRAWING: **DETAILS**

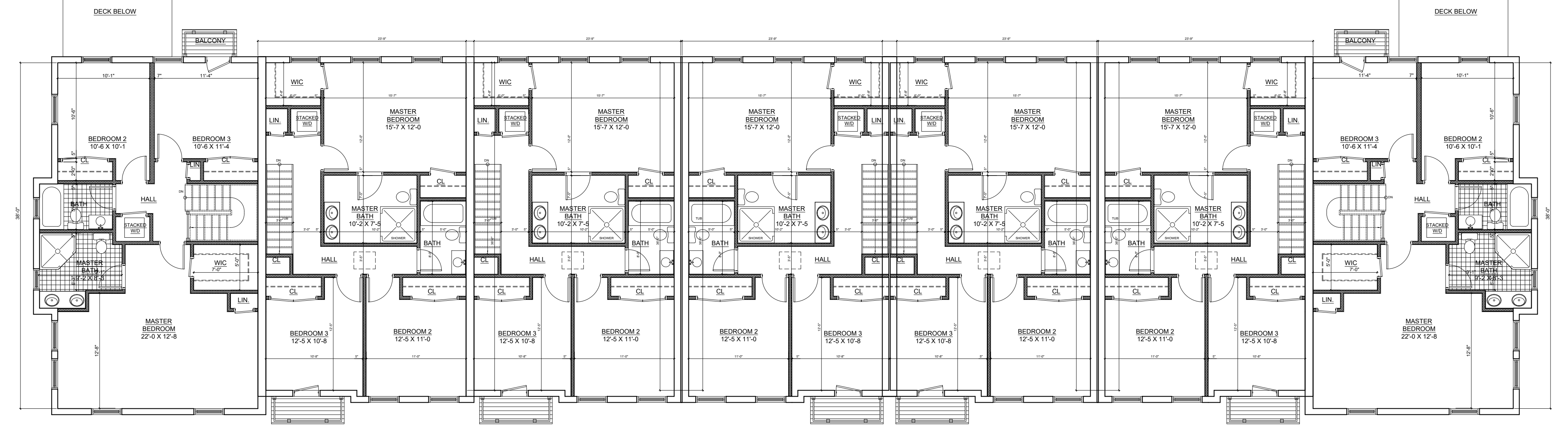
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| PROJECT NUMBER | 19131.100 | PROJECT MANAGER | J.J.C. | DRAWING NO. | SHEET |
| DATE | 8-27-19 | DRAWN BY | J.F.R. | D-5 | 11 |
| SCALE | AS NOTED | CHECKED BY | A.D.T. | | 11 |

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.



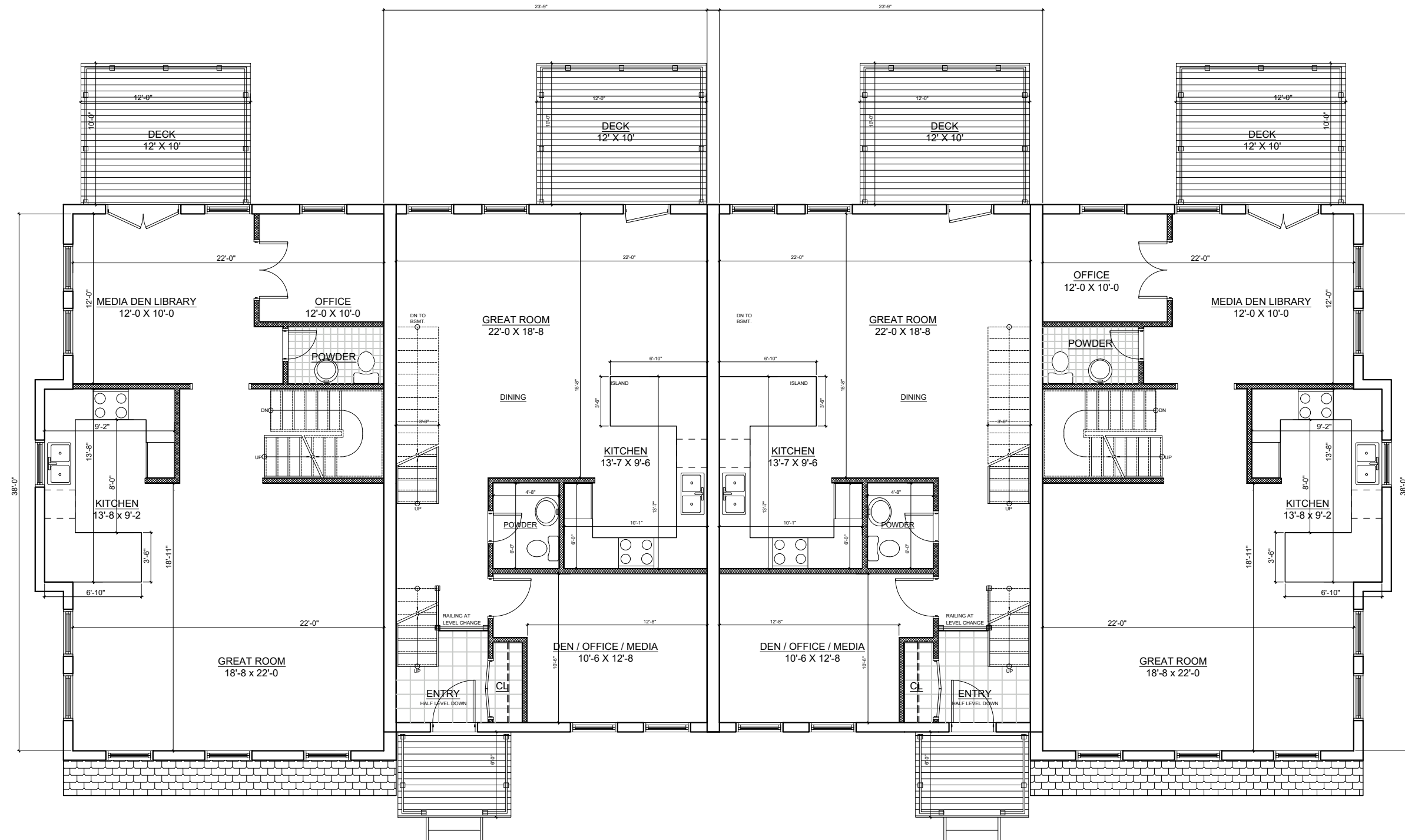
2nd Floor Plan

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



2nd Floor Plan

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



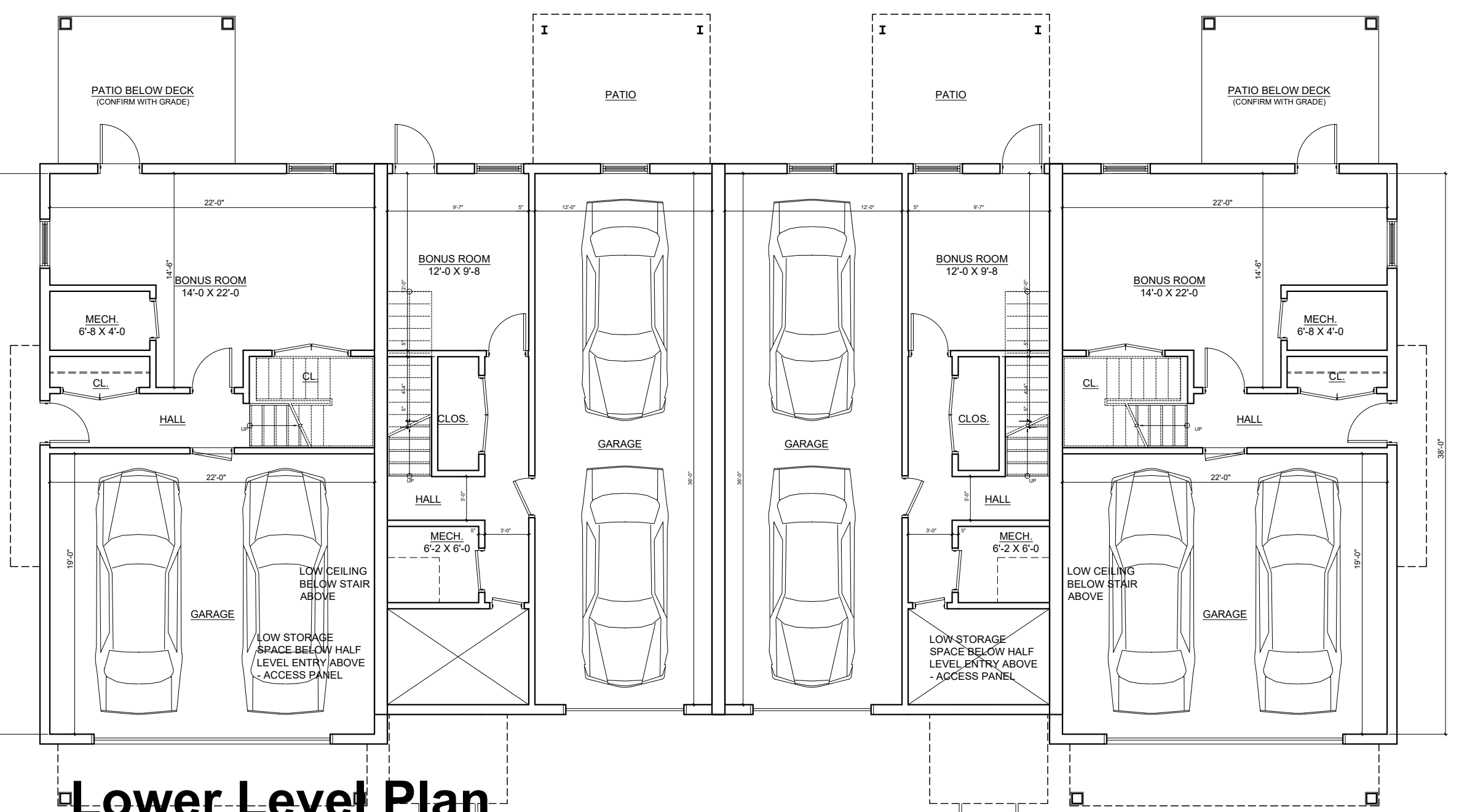
1st Floor Plan

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



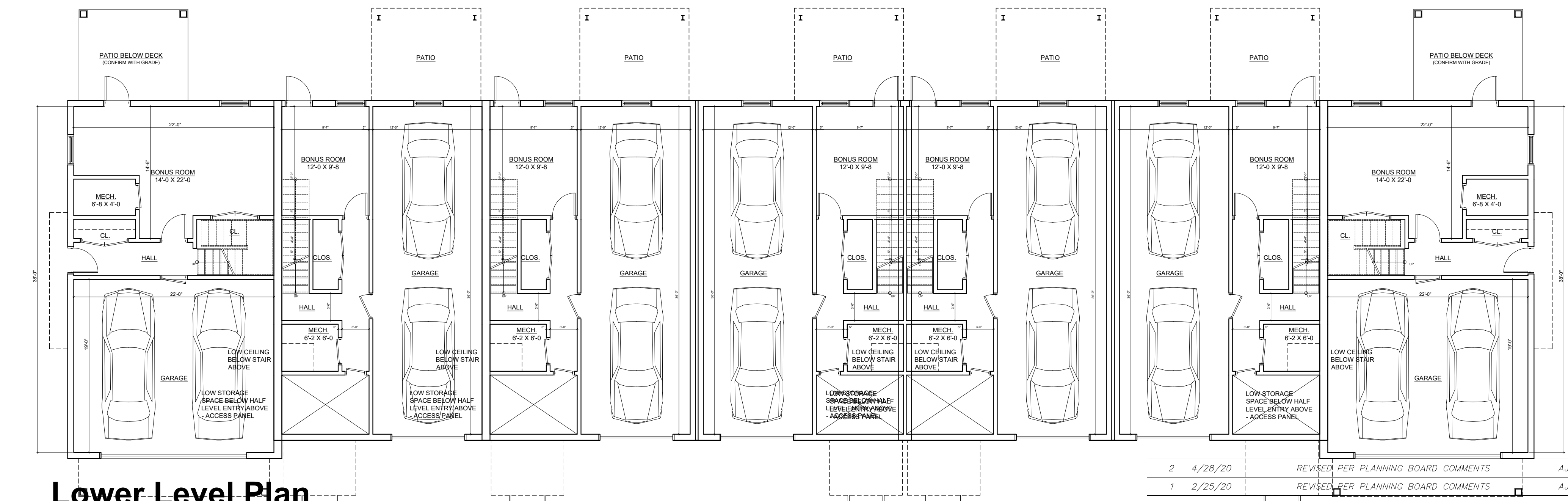
1st Floor Plan

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



Lower Level Plan

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



Lower Level Plan

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

4 Unit Townhouse Plans - Front Garage

7 Unit Townhouse Plans - Front Garage

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, ERRASURE, MODIFICATION OR REVISION OF THIS PLAN, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20____, BY

_____ CHAIRMAN

_____ SECRETARY

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

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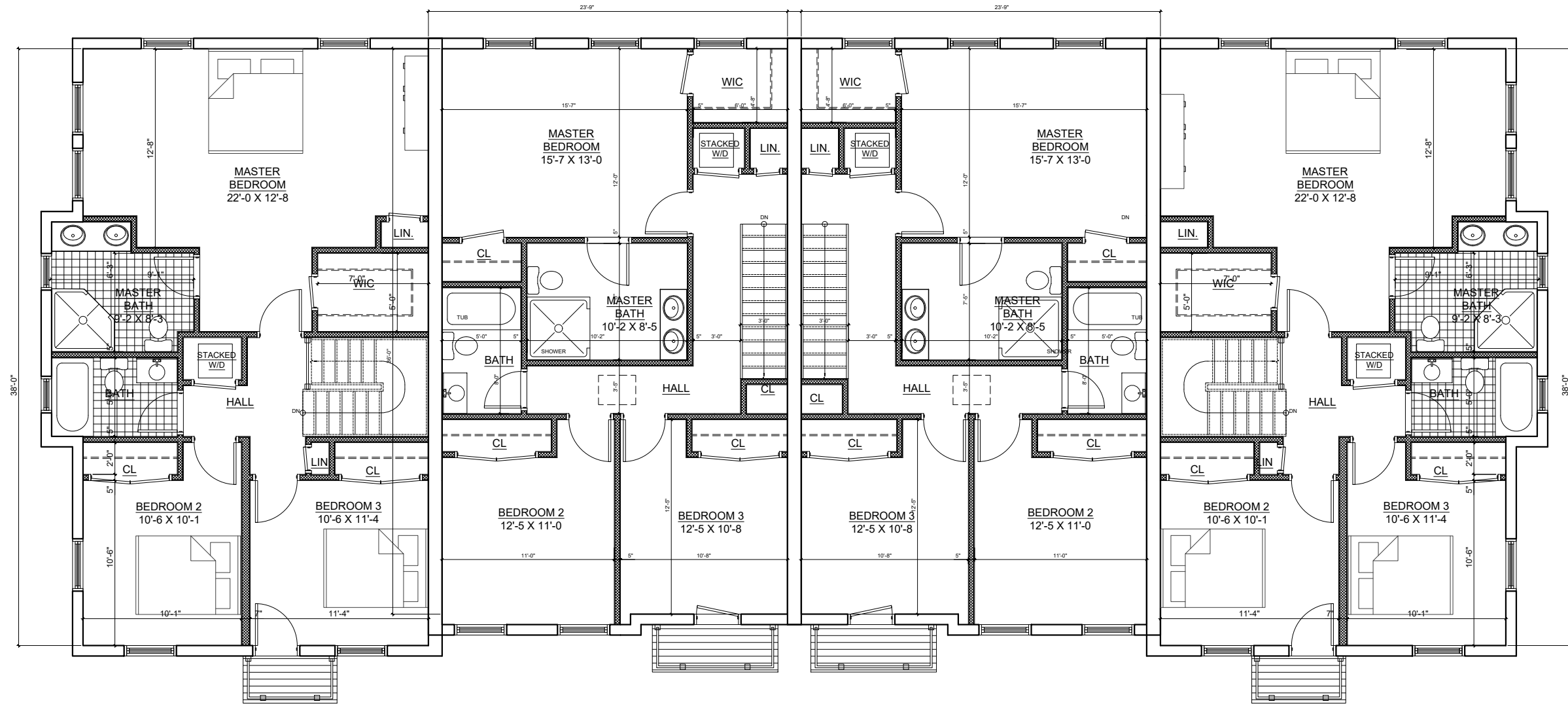
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|-----|---------|-------------------------------------|-----|
| 2 | 4/28/20 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 1 | 2/25/20 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| NO. | DATE | REVISION | BY |

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

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3 Garrett Place
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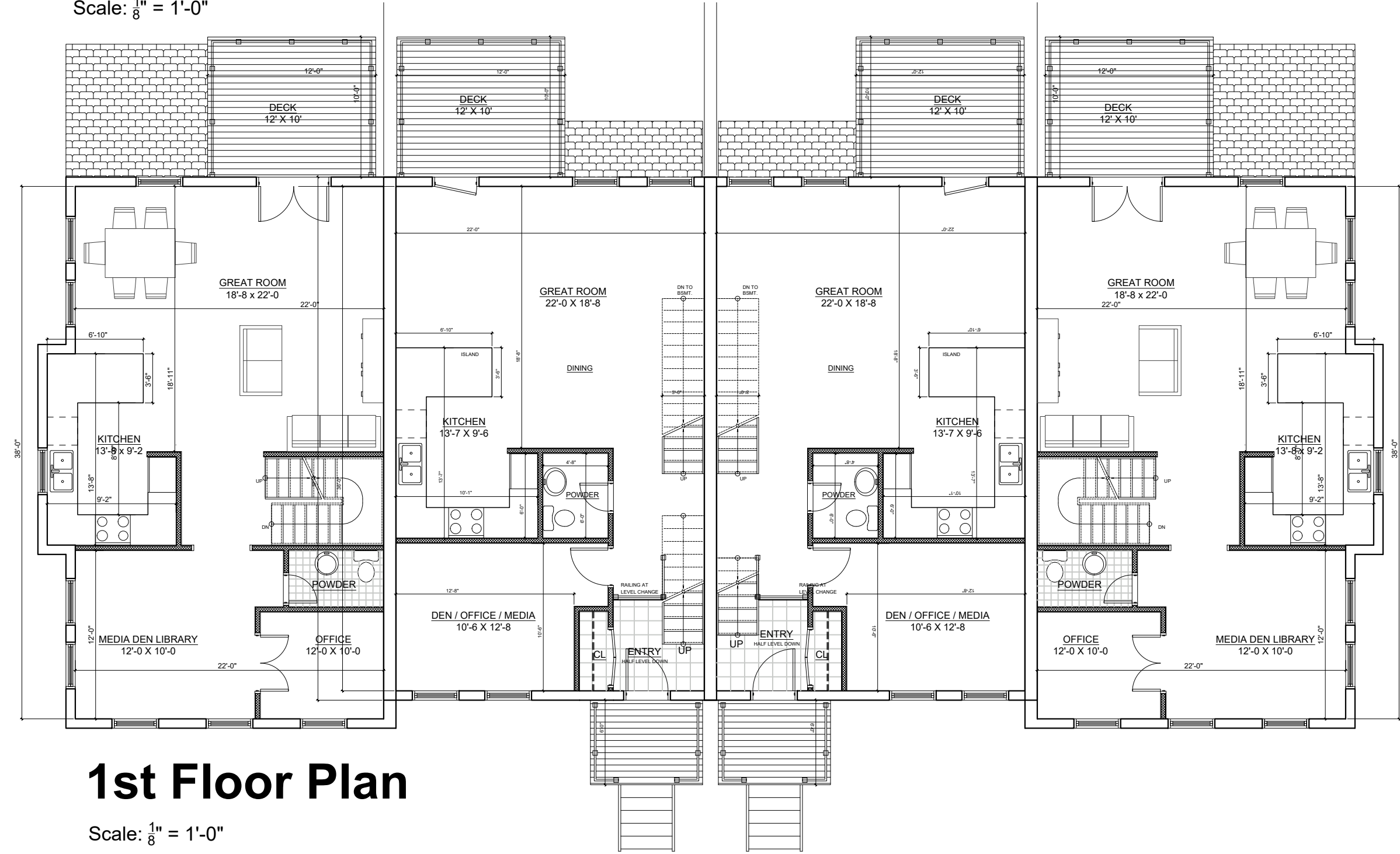
PROJECT:
BEACON VIEWS
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK
DRAWING:
Building Plans - Front Garage

| | | | | | |
|----------------|--------------|-----------------|-----|-------------|-------|
| PROJECT NUMBER | 19131.100 | PROJECT MANAGER | AJS | DRAWING NO. | SHEET |
| DATE | 10-29-19 | DRAWN BY | AJS | A-1 | 2 |
| SCALE | Not to Scale | CHECKED BY | | | 3 |



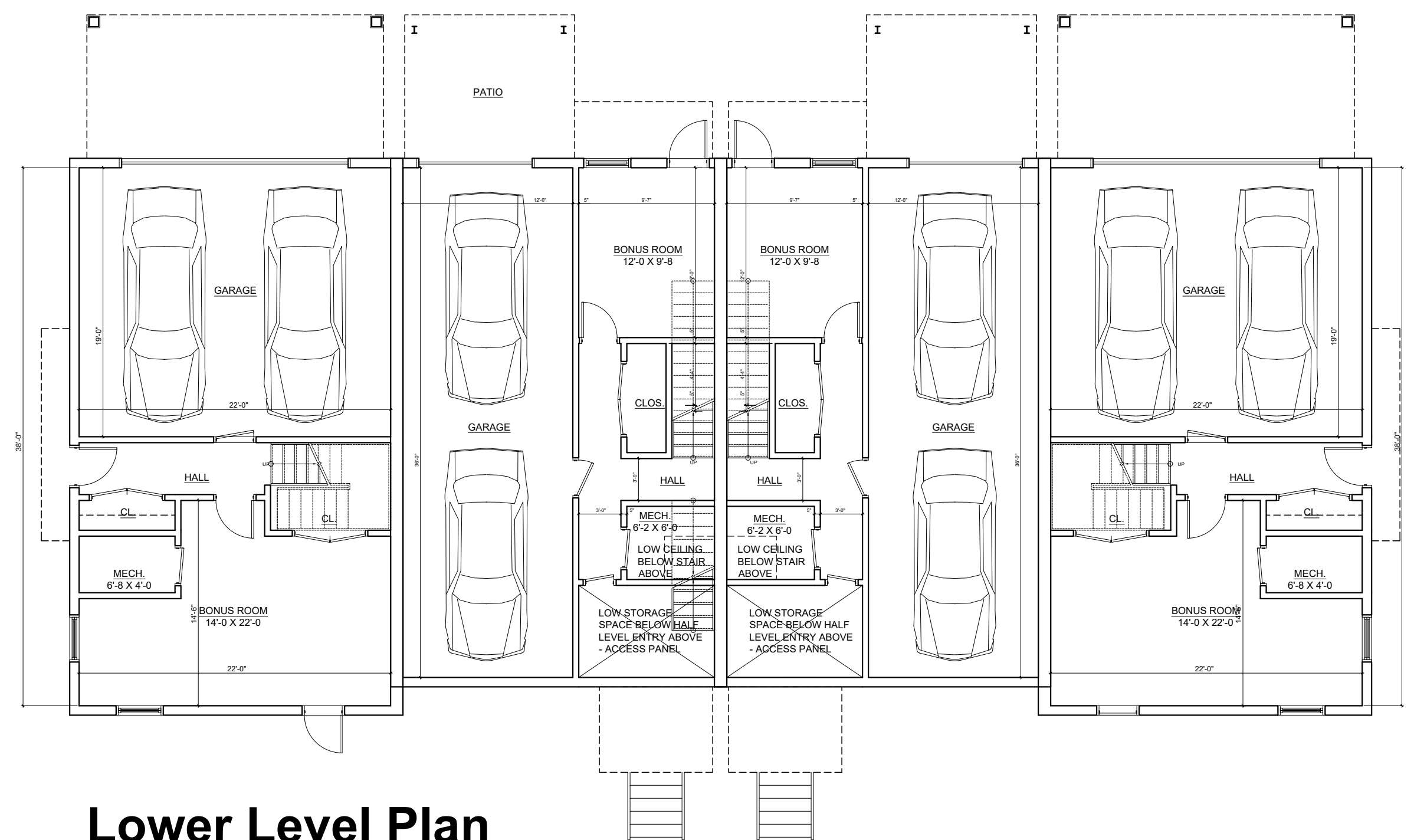
2nd Floor Plan

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



1st Floor Plan

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



Lower Level Plan

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

4 Unit Townhouse Plans - Rear Garage

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, ERRASURE, MODIFICATION OR REVISION OF THIS PLAN, AS APPROVED, SHALL VOID THIS APPROVAL.

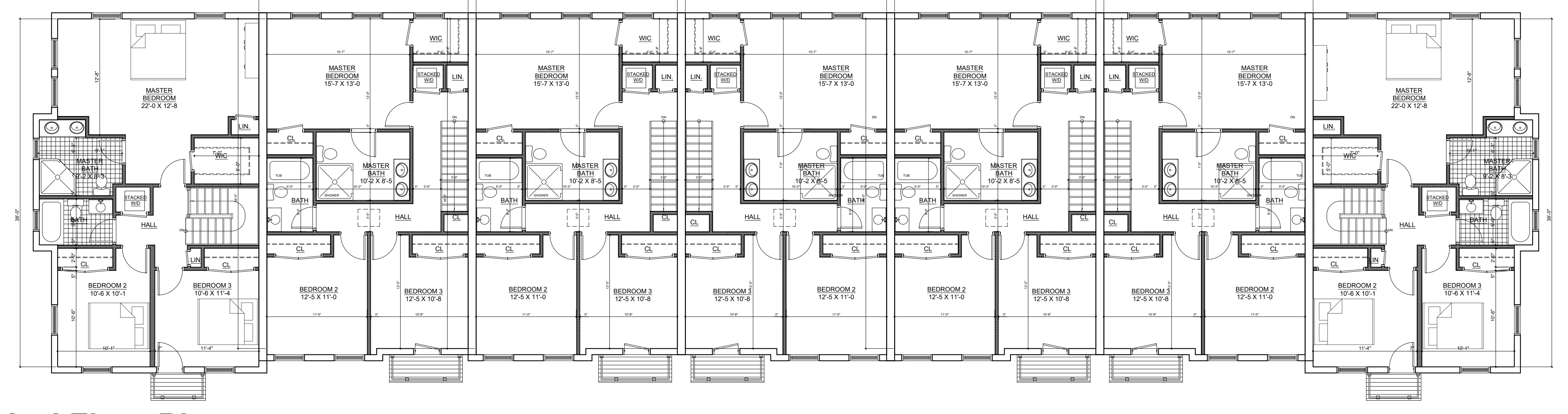
SIGNED THIS _____ DAY OF _____, 20____, BY _____

CHAIRMAN

SECRETARY

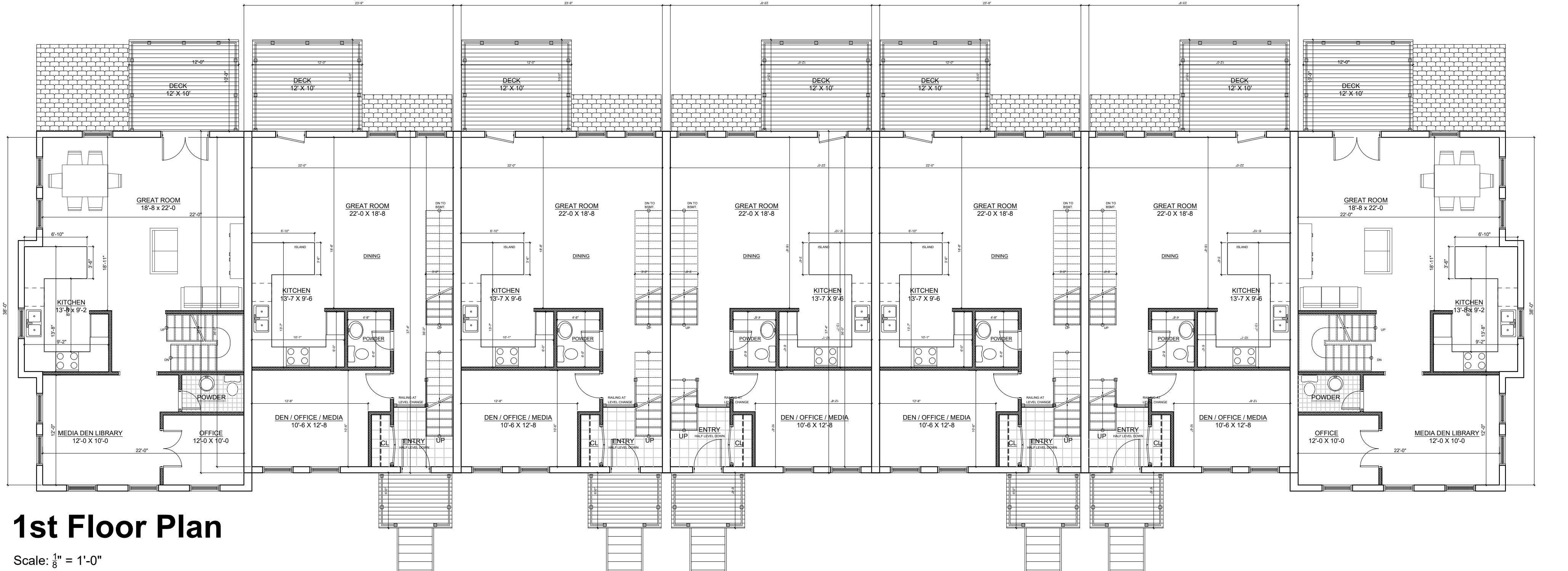
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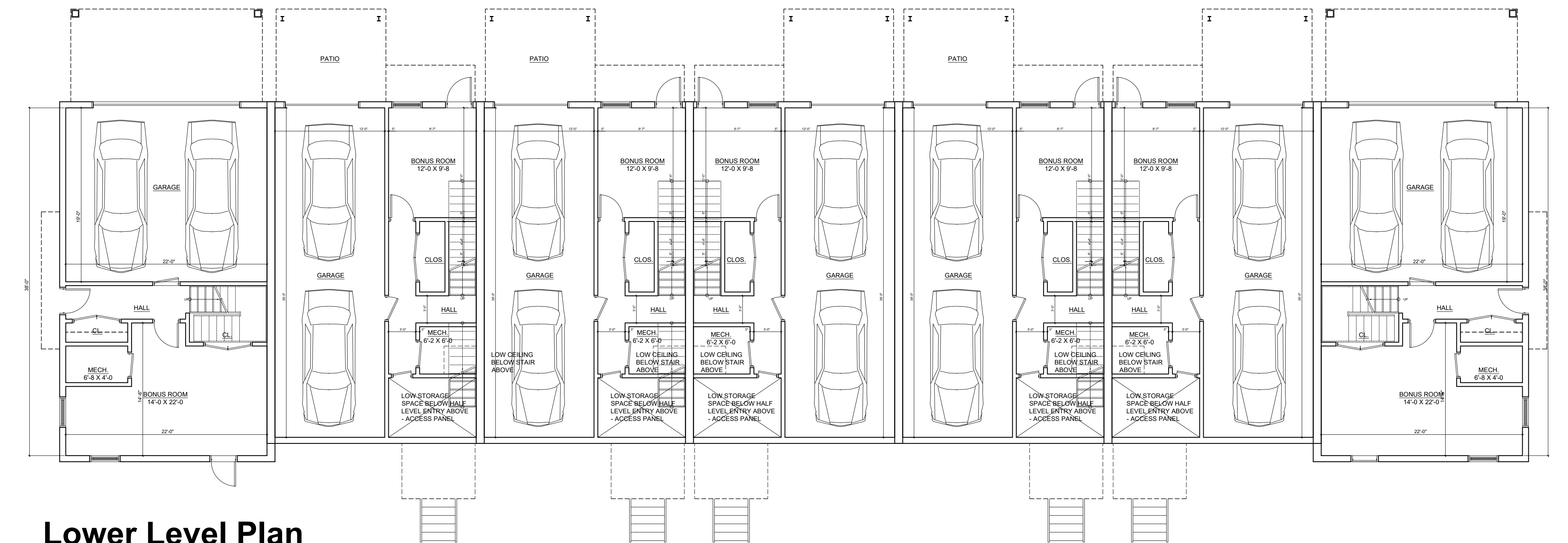
2nd Floor Plan

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



1st Floor Plan

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



Lower Level Plan

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

7 Unit Townhouse Plans - Rear Garage

| NO. | DATE | REVISION | BY |
|-----|---------|-------------------------------------|-----|
| 2 | 4/28/20 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 1 | 2/25/20 | REVISED PER PLANNING BOARD COMMENTS | AJS |

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

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

DRAWING:
Building Plans - Rear Garage

| PROJECT NUMBER | PROJECT MANAGER | DRAWING NO. | SHEET |
|----------------|-----------------|-------------|-------|
| 19131.100 | AJS | A-2 | 3 |
| DATE | DRAWN BY | CHECKED BY | |
| 10-29-19 | | | |
| SCALE | Not to Scale | | |

- ROOF:** ARCHITECTURAL ASPHALT SHINGLES. COLOR: GRAY
- PARAPETS:** SHEET METAL FLASHING. COLOR: LEAD GRAY
- WINDOWS:** VINYL CLAD DOUBLE HUNG WINDOWS BY ANDERSEN OR APPROVED EQUAL. COLOR: WHITE
- SIDING:** HORIZONTAL VINYL SIDING. COLOR: VARIATIONS ON LIGHT GRAY SHADES. NOTE THAT EACH BUILDING GROUP WILL BE ONE COLOR, BUT THERE WILL BE 3 COLORS OF SIDING THROUGHOUT THE PROJECT
- WINDOW TRIM:** AZEK. COLOR: WHITE
- PORCH & BALCONY TRIM:** AZEK. COLOR: LIGHT GRAY



Elevation: Front



Elevation: Right Side



Elevation: Left Side



Elevation: Rear

Elevations: Rear Garage Entrance

Scale: $\frac{1}{16}'' = 1'-0''$



View at Garage Side
Not to Scale

- ROOF:** ARCHITECTURAL ASPHALT SHINGLES. COLOR: GRAY
- PARAPETS:** SHEET METAL FLASHING. COLOR: LEAD GRAY
- WINDOWS:** VINYL CLAD DOUBLE HUNG WINDOWS BY ANDERSEN OR APPROVED EQUAL. COLOR: WHITE
- SIDING:** HORIZONTAL VINYL SIDING. COLOR: VARIATIONS ON LIGHT GRAY SHADES. NOTE THAT EACH BUILDING GROUP WILL BE ONE COLOR, BUT THERE WILL BE 3 COLORS OF SIDING THROUGHOUT THE PROJECT
- WINDOW TRIM:** AZEK. COLOR: WHITE
- PORCH & BALCONY TRIM:** AZEK. COLOR: LIGHT GRAY



Elevation: Front



Elevation: Right Side



Elevation: Left Side



Elevation: Rear

Elevations: Front Garage Entrance

Scale: $\frac{1}{16}'' = 1'-0''$



View at Entry Side
Not to Scale

NOTE THAT THE RENDERINGS ARE ARTISTIC INTERPRETATIONS OF THE PROPOSED BUILDING DESIGN TO AID IN REVIEWING THE PROPOSED DESIGN OF THE BUILDINGS ONLY; AND ARE NOT INTENDED AS DETAILED REPRESENTATIONS OF SITE CONDITIONS. CHANGES TO DESIGN ELEMENTS MAY OCCUR IN THE FINAL CONSTRUCTION DOCUMENTS TO SUIT TENANT LAYOUTS AND BUILDING CODE REQUIREMENTS

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 PLAN, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20____, BY _____

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SECRETARY

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| NO. | DATE | REVISION | BY |

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Beacon, New York 12508

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

DRAWING:
Elevations / Views

| | | | | | |
|----------------|--------------|-----------------|-----|-------------|-------|
| PROJECT NUMBER | 19131.100 | PROJECT MANAGER | | DRAWING NO. | SHEET |
| DATE | 10-29-19 | DRAWN BY | AJS | A-3 | 3 |
| SCALE | Not to Scale | CHECKED BY | | | 3 |



PRELIMINARY STORMWATER POLLUTION PREVENTION PLAN

Prepared For

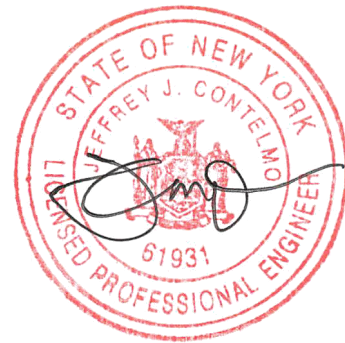
BEACON VIEWS

City of Beacon, New York

April 28, 2020

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.

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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. 6055-03-331 123. The parcel is located in the RD-5 zoning district. The subject parcel and surroundings are shown on Figure 1. The project proposes seven (7) multi-family townhouse buildings (40 total townhouse units) 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 seven (7) 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. The stormwater runoff will be treated by three (3) stormwater management practices, including a I-4 Subsurface Infiltration System (1.2P), F-5 Bioretention Filter (1.3P) and a P-2 Wet Pond (1.1P). Pretreatment of the stormwater runoff will be provided with a

hydrodynamic separator upstream of the proposed subsurface infiltration system, gravel diaphragm and mulch layer for the bioretention filter and a forebay in the wet pond. 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. The contributing area to the subsurface infiltration system is shown as subcatchment 1.2S. The contributing area to the bioretention filter and wet pond are shown as subcatchment 1.3S and 1.1S, respectively. 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-0-20-001 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
- T_c (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 SMP's 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."

The project SWPPP cannot provide 100% of the WQ_v through the implementation of GIP's or standard SMP's with RR_v capacity. This is because the onsite soils conditions and depth to groundwater in portions of the site, thus minimizing the area where infiltration practices for treatment of the RR_v / WQ_v is possible. With respect to runoff volume, the project SWPPP addresses and satisfies the RR_v requirements of the Design Manual. In order to meet these requirements to the maximum extent practicable, the project SWPPP has minimized the creation of impervious surfaces to the maximum extent practicable. The types of GIP's and standard SMP's with RR_v capacity that can be employed onsite are limited. The project SWPPP as required by the Design Manual meets and exceeds the RR_v minimum required. In addition, as required by the Design Manual, an analysis evaluating each of the green infrastructure techniques in Table 3.2 has been provided in Appendix F. For this project there are two (2) types of practices employed towards meeting the RR_v requirements.

The project proposes a F-5 Bioretention Filter and an I-4 Subsurface Infiltration System in an area of the project site where the soil conditions meet the Design Manual requirements. These two stormwater practices, sized in accordance with the Design Manual, will be applied as a GIP/SMP with volume reduction towards meeting the RR_v minimum. The bioretention filter sizing calculations have been provided in Appendix I of this SWPPP. Sizing calculations for the subsurface infiltration practice are provided in Section 2.2 below.

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.

Table 2.1.1 Runoff Reduction Volume Summary

| Design Line | 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.) | WQ _v Required for Downstream SMP (c.f.) |
|---------------|---|--------------------------------|--|---------------------------------|--|
| Design Line 1 | 12,599 | 2,414 | 12,599 | 3,856 | 8,743 |

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 minimum. By implementing GIP's to the greatest extent practicable, and exceeding the RR_v minimum, the NYSDEC RR_v requirement has been addressed. As previously stated, 100% of the WQ_v/RR_v required could not be provided due to onsite soil conditions and the limited area where infiltration is feasible. As 100% of the WQ_v / RR_v required was not provided for the subcatchments, a downstream standard SMP must be provided to treat the difference between the WQ_v / RR_v required and the RR_v provided. A P-2 Wet Pond will be provided as the primary downstream stormwater management practice to treat the remaining WQ_v for the subcatchments. As the WQ_v for subcatchment 1.1S, shown in Table 2.2.1, is greater than the WQ_v required, the Wet Pond has been sized to treat the greater WQ_v. The proposed Wet Pond is being provided to meet stormwater quality/quantity requirements of the NYSDEC.

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 WQ_v is the runoff volume produced during the 90% storm. The proposed infiltration practices have been designed to treat the WQ_v 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:

$$\text{The water quality volume shall be } WQ_v = \frac{(P)(R_v)(A)}{12}$$

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 | WQv ¹ (cf) |
|--------------|--------------------------|
| 1.1S | 9,818 |
| 1.2S | 1,839 |
| 1.3S | 942 |

¹ For detailed calculations see Appendix A

As previously stated, there are three stormwater management practices proposed as part of the development of the site to meet both the WQv and RRV requirements. Each practice has been designed to treat the Water Quality Volume from the contributing area. The subsurface infiltration practice is designed as an offline practice with a flow splitter upstream of the practice. The infiltration practice is sized to treat at a minimum the WQv from the contributing area, while allowing portions of larger storms to discharge from the infiltration practice through an overflow pipe as allowed by the NYSSMDM. The overflow pipe is set to allow the full WQv storage within the practice as required by the Design Manual. The calculation of the WQv is performed per the methods of the NYSSMDM in Appendix A.

Deep test holes have been performed in the area of the proposed infiltration practice but infiltration testing has yet to be performed. The deep test results performed meet the requirements of the Design Manual for an infiltration practice. Test results can be found on Figure 4. 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. Infiltration testing will be performed to confirm the design of the infiltration practice.

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 H. The table below summarizes the WQv-year peak flows and hydrodynamic separate flow rates.

Table 2.2.2 – Pretreatment Hydrodynamic Separator Summary

| Stormwater Management Practice | WQv ¹ Peak Flow (C.F.S). | Hydrodynamic Separator Model | Hydrodynamic Separator Capacity (C.F.S.) |
|--------------------------------|---|------------------------------|---|
| 1.2P | 1.65 | HydroStorm HS 6 | 1.98 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.

As previously stated above the F-5 Bioretention Filter has been sized to treat the WQv from the contributing area. Sizing calculations for the bioretention filter per the Design Manual Requirements are shown in Appendix I of the SWPPP.

The P-2 wet pond has been sized in accordance with Chapter 6 of the Design Manual as shown in the table below. The P-2 Wet Pond has been sized to store 100% of the WQv in the

permanent pool. As previously stated, the P-2 Wet Pond has been sized for the WQv calculated in Appendix A as the WQv from the contributing area. The provided volume for the P-2 Wet Pond can be verified in the stage storage tables contained in Appendix C.

Table 2.1.3 P-2 Wet Pond Summary

| Design Elements | Required | Provided | Remarks |
|---|---|--|-------------------|
| Pond Location | Not within Jurisdictional Waters | Outside of Jurisdictional Waters | See Project Plans |
| Forebay Volume | 10% of WQv (982 cubic feet) | 21% of WQv (2,050 cubic feet) | See Appendix C |
| Forebay Depth | 4' Min. – 6' Max. | 5' Provided | See Project Plans |
| WQv Storage | 100% Min. within Permanent Pool (9,818 cubic feet) | 100%+ within Permanent Pool (10,715 cubic feet) | See Appendix C |
| Minimum Length to Width Ratio | 1.5 : 1 | Greater than 2 : 1 | See Project Plans |
| Minimum Surface Area to Drainage Area Ratio | 1 : 100 | 1 : 39 | See Project Plans |
| Benches at Water Level | Aquatic Bench | Aquatic Bench | See Project Plans |
| Landscaping | Pond and Buffer Plantings Required | Pond and Buffer Plantings Provided | See Project Plans |

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 1-year, 24-hour storm event or by fully infiltrating the stormwater runoff from the 1-year, 24-hour storm event. As shown in Appendix C, the proposed I-4 Subsurface Infiltration System has been designed to fully infiltrate the stormwater runoff from the 1-year, 24-hour design storm and the P-2 Wet Pond has been designed to provide 24-hour extended detention of the 1-year, 24-hour storm, therefore the CP_v criterion has been met for the proposed areas of new development.

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 | 41.5 | 93.6 | 92.5 |

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-0-20-001 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-0-20-001. 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 Soil Restoration

Soil Restoration is required to be applied across areas of the development site where soils have been disturbed and will be vegetated. The purpose is to recover the original properties and porosity of the soil compacted during construction activity. Soil Restoration is applied in the cleanup, restoration, and landscaping phase of construction followed by the permanent establishment of an appropriate, deep-rooted groundcover to help maintain the restored soil structure. Soil restoration includes mechanical decompaction and compost amendment. The table below describes various soil

disturbance activities related to land development, soil types and the requirements for soil restoration for each activity as identified in the Design Manual. Restoration is applied across areas of a development site where soils have been compacted and will be vegetated according to the criteria defined in the table below:

| Soil Restoration Requirements^{1, 2,4} (Onsite soils within the limit of disturbance belong to Hydrologic Soil Groups (HSG) 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 - no change in grade | HSG A & B | HSG C&D | Protect area from any ongoing construction activities. |
| | Apply 6 inches of topsoil | Aerate ³ and apply 6 inches of topsoil | |
| Areas of cut or fill | HSG A & B | HSG C&D | |
| | Aerate ¹ and apply 6 inches of topsoil | Apply full Soil Restoration ² | |
| 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 (decompaction and compost Enhancement ⁶) | | |
| Areas where Runoff Reduction and/or Infiltration practices are applied | Restoration not required, but may be applied to enhance the reduction specified for appropriate practices. | | Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct 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. 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 function like a mini-subsoiler.
2. Per "Deep Ripping and De-compaction, DEC 2008".
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. 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 seeding notes located on the project drawings.
 - 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.

After soil restoration is completed an inspector should be able to push a 3/8" metal bar twelve inches into the soil with just body weight. Following decompaction/soil restoration activities, the following maintenance is anticipated during the first year:

- Initial inspections for the first six months (once after each storm greater than a half-inch).
- Reseeding to repair bare or eroding areas to assure grass stabilization.
- Water once every three days for first month, and then provide a half inch of water per week during first year. Irrigation plan may be adjusted according to the rain event.
- Fertilization may be needed in the fall after the first growing season to increase plant vigor.

In order to ensure the soil remains decompacted the following ongoing maintenance is recommended:

- Planting the appropriate ground cover with deep roots to maintain the soil structure.
- Keeping the site free of vehicular and foot traffic or other weight loads. Consider pedestrian footpaths (sometimes it may be necessary to de-thatch the turf every few years).

5.3 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-0-20-001 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: 4/28/2020



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

$$1. \text{Water Quality Volume } = WQ_v = \frac{P * R_v * A}{12}$$

| | | |
|--|---|-----------|
| P = WQv 24-hour Rainfall Amount | = | 1.4 in. |
| A = Subcatchment Area | = | 135730 SF |
| Ai= Impervious Area within Subcatchment Area | = | 85680 |
| I = Ai/A | = | 63.1 % |
| Rv = 0.05 + 0.009 (I%) | = | 0.62 |
| WQv = Water Quality Volume | = | 9,818 CF |

Subcatchment ID: 1.2

$$1. \text{Water Quality Volume } = WQ_v = \frac{P * R_v * A}{12}$$

| | | |
|--|---|----------|
| P = WQv 24-hour Rainfall Amount | = | 1.4 in. |
| A = Subcatchment Area | = | 21300 SF |
| Ai= Impervious Area within Subcatchment Area | = | 16400 |
| I = Ai/A | = | 77.0 % |
| Rv = 0.05 + 0.009 (I%) | = | 0.74 |
| WQv = Water Quality Volume | = | 1,839 CF |

WQv Calculation Worksheet

Project: Beacon Views, LLC

Project #: 19131.100

Date: 4/28/2020



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: 1.3S

$$1. \text{Water Quality Volume } = WQ_v = \frac{P * R_v * A}{12}$$

P = WQv 24-hour Rainfall Amount

= 1.4 in.

A = Subcatchment Area

= 16480 SF

Ai = Impervious Area within Subcatchment Area

= 8140

I = Ai/A

= 49.4 %

Rv = 0.05 + 0.009 (I%)

= 0.49

WQv = Water Quality Volume

= 942 CF

RRv Calculation Worksheet - Design Line 1

Project: Beacon Views, LLC
 Project #: 19131.100
 Date: 4/28/2020



1. *RRv Initial = Water Quality Volume (WQv)* 0.289 ac-ft = 12,599 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 (100%) = 0.95
 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 = 2.5 Acres

RRv Minimum = 2,414 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) = 12,599 c.f.

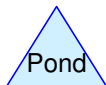
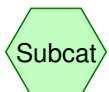
4. *RRv Provided*

| 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 [HSG A / B = 20%] [HSG C / D = 10%] {Modified HSG C - D = 15% - 12%} | | 20% 10% | 0 0 |
| 5.3.7 Rain Garden [No underdrains / Good Soils = 100%] [With underdrains / Poor Soils = 40%] | | 40% | 0 |
| 5.3.8 Green Roof [RRv provided equals volume provided in Green Roof] | | 100% | N/A |
| 5.3.9 Stormwater Planters [Infiltration Planters = 100%] [Flow Through HSG C = 45%] [Flow Through HSG D = 30%] | | 45% | N/A |
| 5.3.10 Rain Tank / Cisterns | | 100% | N/A |
| 5.3.11 Porous Pavement | | 100% | 0 |
| Infiltration Practice (Standard SMP) | 3572 | 100% | 3,572 |
| Bioretention Practice (Standard SMP) [Without Underdrains HSG A/B = 80%] [With Underdrain HSG C/D = 40%] | 709 | 40% | 284 |
| Dry Swale (Open Channel Practice) (Standard SMP) [HSG A/B = 40%] [HSG C/D = 20%] | | 20% | N/A |
| <i>RRv Provided =</i> | | | 3,856 |

5. Summary

RRv Initial = 12,599 c.f.
 RRv Required = 12,599 c.f.
 RRv Minimum = 2,414 c.f.
 RRv Provided = 3,856 c.f.
 WQv Required for Downstream SMP = 8,743 c.f. (= RRv Required - RRv Provided)
 Is RRv Provided greater than or equal to RRv Minimum? Yes

APPENDIX B
Pre-Development Computer Data



Routing Diagram for Pre Development

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Pre Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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Page 2

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 SOP 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 | | | |

Pre Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.

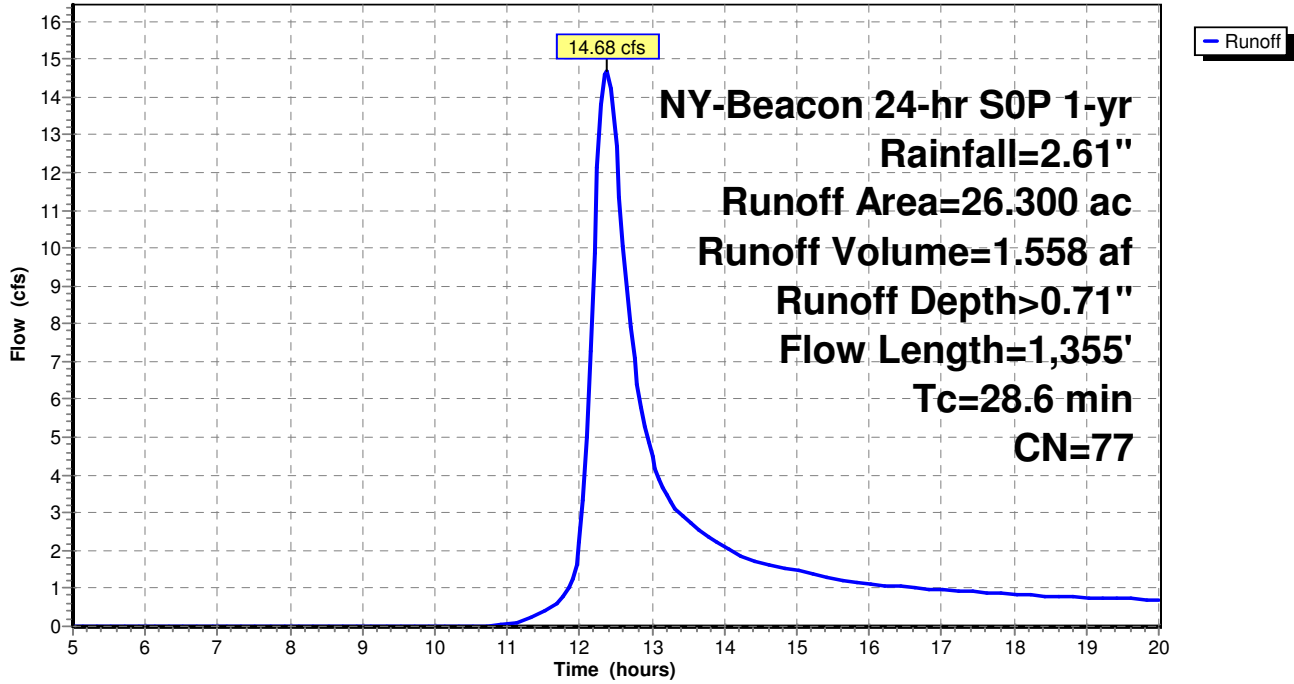
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Page 3

Subcatchment PRE:

Hydrograph



Pre Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

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Page 4

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 SOP 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 | | | |

Pre Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.

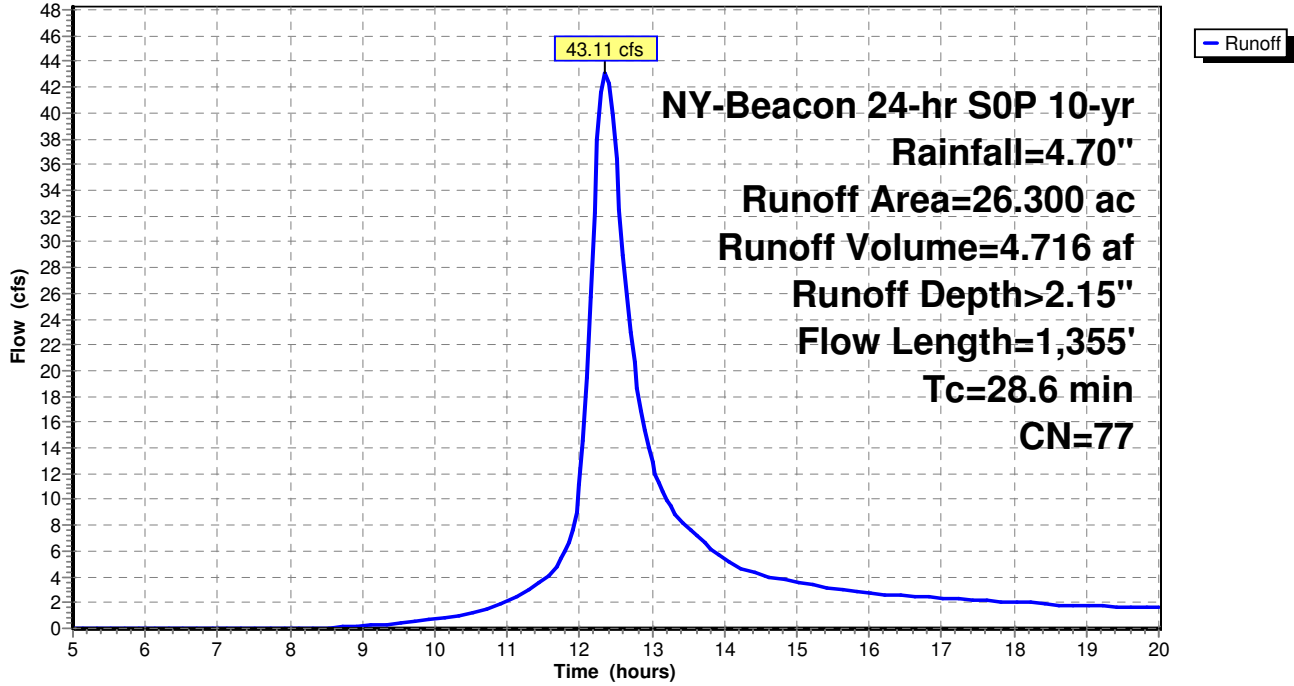
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Page 5

Subcatchment PRE:

Hydrograph



Pre Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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Page 6

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 SOP 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 | | | |

Pre Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.

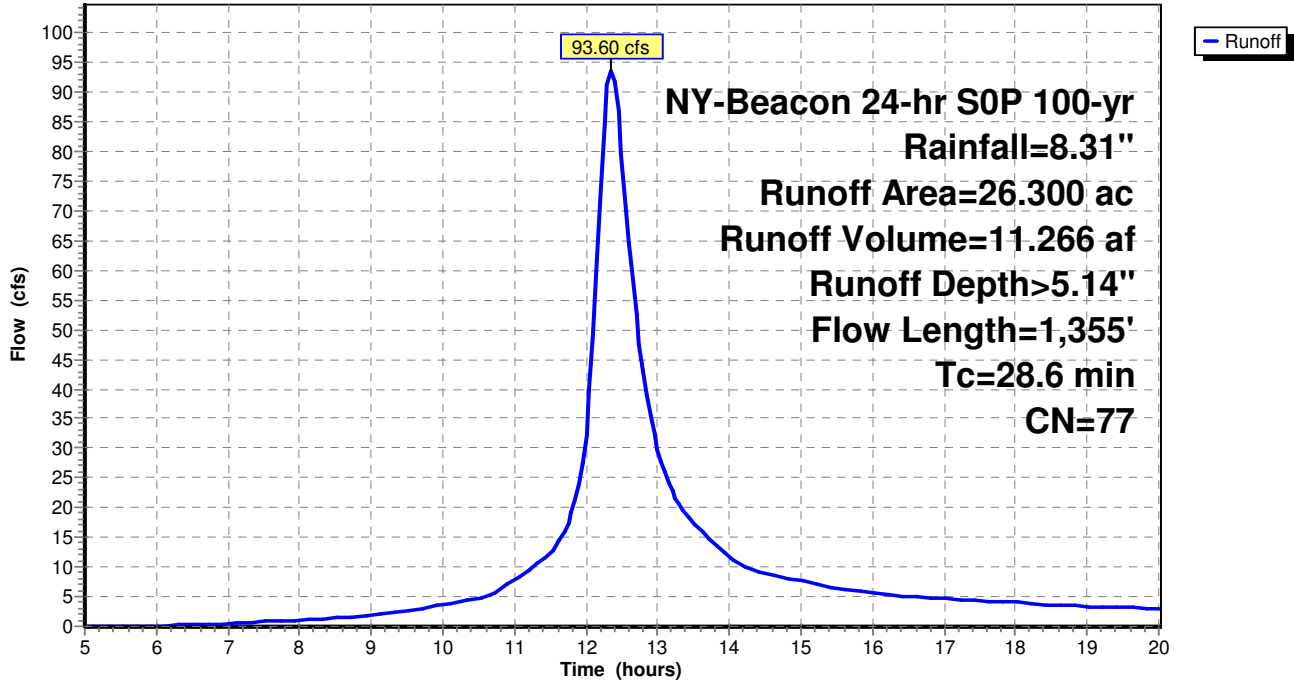
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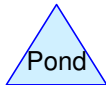
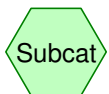
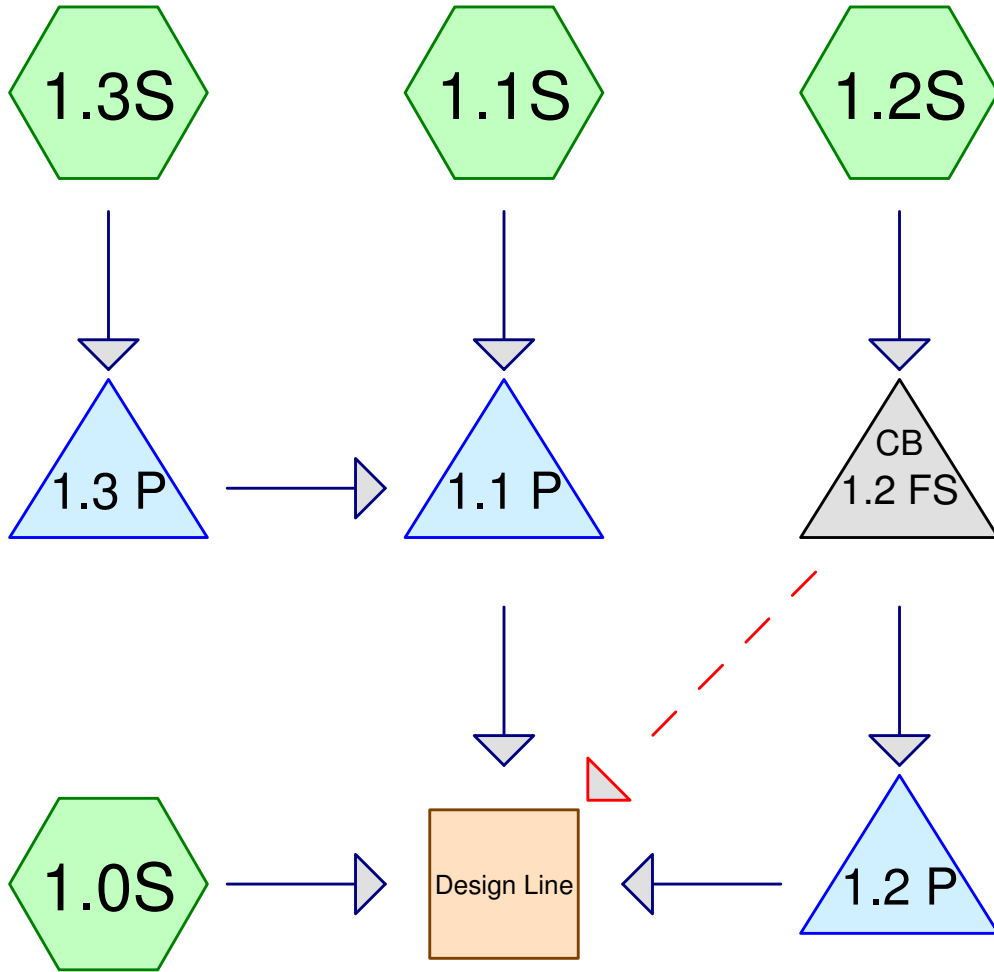
Page 7

Subcatchment PRE:

Hydrograph



APPENDIX C
Post-Development Computer Data



Routing Diagram for Post Development

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Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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Page 2

Summary for Subcatchment 1.0S:

Runoff = 13.32 cfs @ 12.37 hrs, Volume= 1.584 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 SOP 1-yr Rainfall=2.61"

| Area (ac) | CN | Description |
|-----------|----|---------------------------|
| 8.700 | 78 | Meadow, non-grazed, HSG D |
| 13.200 | 77 | Woods, Good, HSG D |
| 0.200 | 98 | Paved parking, HSG D |
| 22.100 | 78 | Weighted Average |
| 21.900 | | 99.10% Pervious Area |
| 0.200 | | 0.90% 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 | | | |

Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.

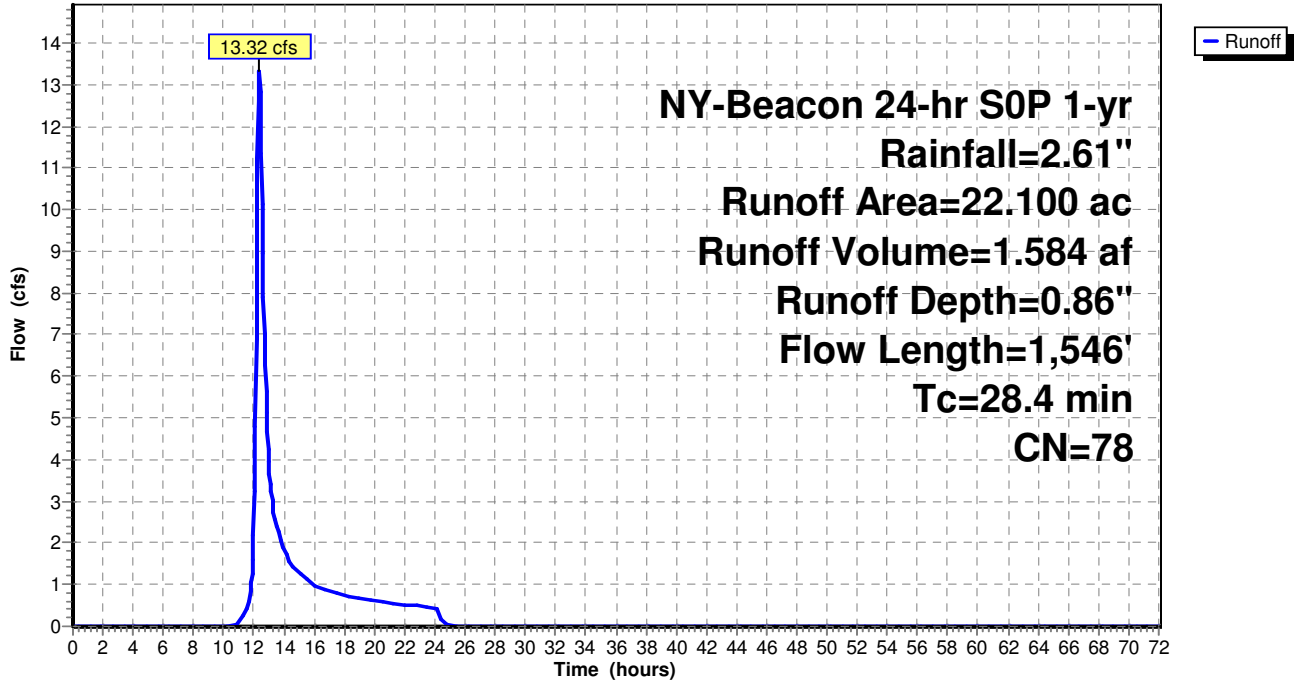
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Page 3

Subcatchment 1.0S:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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Page 4

Summary for Subcatchment 1.1S:

Runoff = 9.43 cfs @ 11.97 hrs, Volume= 0.464 af, Depth= 1.80"

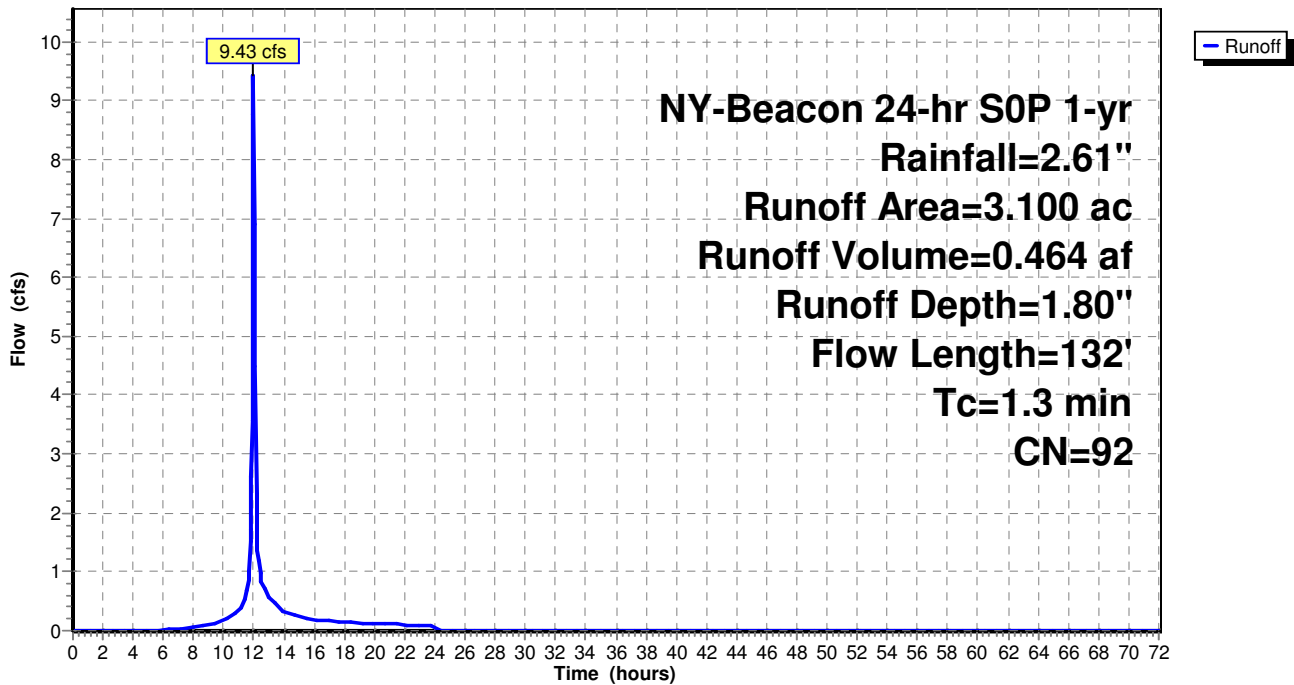
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 2.000 | 98 | Paved parking, HSG D |
| 1.100 | 80 | >75% Grass cover, Good, HSG D |
| 3.100 | 92 | Weighted Average |
| 1.100 | | 35.48% Pervious Area |
| 2.000 | | 64.52% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 0.1 | 6 | 0.0200 | 0.78 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 3.16" |
| 0.7 | 6 | 0.0500 | 0.14 | | Sheet Flow, Grass: Short n= 0.150 P2= 3.16" |
| 0.5 | 120 | 0.0600 | 3.67 | | Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps |
| 1.3 | 132 | Total | | | |

Subcatchment 1.1S:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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Page 5

Summary for Subcatchment 1.2S:

Runoff = 1.65 cfs @ 11.97 hrs, Volume= 0.082 af, Depth= 1.97"

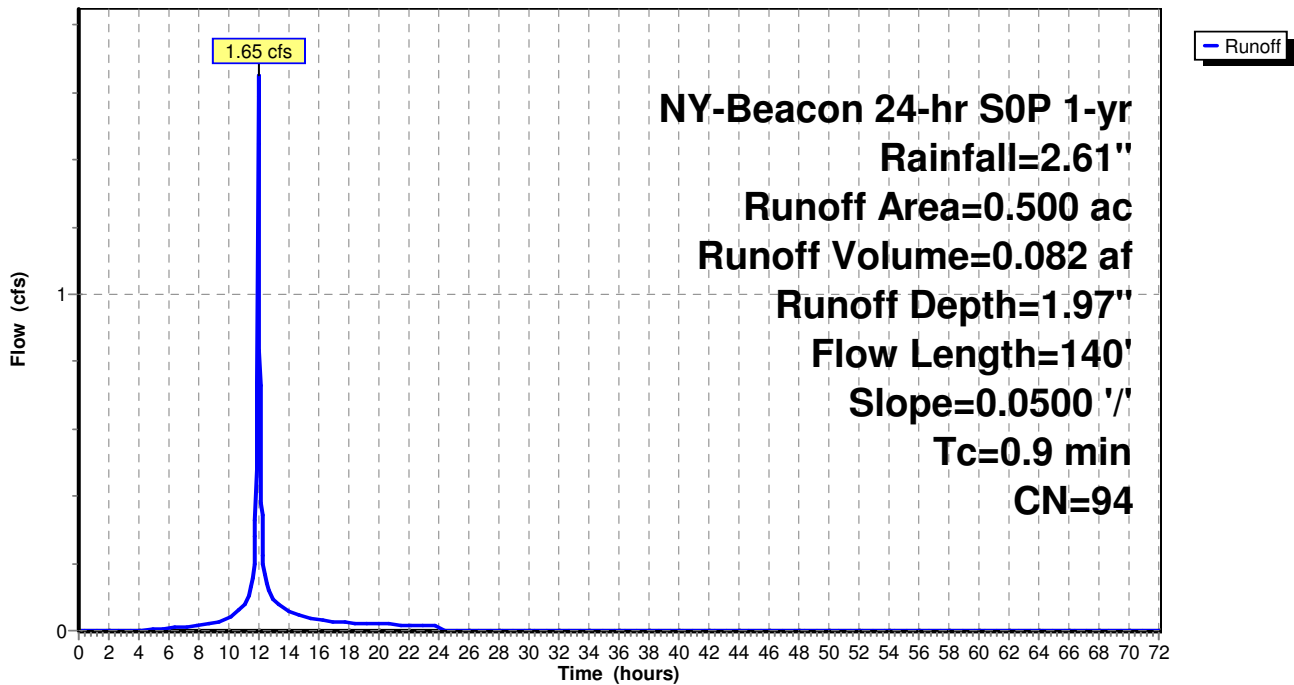
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.380 | 98 | Paved parking, HSG D |
| 0.120 | 80 | >75% Grass cover, Good, HSG D |
| 0.500 | 94 | Weighted Average |
| 0.120 | | 24.00% Pervious Area |
| 0.380 | | 76.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 0.8 | 100 | 0.0500 | 1.97 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 3.16" |
| 0.1 | 40 | 0.0500 | 4.54 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 0.9 | 140 | Total | | | |

Subcatchment 1.2S:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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Page 6

Summary for Subcatchment 1.3S:

Runoff = 0.94 cfs @ 12.02 hrs, Volume= 0.052 af, Depth= 1.55"

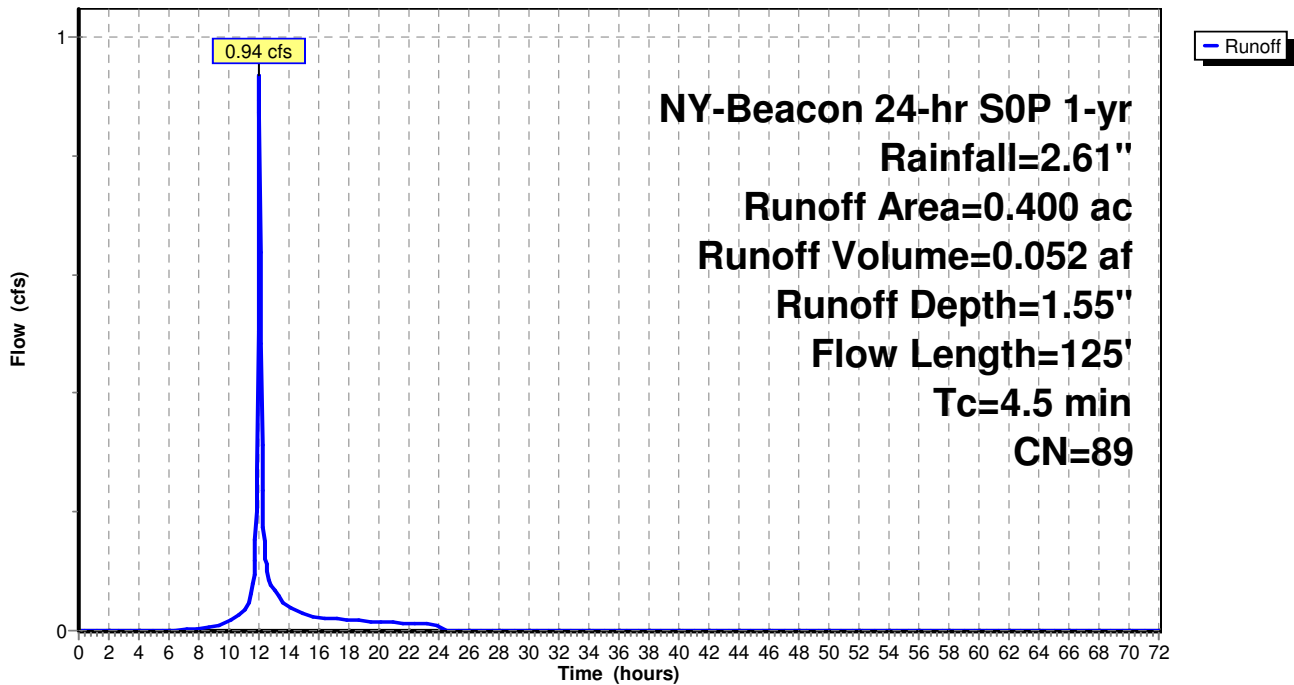
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.200 | 98 | Paved parking, HSG D |
| 0.200 | 80 | >75% Grass cover, Good, HSG D |
| 0.400 | 89 | Weighted Average |
| 0.200 | | 50.00% Pervious Area |
| 0.200 | | 50.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---|
| 4.4 | 85 | 0.1100 | 0.32 | | Sheet Flow, Grass: Short n= 0.150 P2= 3.16" |
| 0.1 | 40 | 0.0500 | 4.54 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 4.5 | 125 | Total | | | |

Subcatchment 1.3S:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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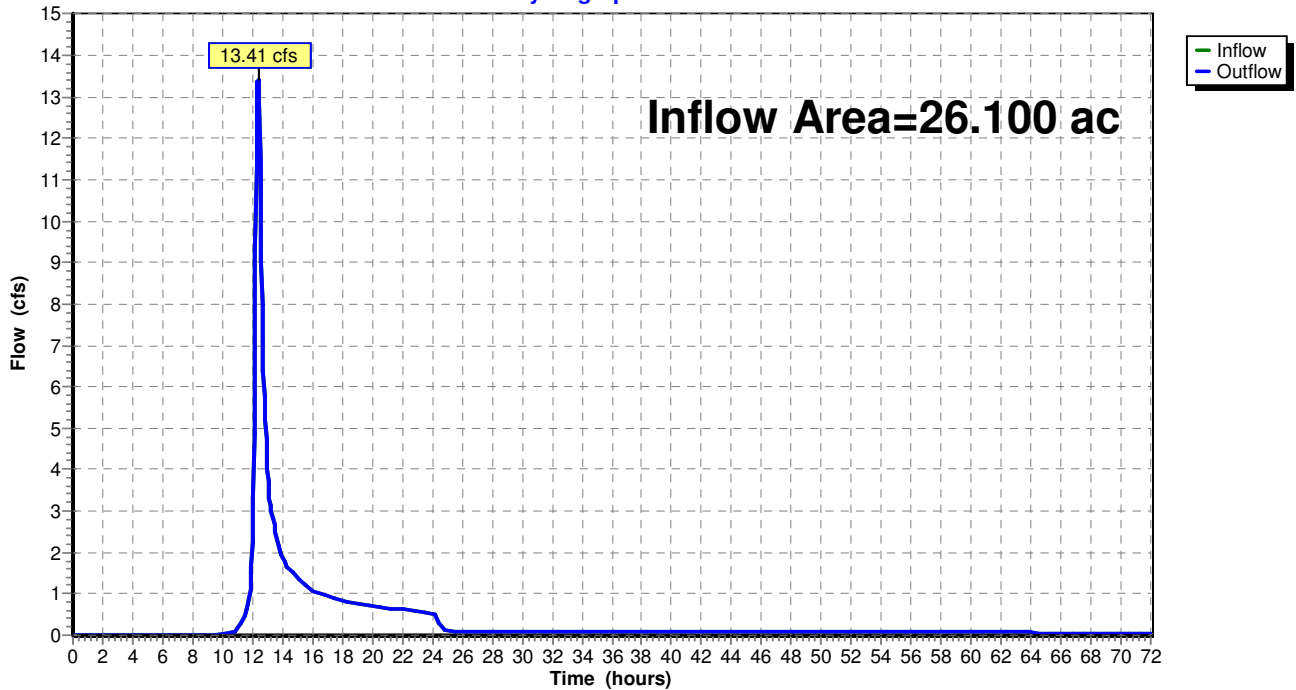
Summary for Reach Design Line:

Inflow Area = 26.100 ac, 10.65% Impervious, Inflow Depth > 0.92" for 1-yr event
Inflow = 13.41 cfs @ 12.37 hrs, Volume= 1.993 af
Outflow = 13.41 cfs @ 12.37 hrs, Volume= 1.993 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Reach Design Line:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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Summary for Pond 1.1 P:

Inflow Area = 3.500 ac, 62.86% Impervious, Inflow Depth = 1.77" for 1-yr event
 Inflow = 9.43 cfs @ 11.97 hrs, Volume= 0.515 af
 Outflow = 0.10 cfs @ 23.95 hrs, Volume= 0.409 af, Atten= 99%, Lag= 718.8 min
 Primary = 0.10 cfs @ 23.95 hrs, Volume= 0.409 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Starting Elev= 180.00' Surf.Area= 7,640 sf Storage= 10,715 cf
 Peak Elev= 182.12' @ 23.95 hrs Surf.Area= 13,277 sf Storage= 28,048 cf (17,333 cf above start)
 Flood Elev= 183.50' Surf.Area= 16,210 sf Storage= 45,265 cf (34,550 cf above start)

Plug-Flow detention time= 2,749.4 min calculated for 0.163 af (32% of inflow)
 Center-of-Mass det. time= 1,476.8 min (2,332.7 - 855.9)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|---------|---------------|--|
| #1 | 175.00' | 2,050 cf | Forebay (Prismatic) Listed below (Recalc) |
| #2 | 175.00' | 50,435 cf | Custom Stage Data (Prismatic) Listed below (Recalc) |
| | | 52,485 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|------------------|-------------------|------------------------|------------------------|
| 175.00 | 5 | 0 | 0 |
| 177.00 | 110 | 115 | 115 |
| 179.00 | 450 | 560 | 675 |
| 180.00 | 2,300 | 1,375 | 2,050 |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|------------------|-------------------|------------------------|------------------------|
| 175.00 | 500 | 0 | 0 |
| 177.00 | 1,180 | 1,680 | 1,680 |
| 179.00 | 2,090 | 3,270 | 4,950 |
| 180.00 | 5,340 | 3,715 | 8,665 |
| 182.00 | 10,730 | 16,070 | 24,735 |
| 184.00 | 14,970 | 25,700 | 50,435 |

| Device | Routing | Invert | Outlet Devices |
|--------|----------|---------|--|
| #1 | Primary | 179.00' | 24.0" Round Culvert L= 34.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 179.00' / 178.50' S= 0.0147 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |
| #2 | Device 1 | 180.00' | 1.6" Vert. Orifice/Grate C= 0.600 |
| #3 | Device 1 | 182.20' | 3.2' 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 @ 23.95 hrs HW=182.12' TW=0.00' (Dynamic Tailwater)

- 1=Culvert (Passes 0.10 cfs of 22.01 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.10 cfs @ 6.89 fps)
- 3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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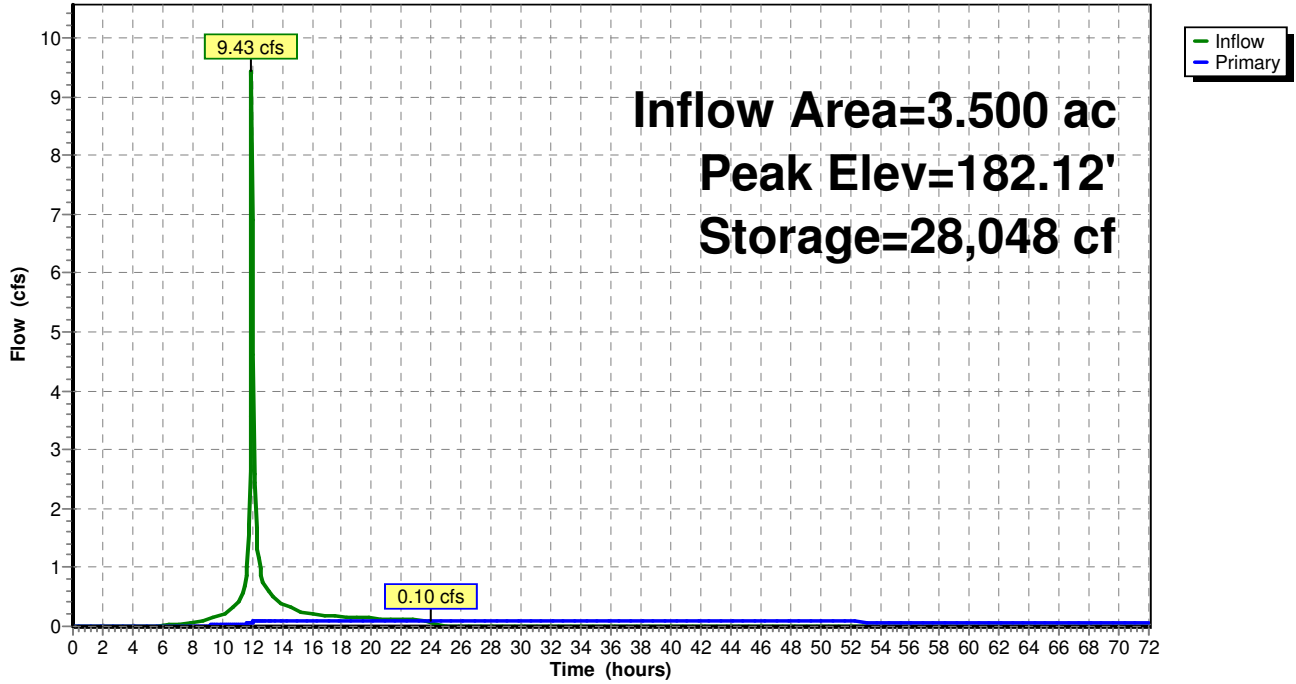
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Pond 1.1 P:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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Summary for Pond 1.2 FS:

Inflow Area = 0.500 ac, 76.00% Impervious, Inflow Depth = 1.97" for 1-yr event
 Inflow = 1.65 cfs @ 11.97 hrs, Volume= 0.082 af
 Outflow = 1.65 cfs @ 11.97 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.65 cfs @ 11.97 hrs, Volume= 0.082 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 185.97' @ 11.97 hrs

Flood Elev= 187.70'

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|---------|--|
| #1 | Primary | 184.70' | 8.0" Round Culvert L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 184.70' / 184.50' S= 0.0167 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf |
| #2 | Secondary | 184.70' | 12.0" Round Culvert L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 184.70' / 184.00' S= 0.0233 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3 | Device 2 | 186.00' | 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 |

Primary OutFlow Max=1.54 cfs @ 11.97 hrs HW=185.87' TW=183.03' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 1.54 cfs @ 4.41 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=184.70' TW=0.00' (Dynamic Tailwater)

↑**2=Culvert** (Controls 0.00 cfs)

↑**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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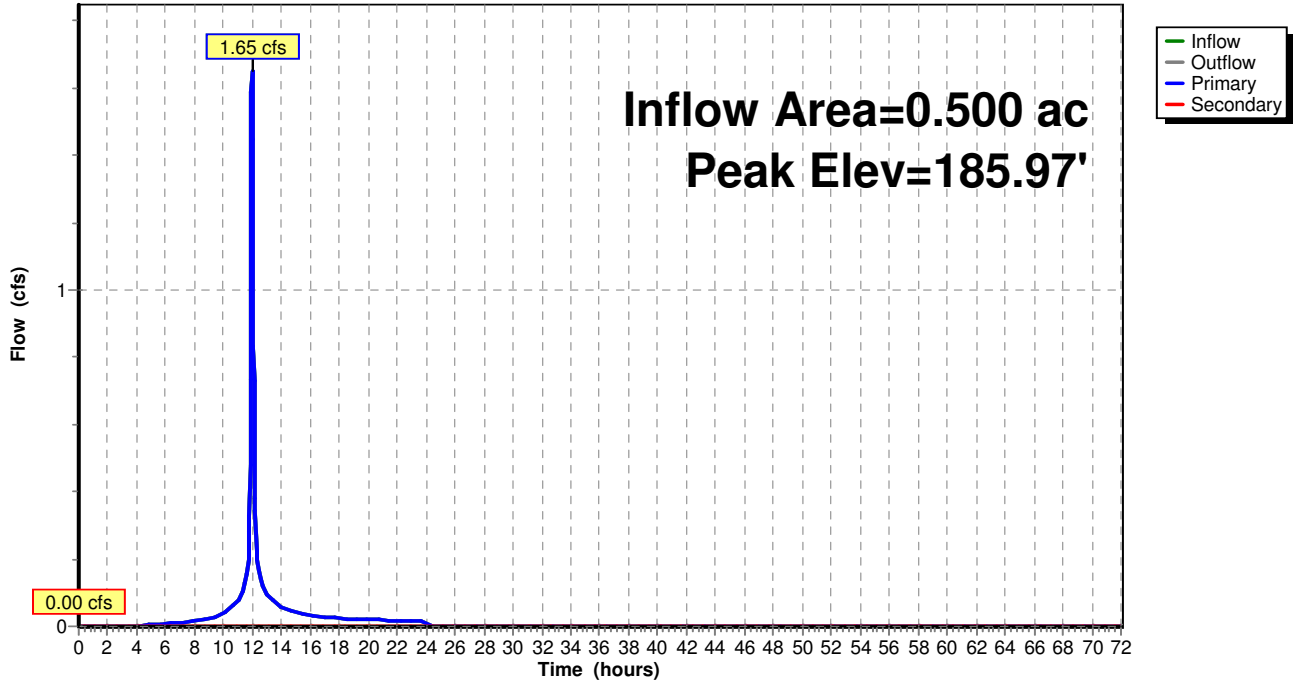
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Pond 1.2 FS:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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Summary for Pond 1.2 P:

Inflow Area = 0.500 ac, 76.00% Impervious, Inflow Depth = 1.97" for 1-yr event
Inflow = 1.65 cfs @ 11.97 hrs, Volume= 0.082 af
Outflow = 0.03 cfs @ 10.45 hrs, Volume= 0.082 af, Atten= 98%, Lag= 0.0 min
Discarded = 0.03 cfs @ 10.45 hrs, Volume= 0.082 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 184.28' @ 16.28 hrs Surf.Area= 0.030 ac Storage= 0.047 af

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 633.5 min (1,428.0 - 794.6)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|---------|---------------|--|
| #1A | 182.00' | 0.028 af | 34.75'W x 38.04'L x 3.50'H Field A 0.106 af Overall - 0.037 af Embedded = 0.069 af x 40.0% Voids |
| #2A | 182.50' | 0.037 af | ADS StormTech SC-740 x 35 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 7 rows |
| | | 0.065 af | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|---------|---|
| #1 | Discarded | 182.00' | 1.000 in/hr Exfiltration over Horizontal area |
| #2 | Primary | 184.30' | 8.0" Round Culvert L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 184.30' / 184.10' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf |

Discarded OutFlow Max=0.03 cfs @ 10.45 hrs HW=182.04' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=182.00' TW=0.00' (Dynamic Tailwater)

↑**2=Culvert** (Controls 0.00 cfs)

Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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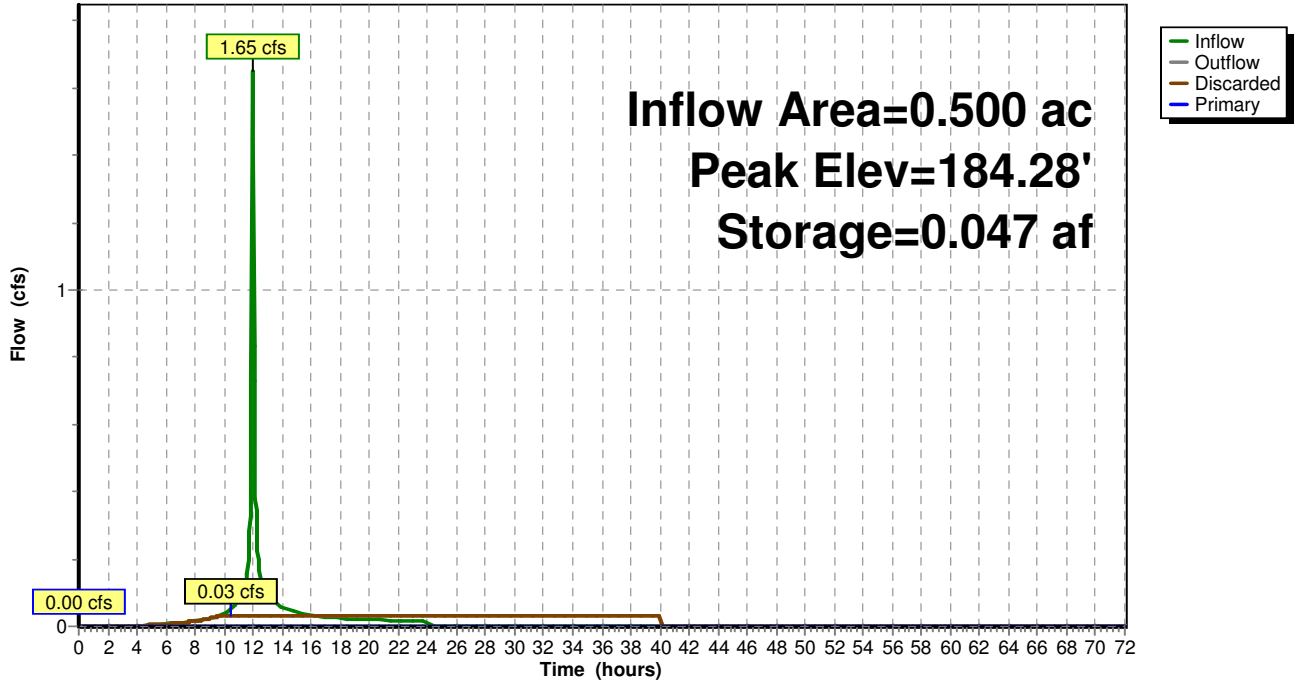
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Pond 1.2 P:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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Summary for Pond 1.3 P:

Inflow Area = 0.400 ac, 50.00% Impervious, Inflow Depth = 1.55" for 1-yr event
 Inflow = 0.94 cfs @ 12.02 hrs, Volume= 0.052 af
 Outflow = 0.33 cfs @ 12.21 hrs, Volume= 0.052 af, Atten= 65%, Lag= 11.2 min
 Primary = 0.33 cfs @ 12.21 hrs, Volume= 0.052 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 192.59' @ 12.21 hrs Surf.Area= 1,620 sf Storage= 858 cf

Plug-Flow detention time= 460.9 min calculated for 0.052 af (100% of inflow)
 Center-of-Mass det. time= 461.7 min (1,288.2 - 826.5)

| Volume | Invert | Avail.Storage | Storage Description |
|------------------|-------------------|------------------------|--|
| #1 | 192.00' | 3,720 cf | Custom Stage Data (Prismatic) Listed below (Recalc) |
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 192.00 | 1,270 | 0 | 0 |
| 194.00 | 2,450 | 3,720 | 3,720 |

| Device | Routing | Invert | Outlet Devices |
|--------|----------|---------|---|
| #1 | Primary | 188.20' | 12.0" Round Culvert L= 102.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 188.20' / 187.10' S= 0.0108 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #2 | Device 1 | 192.00' | 0.250 in/hr Exfiltration over Horizontal area |
| #3 | Device 1 | 192.50' | 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=0.33 cfs @ 12.21 hrs HW=192.59' TW=181.46' (Dynamic Tailwater)

- ↑ 1=Culvert (Passes 0.33 cfs of 6.16 cfs potential flow)
- ↑ 2=Exfiltration (Exfiltration Controls 0.01 cfs)
- ↑ 3=Broad-Crested Rectangular Weir (Weir Controls 0.32 cfs @ 0.85 fps)

Post Development

NY-Beacon 24-hr SOP 1-yr Rainfall=2.61"

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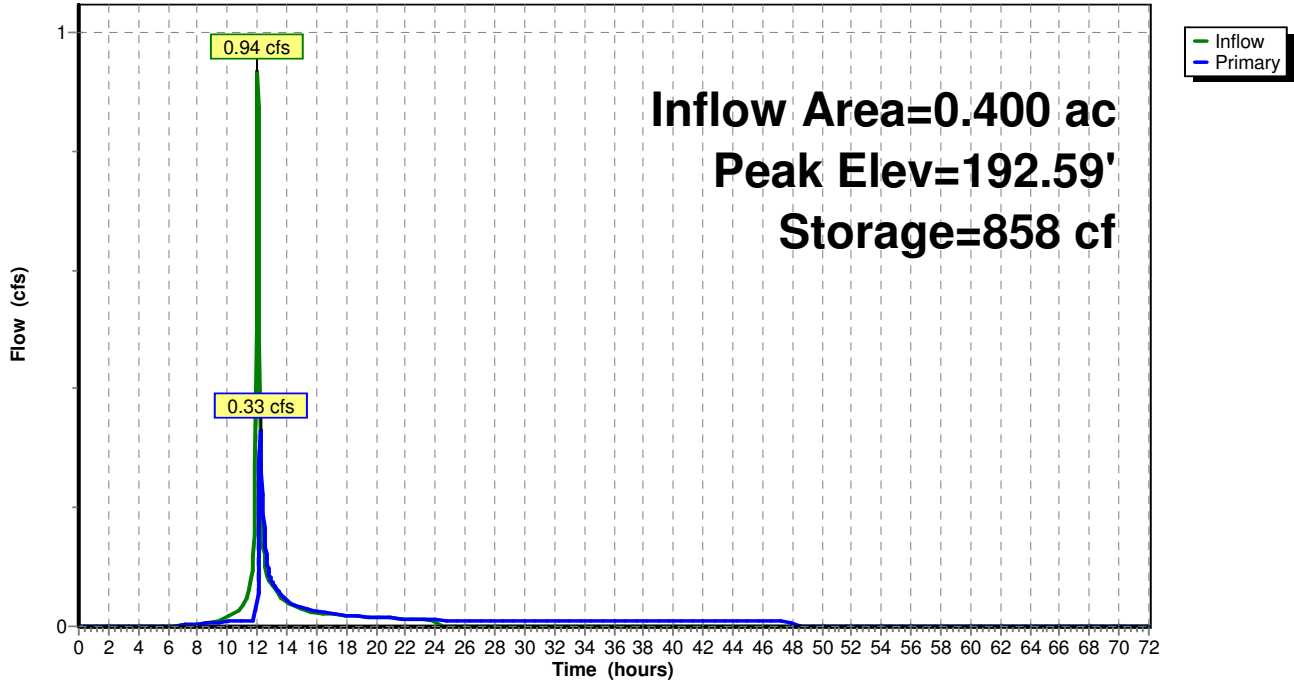
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Pond 1.3 P:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

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Summary for Subcatchment 1.0S:

Runoff = 37.72 cfs @ 12.35 hrs, Volume= 4.529 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 SOP 10-yr Rainfall=4.70"

| Area (ac) | CN | Description |
|-----------|----|---------------------------|
| 8.700 | 78 | Meadow, non-grazed, HSG D |
| 13.200 | 77 | Woods, Good, HSG D |
| 0.200 | 98 | Paved parking, HSG D |
| 22.100 | 78 | Weighted Average |
| 21.900 | | 99.10% Pervious Area |
| 0.200 | | 0.90% 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 | | | |

Post Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

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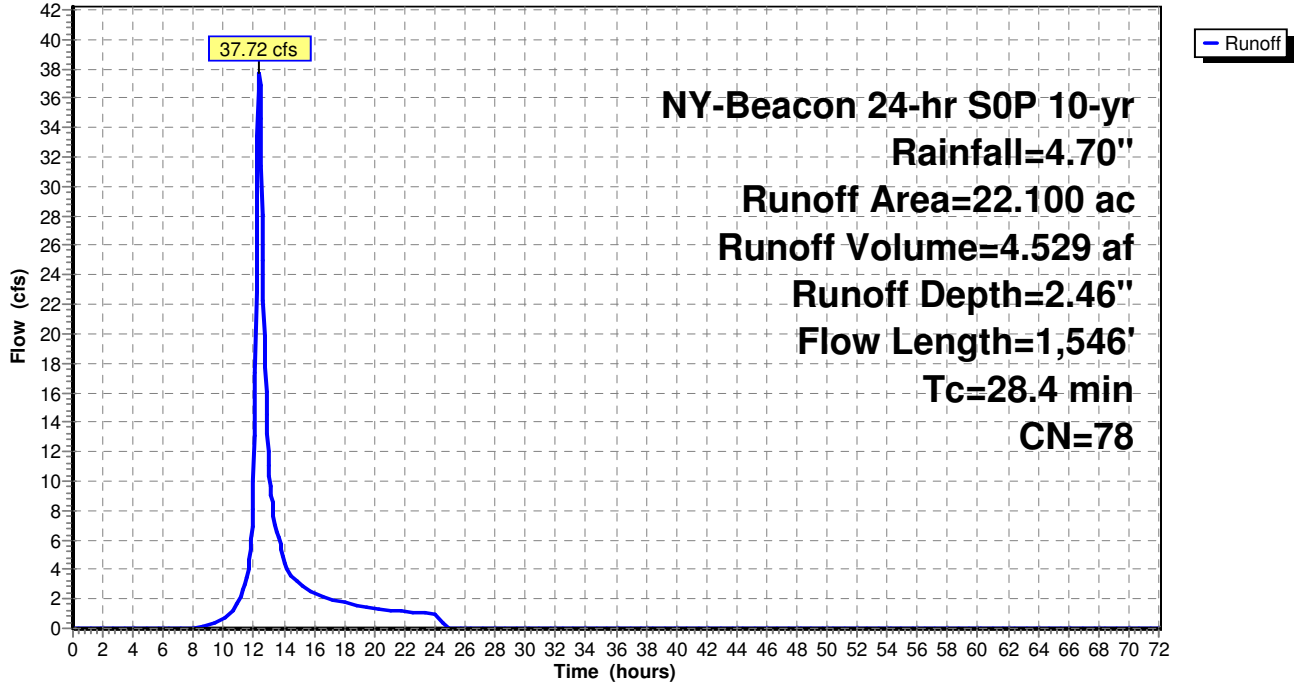
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Subcatchment 1.0S:

Hydrograph



Post Development

NY-Beacon 24-hr S0P 10-yr Rainfall=4.70"

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Summary for Subcatchment 1.1S:

Runoff = 16.79 cfs @ 11.97 hrs, Volume= 0.981 af, Depth= 3.80"

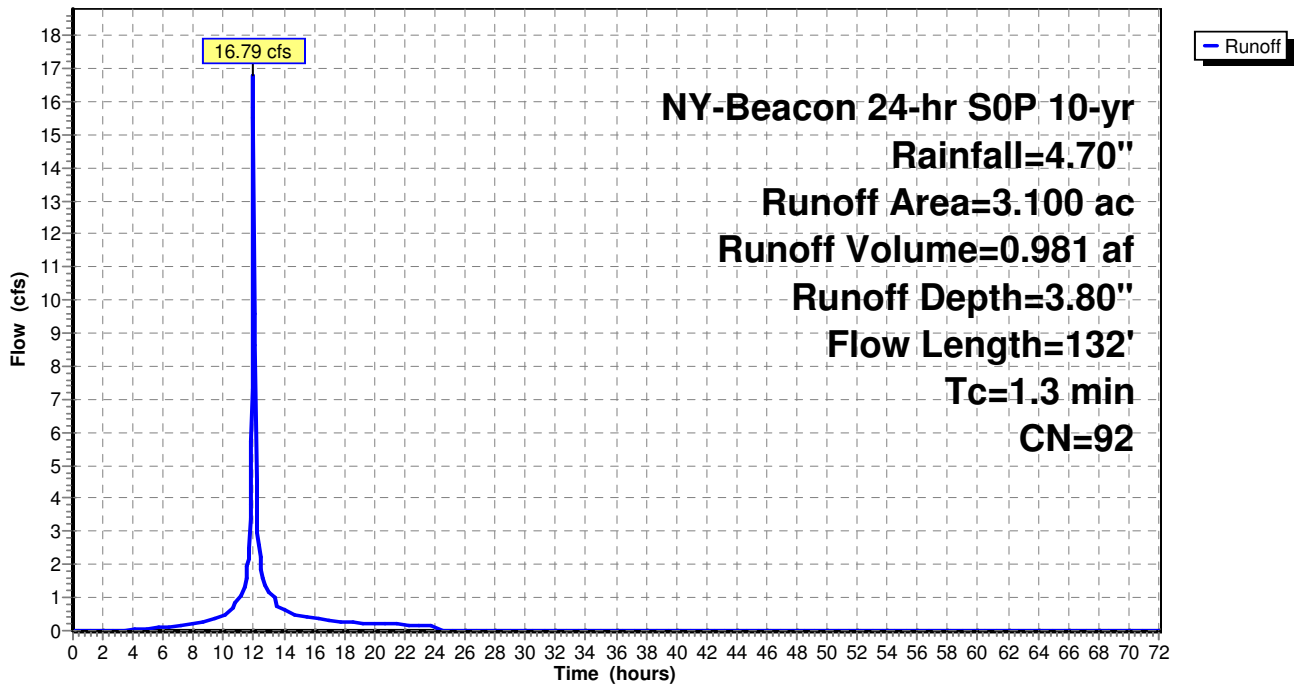
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 NY-Beacon 24-hr S0P 10-yr Rainfall=4.70"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 2.000 | 98 | Paved parking, HSG D |
| 1.100 | 80 | >75% Grass cover, Good, HSG D |
| 3.100 | 92 | Weighted Average |
| 1.100 | | 35.48% Pervious Area |
| 2.000 | | 64.52% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 0.1 | 6 | 0.0200 | 0.78 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 3.16" |
| 0.7 | 6 | 0.0500 | 0.14 | | Sheet Flow, Grass: Short n= 0.150 P2= 3.16" |
| 0.5 | 120 | 0.0600 | 3.67 | | Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps |
| 1.3 | 132 | Total | | | |

Subcatchment 1.1S:

Hydrograph



Post Development

NY-Beacon 24-hr S0P 10-yr Rainfall=4.70"

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Summary for Subcatchment 1.2S:

Runoff = 2.81 cfs @ 11.97 hrs, Volume= 0.167 af, Depth= 4.01"

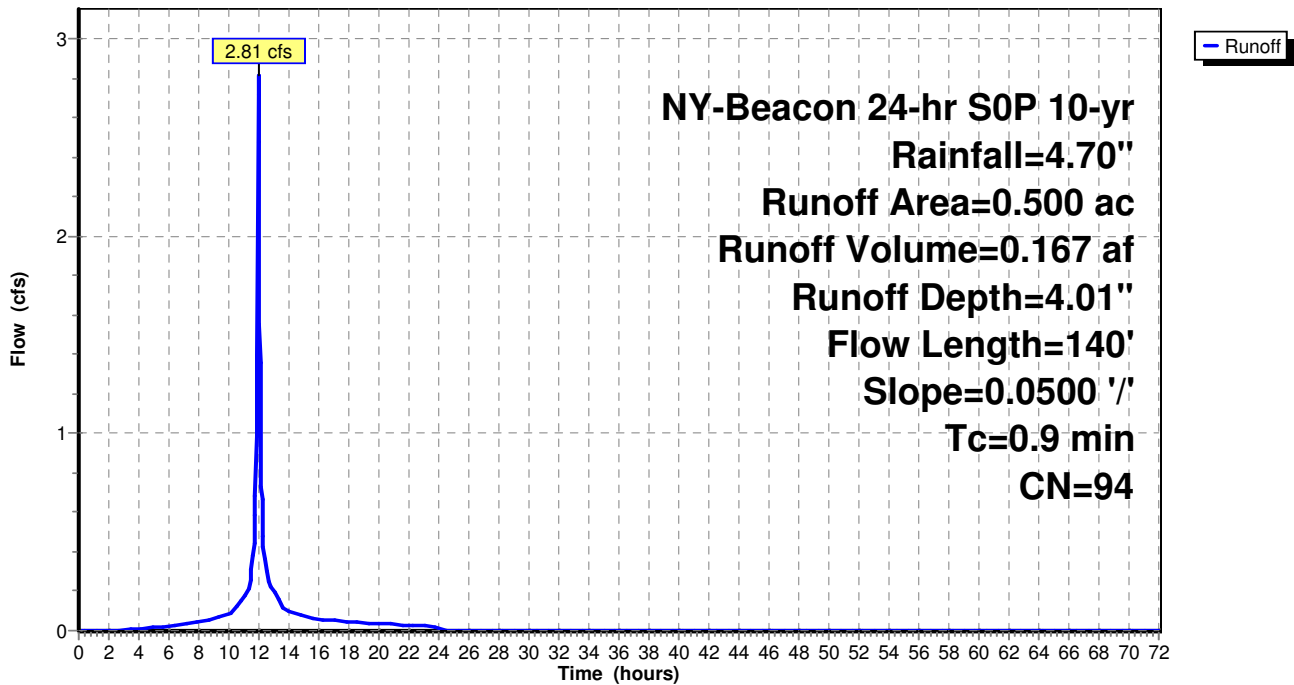
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 NY-Beacon 24-hr S0P 10-yr Rainfall=4.70"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.380 | 98 | Paved parking, HSG D |
| 0.120 | 80 | >75% Grass cover, Good, HSG D |
| 0.500 | 94 | Weighted Average |
| 0.120 | | 24.00% Pervious Area |
| 0.380 | | 76.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 0.8 | 100 | 0.0500 | 1.97 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 3.16" |
| 0.1 | 40 | 0.0500 | 4.54 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 0.9 | 140 | Total | | | |

Subcatchment 1.2S:

Hydrograph



Post Development

NY-Beacon 24-hr S0P 10-yr Rainfall=4.70"

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Summary for Subcatchment 1.3S:

Runoff = 1.81 cfs @ 12.02 hrs, Volume= 0.116 af, Depth= 3.49"

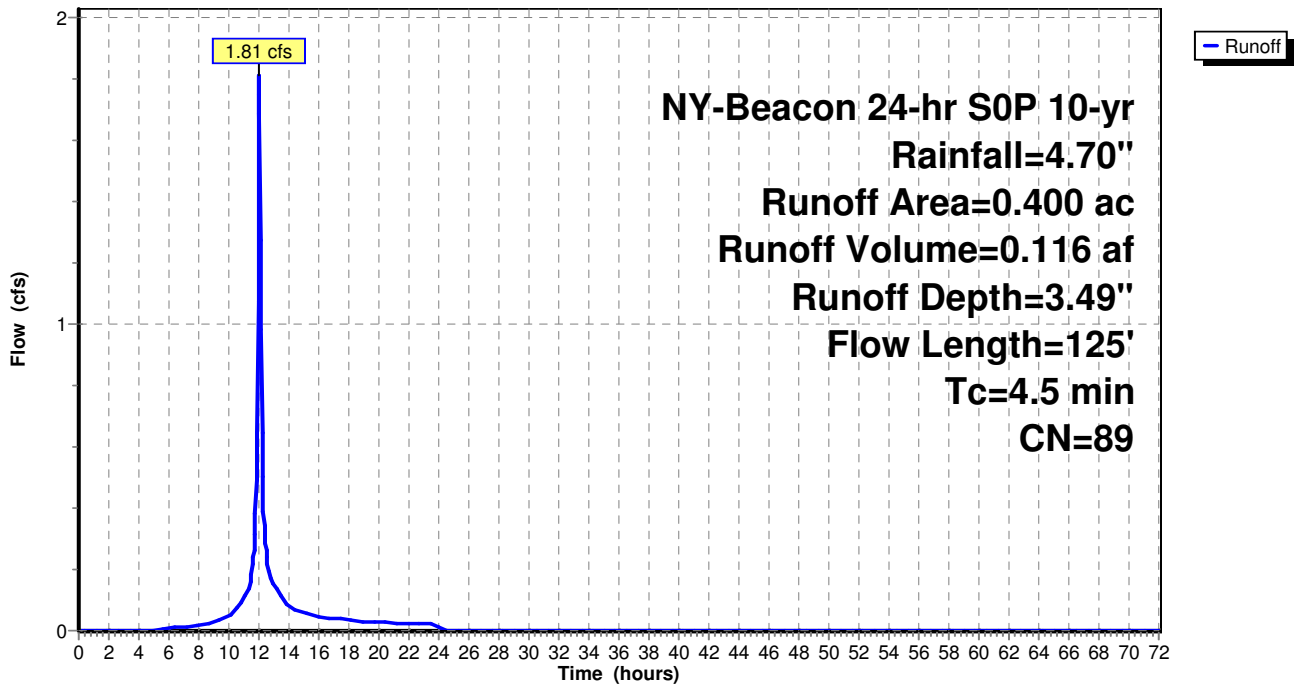
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 NY-Beacon 24-hr S0P 10-yr Rainfall=4.70"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.200 | 98 | Paved parking, HSG D |
| 0.200 | 80 | >75% Grass cover, Good, HSG D |
| 0.400 | 89 | Weighted Average |
| 0.200 | | 50.00% Pervious Area |
| 0.200 | | 50.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---|
| 4.4 | 85 | 0.1100 | 0.32 | | Sheet Flow, Grass: Short n= 0.150 P2= 3.16" |
| 0.1 | 40 | 0.0500 | 4.54 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 4.5 | 125 | Total | | | |

Subcatchment 1.3S:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

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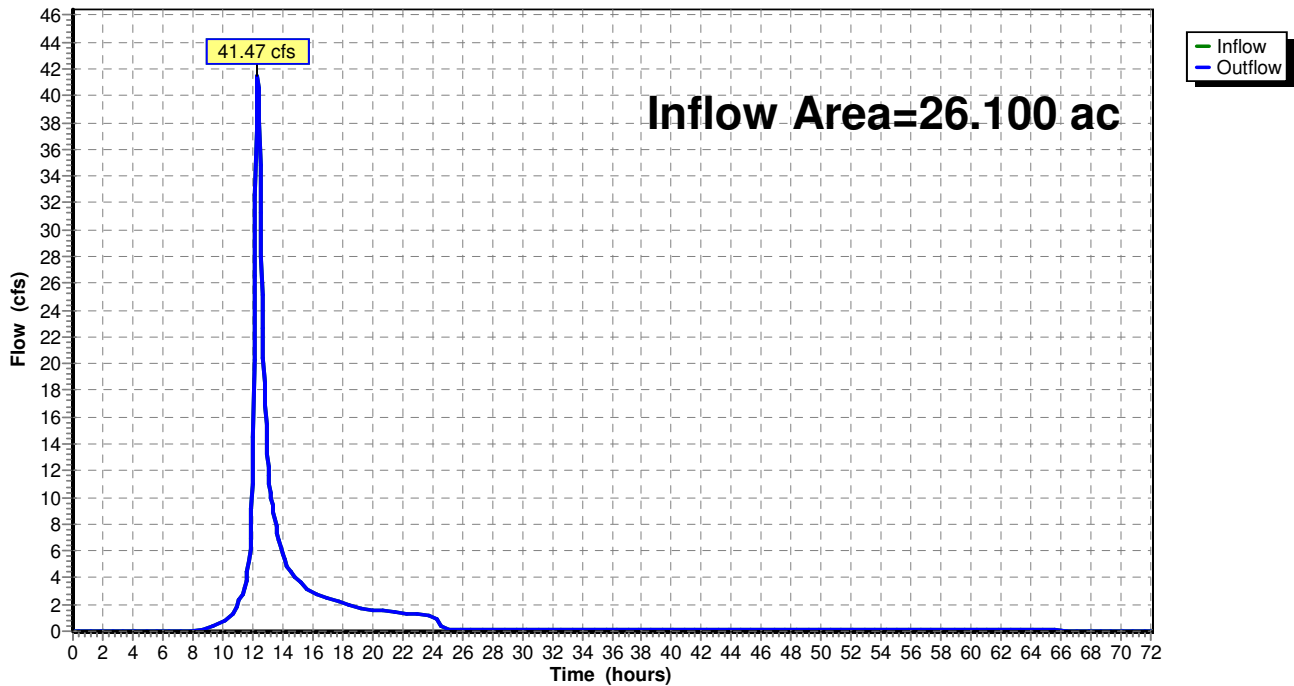
Summary for Reach Design Line:

Inflow Area = 26.100 ac, 10.65% Impervious, Inflow Depth > 2.56" for 10-yr event
Inflow = 41.47 cfs @ 12.35 hrs, Volume= 5.572 af
Outflow = 41.47 cfs @ 12.35 hrs, Volume= 5.572 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Reach Design Line:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

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Summary for Pond 1.1 P:

Inflow Area = 3.500 ac, 62.86% Impervious, Inflow Depth = 3.76" for 10-yr event
 Inflow = 17.25 cfs @ 11.98 hrs, Volume= 1.097 af
 Outflow = 3.27 cfs @ 12.31 hrs, Volume= 0.973 af, Atten= 81%, Lag= 20.2 min
 Primary = 3.27 cfs @ 12.31 hrs, Volume= 0.973 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Starting Elev= 180.00' Surf.Area= 7,640 sf Storage= 10,715 cf
 Peak Elev= 182.68' @ 12.31 hrs Surf.Area= 14,469 sf Storage= 34,555 cf (23,840 cf above start)
 Flood Elev= 183.50' Surf.Area= 16,210 sf Storage= 45,265 cf (34,550 cf above start)

Plug-Flow detention time= 1,098.6 min calculated for 0.727 af (66% of inflow)
 Center-of-Mass det. time= 708.9 min (1,517.8 - 809.0)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|---------|---------------|--|
| #1 | 175.00' | 2,050 cf | Forebay (Prismatic) Listed below (Recalc) |
| #2 | 175.00' | 50,435 cf | Custom Stage Data (Prismatic) Listed below (Recalc) |
| | | 52,485 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|------------------|-------------------|------------------------|------------------------|
| 175.00 | 5 | 0 | 0 |
| 177.00 | 110 | 115 | 115 |
| 179.00 | 450 | 560 | 675 |
| 180.00 | 2,300 | 1,375 | 2,050 |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|------------------|-------------------|------------------------|------------------------|
| 175.00 | 500 | 0 | 0 |
| 177.00 | 1,180 | 1,680 | 1,680 |
| 179.00 | 2,090 | 3,270 | 4,950 |
| 180.00 | 5,340 | 3,715 | 8,665 |
| 182.00 | 10,730 | 16,070 | 24,735 |
| 184.00 | 14,970 | 25,700 | 50,435 |

| Device | Routing | Invert | Outlet Devices |
|--------|----------|---------|--|
| #1 | Primary | 179.00' | 24.0" Round Culvert L= 34.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 179.00' / 178.50' S= 0.0147 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |
| #2 | Device 1 | 180.00' | 1.6" Vert. Orifice/Grate C= 0.600 |
| #3 | Device 1 | 182.20' | 3.2' 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=3.26 cfs @ 12.31 hrs HW=182.68' TW=0.00' (Dynamic Tailwater)

- 1=Culvert (Passes 3.26 cfs of 24.75 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.11 cfs @ 7.78 fps)
- 3=Broad-Crested Rectangular Weir (Weir Controls 3.15 cfs @ 2.06 fps)

Post Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

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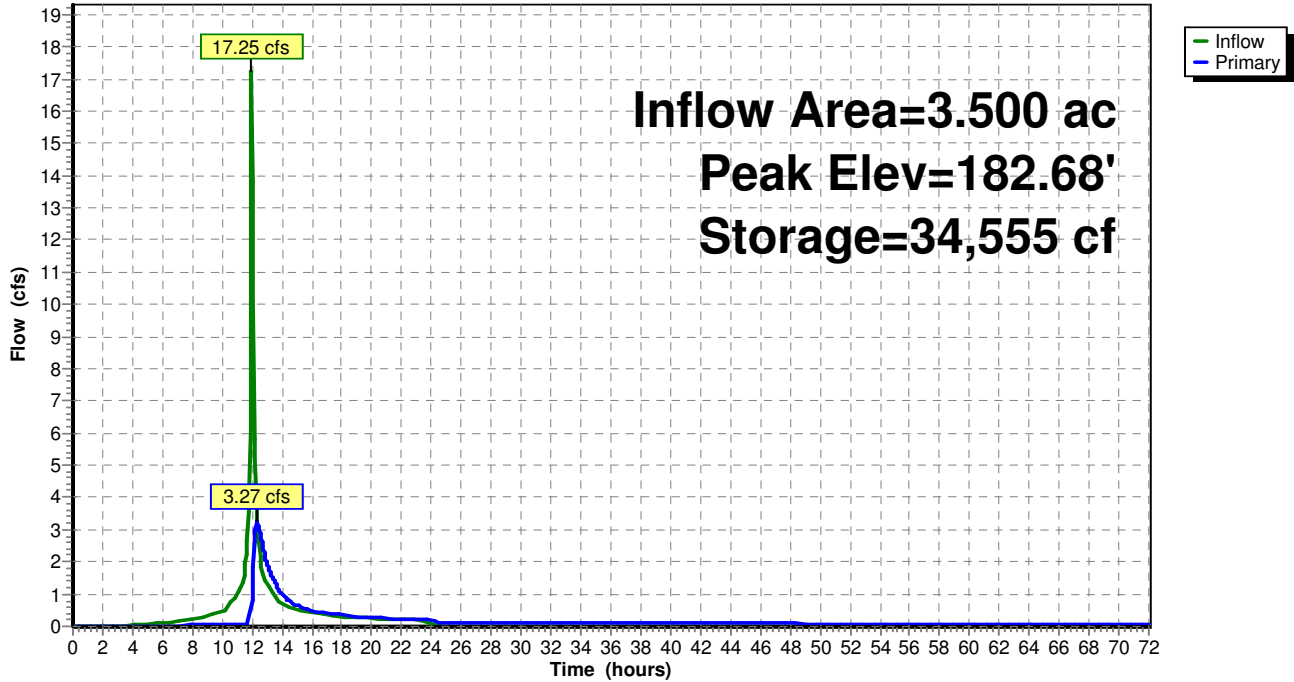
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Pond 1.1 P:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

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Summary for Pond 1.2 FS:

Inflow Area = 0.500 ac, 76.00% Impervious, Inflow Depth = 4.01" for 10-yr event
Inflow = 2.81 cfs @ 11.97 hrs, Volume= 0.167 af
Outflow = 2.81 cfs @ 11.97 hrs, Volume= 0.167 af, Atten= 0%, Lag= 0.0 min
Primary = 1.85 cfs @ 11.97 hrs, Volume= 0.161 af
Secondary = 0.97 cfs @ 11.97 hrs, Volume= 0.007 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 186.24' @ 11.97 hrs

Flood Elev= 187.70'

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|---------|--|
| #1 | Primary | 184.70' | 8.0" Round Culvert L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 184.70' / 184.50' S= 0.0167 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf |
| #2 | Secondary | 184.70' | 12.0" Round Culvert L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 184.70' / 184.00' S= 0.0233 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3 | Device 2 | 186.00' | 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 |

Primary OutFlow Max=1.80 cfs @ 11.97 hrs HW=186.17' TW=184.34' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 1.80 cfs @ 5.14 fps)

Secondary OutFlow Max=0.84 cfs @ 11.97 hrs HW=186.18' TW=0.00' (Dynamic Tailwater)

↑**2=Culvert** (Passes 0.84 cfs of 3.74 cfs potential flow)

↑**3=Broad-Crested Rectangular Weir** (Weir Controls 0.84 cfs @ 1.18 fps)

Post Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

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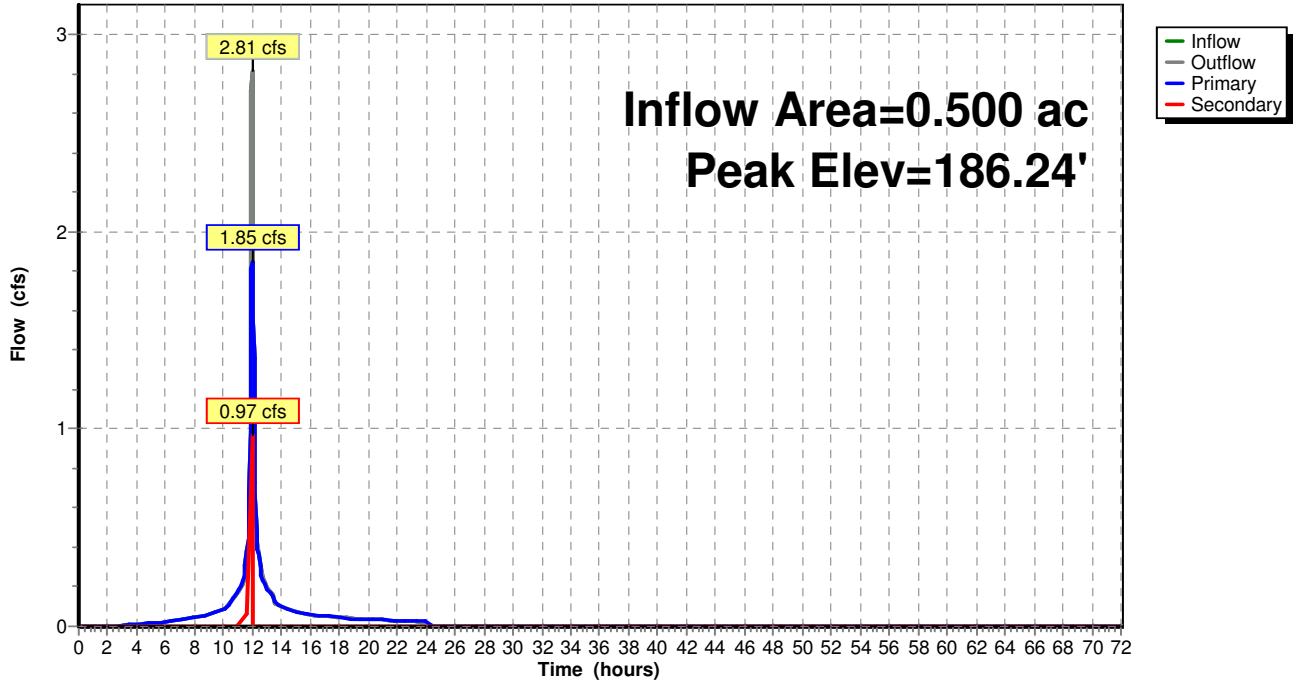
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Pond 1.2 FS:

Hydrograph



Post Development

NY-Beacon 24-hr S0P 10-yr Rainfall=4.70"

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Summary for Pond 1.2 P:

Inflow Area = 0.500 ac, 76.00% Impervious, Inflow Depth = 3.85" for 10-yr event
Inflow = 1.85 cfs @ 11.97 hrs, Volume= 0.161 af
Outflow = 1.09 cfs @ 12.12 hrs, Volume= 0.161 af, Atten= 41%, Lag= 9.1 min
Discarded = 0.03 cfs @ 7.95 hrs, Volume= 0.096 af
Primary = 1.06 cfs @ 12.12 hrs, Volume= 0.064 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 185.07' @ 12.12 hrs Surf.Area= 0.030 ac Storage= 0.060 af

Plug-Flow detention time= 403.2 min calculated for 0.160 af (100% of inflow)
Center-of-Mass det. time= 403.7 min (1,178.8 - 775.1)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|---------|---------------|--|
| #1A | 182.00' | 0.028 af | 34.75'W x 38.04'L x 3.50'H Field A 0.106 af Overall - 0.037 af Embedded = 0.069 af x 40.0% Voids |
| #2A | 182.50' | 0.037 af | ADS StormTech SC-740 x 35 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 7 rows |
| | | 0.065 af | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|---------|---|
| #1 | Discarded | 182.00' | 1.000 in/hr Exfiltration over Horizontal area |
| #2 | Primary | 184.30' | 8.0" Round Culvert L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 184.30' / 184.10' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf |

Discarded OutFlow Max=0.03 cfs @ 7.95 hrs HW=182.04' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=1.02 cfs @ 12.12 hrs HW=185.04' TW=0.00' (Dynamic Tailwater)

↑**2=Culvert** (Barrel Controls 1.02 cfs @ 3.26 fps)

Post Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

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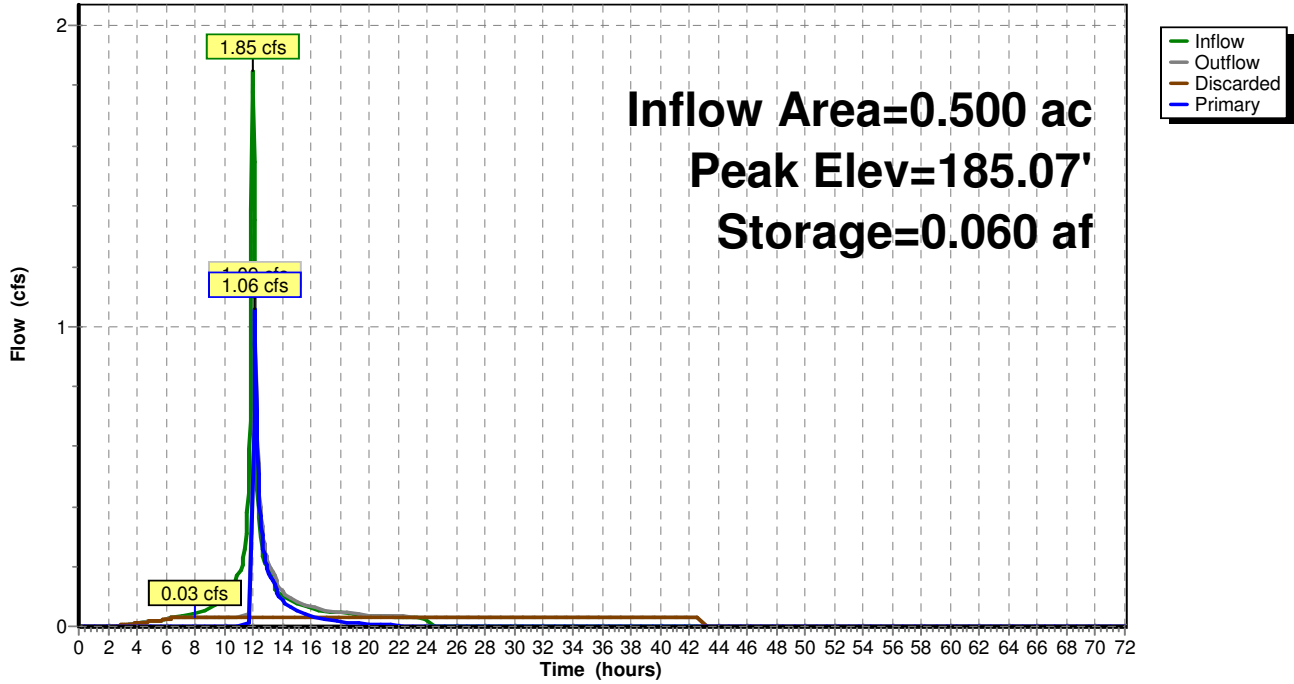
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Pond 1.2 P:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

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Summary for Pond 1.3 P:

Inflow Area = 0.400 ac, 50.00% Impervious, Inflow Depth = 3.49" for 10-yr event
 Inflow = 1.81 cfs @ 12.02 hrs, Volume= 0.116 af
 Outflow = 1.50 cfs @ 12.08 hrs, Volume= 0.116 af, Atten= 17%, Lag= 3.3 min
 Primary = 1.50 cfs @ 12.08 hrs, Volume= 0.116 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 192.76' @ 12.08 hrs Surf.Area= 1,718 sf Storage= 1,133 cf

Plug-Flow detention time= 221.9 min calculated for 0.116 af (100% of inflow)
 Center-of-Mass det. time= 222.7 min (1,022.5 - 799.8)

| Volume | Invert | Avail.Storage | Storage Description |
|------------------|-------------------|------------------------|--|
| #1 | 192.00' | 3,720 cf | Custom Stage Data (Prismatic) Listed below (Recalc) |
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 192.00 | 1,270 | 0 | 0 |
| 194.00 | 2,450 | 3,720 | 3,720 |

| Device | Routing | Invert | Outlet Devices |
|--------|----------|---------|---|
| #1 | Primary | 188.20' | 12.0" Round Culvert L= 102.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 188.20' / 187.10' S= 0.0108 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #2 | Device 1 | 192.00' | 0.250 in/hr Exfiltration over Horizontal area |
| #3 | Device 1 | 192.50' | 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=1.47 cfs @ 12.08 hrs HW=192.76' TW=182.46' (Dynamic Tailwater)

- ↑ **1=Culvert** (Passes 1.47 cfs of 6.27 cfs potential flow)
- ↑ **2=Exfiltration** (Exfiltration Controls 0.01 cfs)
- ↑ **3=Broad-Crested Rectangular Weir** (Weir Controls 1.46 cfs @ 1.43 fps)

Post Development

NY-Beacon 24-hr SOP 10-yr Rainfall=4.70"

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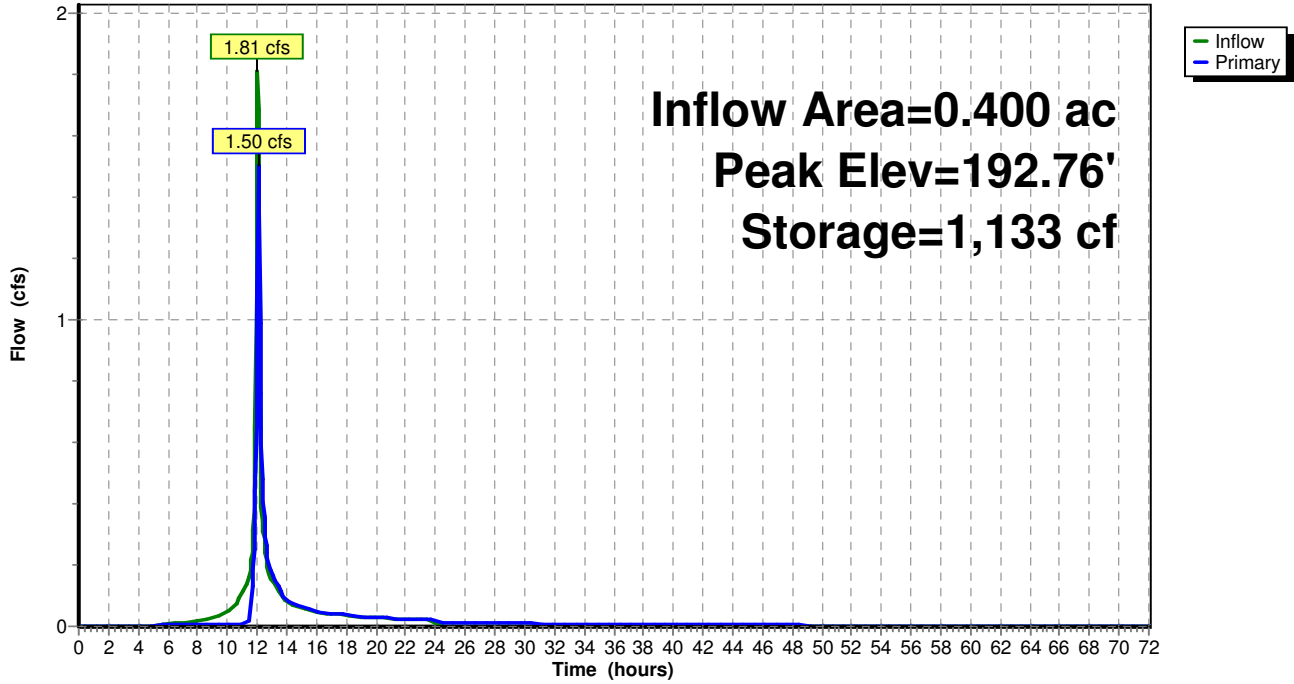
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Pond 1.3 P:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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Summary for Subcatchment 1.0S:

Runoff = 80.42 cfs @ 12.35 hrs, Volume= 10.457 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 SOP 100-yr Rainfall=8.31"

| Area (ac) | CN | Description |
|-----------|----|---------------------------|
| 8.700 | 78 | Meadow, non-grazed, HSG D |
| 13.200 | 77 | Woods, Good, HSG D |
| 0.200 | 98 | Paved parking, HSG D |
| 22.100 | 78 | Weighted Average |
| 21.900 | | 99.10% Pervious Area |
| 0.200 | | 0.90% 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 | | | |

Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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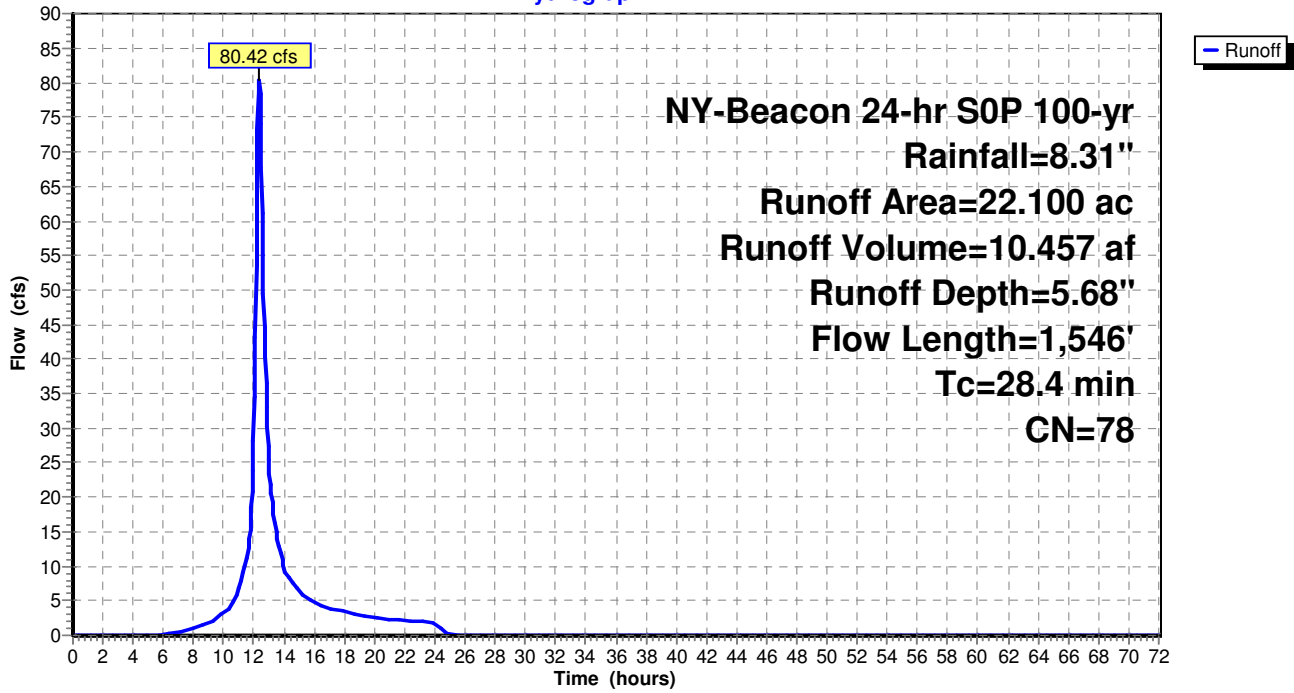
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Subcatchment 1.0S:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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Summary for Subcatchment 1.1S:

Runoff = 27.04 cfs @ 11.97 hrs, Volume= 1.899 af, Depth= 7.35"

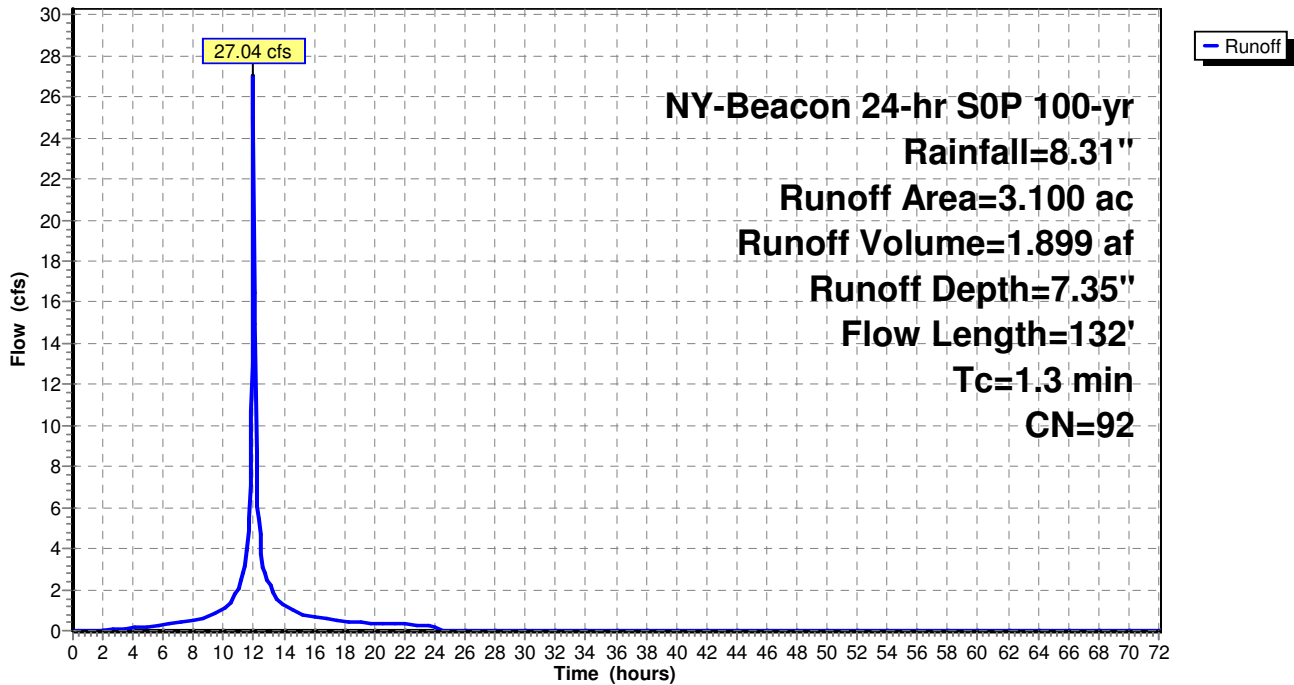
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 2.000 | 98 | Paved parking, HSG D |
| 1.100 | 80 | >75% Grass cover, Good, HSG D |
| 3.100 | 92 | Weighted Average |
| 1.100 | | 35.48% Pervious Area |
| 2.000 | | 64.52% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 0.1 | 6 | 0.0200 | 0.78 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 3.16" |
| 0.7 | 6 | 0.0500 | 0.14 | | Sheet Flow, Grass: Short n= 0.150 P2= 3.16" |
| 0.5 | 120 | 0.0600 | 3.67 | | Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps |
| 1.3 | 132 | Total | | | |

Subcatchment 1.1S:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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Summary for Subcatchment 1.2S:

Runoff = 4.43 cfs @ 11.97 hrs, Volume= 0.316 af, Depth= 7.59"

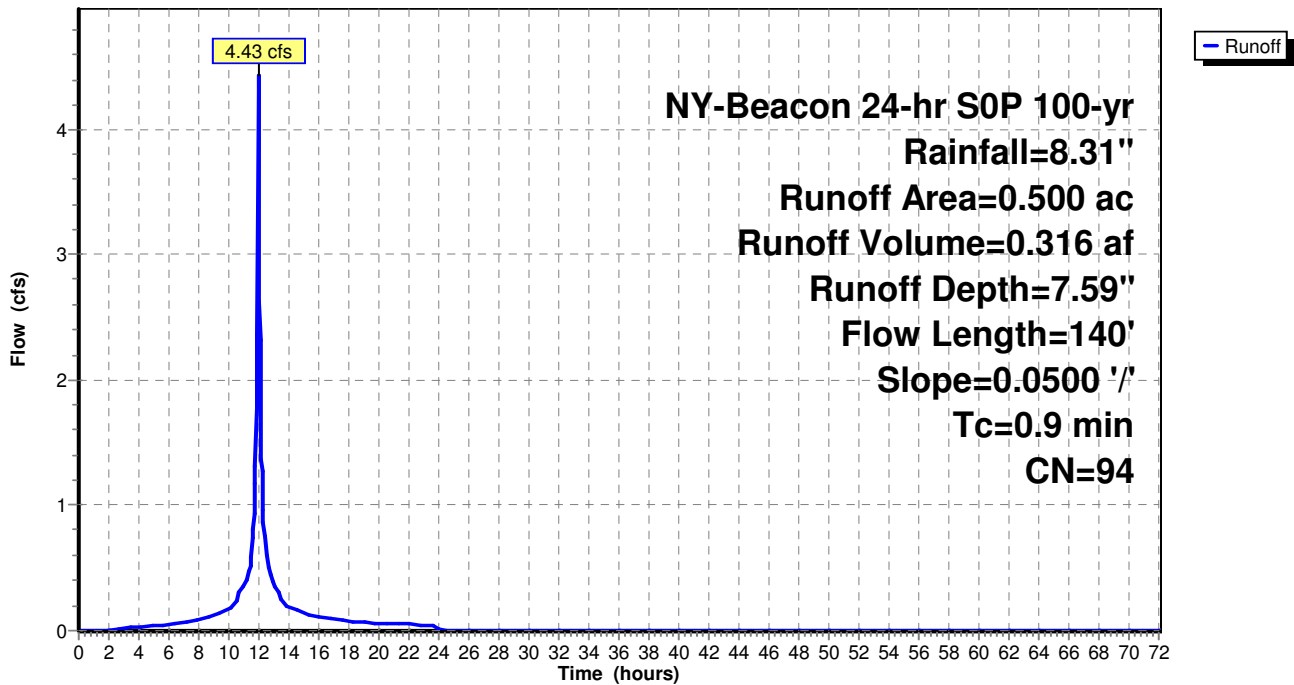
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.380 | 98 | Paved parking, HSG D |
| 0.120 | 80 | >75% Grass cover, Good, HSG D |
| 0.500 | 94 | Weighted Average |
| 0.120 | | 24.00% Pervious Area |
| 0.380 | | 76.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 0.8 | 100 | 0.0500 | 1.97 | | Sheet Flow, Smooth surfaces n= 0.011 P2= 3.16" |
| 0.1 | 40 | 0.0500 | 4.54 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 0.9 | 140 | Total | | | |

Subcatchment 1.2S:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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Summary for Subcatchment 1.3S:

Runoff = 3.06 cfs @ 12.02 hrs, Volume= 0.233 af, Depth= 6.99"

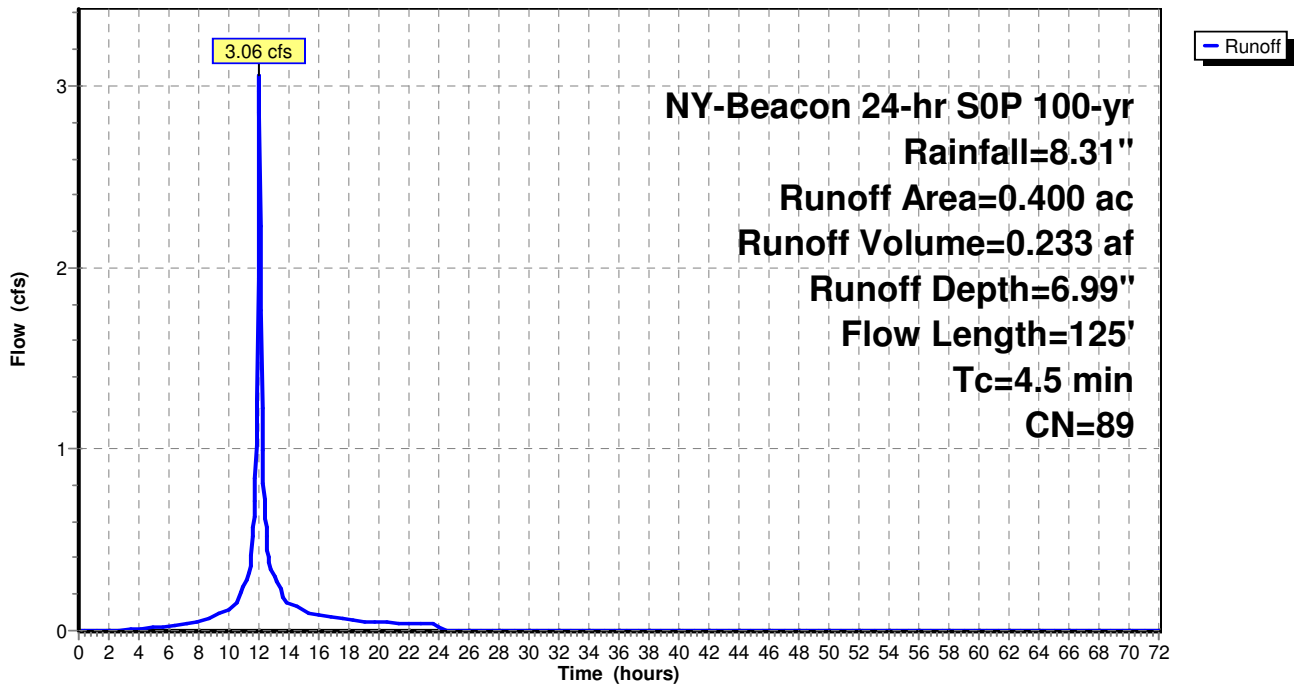
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

| Area (ac) | CN | Description |
|-----------|----|-------------------------------|
| 0.200 | 98 | Paved parking, HSG D |
| 0.200 | 80 | >75% Grass cover, Good, HSG D |
| 0.400 | 89 | Weighted Average |
| 0.200 | | 50.00% Pervious Area |
| 0.200 | | 50.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---|
| 4.4 | 85 | 0.1100 | 0.32 | | Sheet Flow, Grass: Short n= 0.150 P2= 3.16" |
| 0.1 | 40 | 0.0500 | 4.54 | | Shallow Concentrated Flow, Paved Kv= 20.3 fps |
| 4.5 | 125 | Total | | | |

Subcatchment 1.3S:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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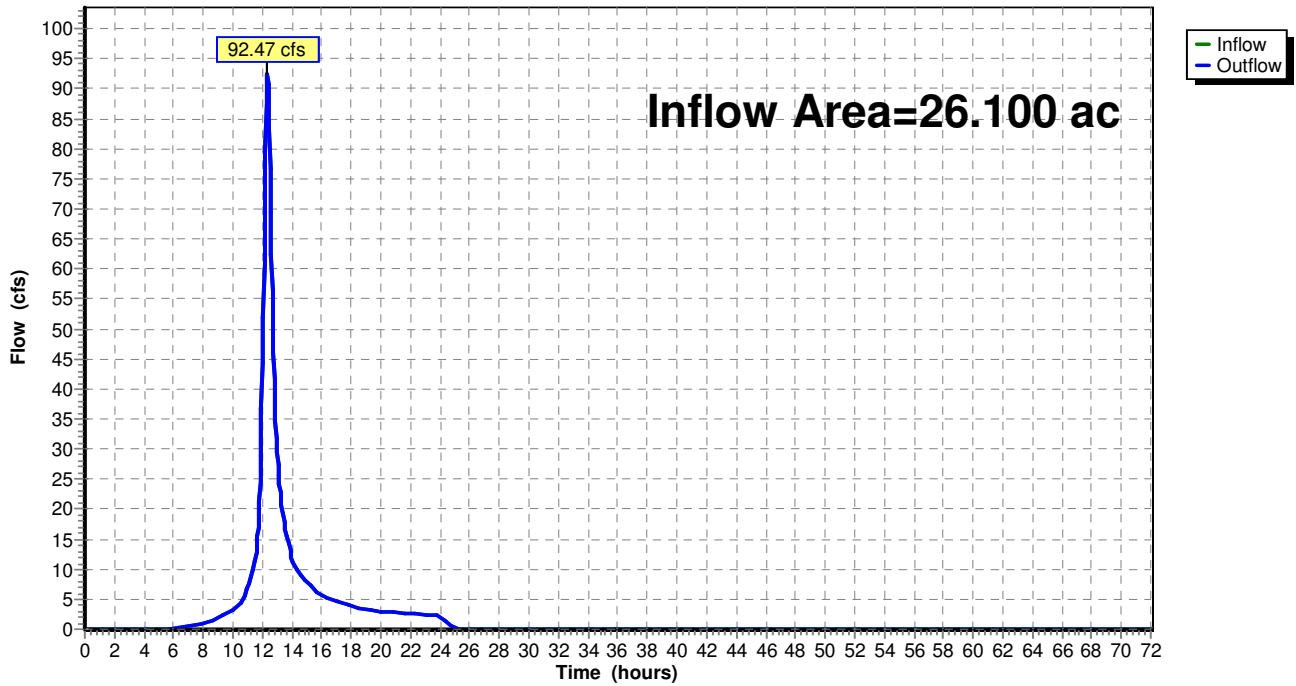
Summary for Reach Design Line:

Inflow Area = 26.100 ac, 10.65% Impervious, Inflow Depth > 5.83" for 100-yr event
Inflow = 92.47 cfs @ 12.33 hrs, Volume= 12.676 af
Outflow = 92.47 cfs @ 12.33 hrs, Volume= 12.676 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Reach Design Line:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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Summary for Pond 1.1 P:

Inflow Area = 3.500 ac, 62.86% Impervious, Inflow Depth = 7.31" for 100-yr event
 Inflow = 28.09 cfs @ 11.98 hrs, Volume= 2.132 af
 Outflow = 15.45 cfs @ 12.11 hrs, Volume= 2.005 af, Atten= 45%, Lag= 8.2 min
 Primary = 15.45 cfs @ 12.11 hrs, Volume= 2.005 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Starting Elev= 180.00' Surf.Area= 7,640 sf Storage= 10,715 cf
 Peak Elev= 183.48' @ 12.11 hrs Surf.Area= 16,160 sf Storage= 44,938 cf (34,223 cf above start)
 Flood Elev= 183.50' Surf.Area= 16,210 sf Storage= 45,265 cf (34,550 cf above start)

Plug-Flow detention time= 522.0 min calculated for 1.758 af (82% of inflow)
 Center-of-Mass det. time= 375.0 min (1,154.7 - 779.7)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|---------|---------------|--|
| #1 | 175.00' | 2,050 cf | Forebay (Prismatic) Listed below (Recalc) |
| #2 | 175.00' | 50,435 cf | Custom Stage Data (Prismatic) Listed below (Recalc) |
| | | 52,485 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|------------------|-------------------|------------------------|------------------------|
| 175.00 | 5 | 0 | 0 |
| 177.00 | 110 | 115 | 115 |
| 179.00 | 450 | 560 | 675 |
| 180.00 | 2,300 | 1,375 | 2,050 |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|------------------|-------------------|------------------------|------------------------|
| 175.00 | 500 | 0 | 0 |
| 177.00 | 1,180 | 1,680 | 1,680 |
| 179.00 | 2,090 | 3,270 | 4,950 |
| 180.00 | 5,340 | 3,715 | 8,665 |
| 182.00 | 10,730 | 16,070 | 24,735 |
| 184.00 | 14,970 | 25,700 | 50,435 |

| Device | Routing | Invert | Outlet Devices |
|--------|----------|---------|---|
| #1 | Primary | 179.00' | 24.0" Round Culvert L= 34.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 179.00' / 178.50' S= 0.0147 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |
| #2 | Device 1 | 180.00' | 1.6" Vert. Orifice/Grate C= 0.600 |
| #3 | Device 1 | 182.20' | 3.2' 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=15.35 cfs @ 12.11 hrs HW=183.47' TW=0.00' (Dynamic Tailwater)

- 1=Culvert (Passes 15.35 cfs of 28.18 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.12 cfs @ 8.88 fps)
- 3=Broad-Crested Rectangular Weir (Weir Controls 15.23 cfs @ 3.74 fps)

Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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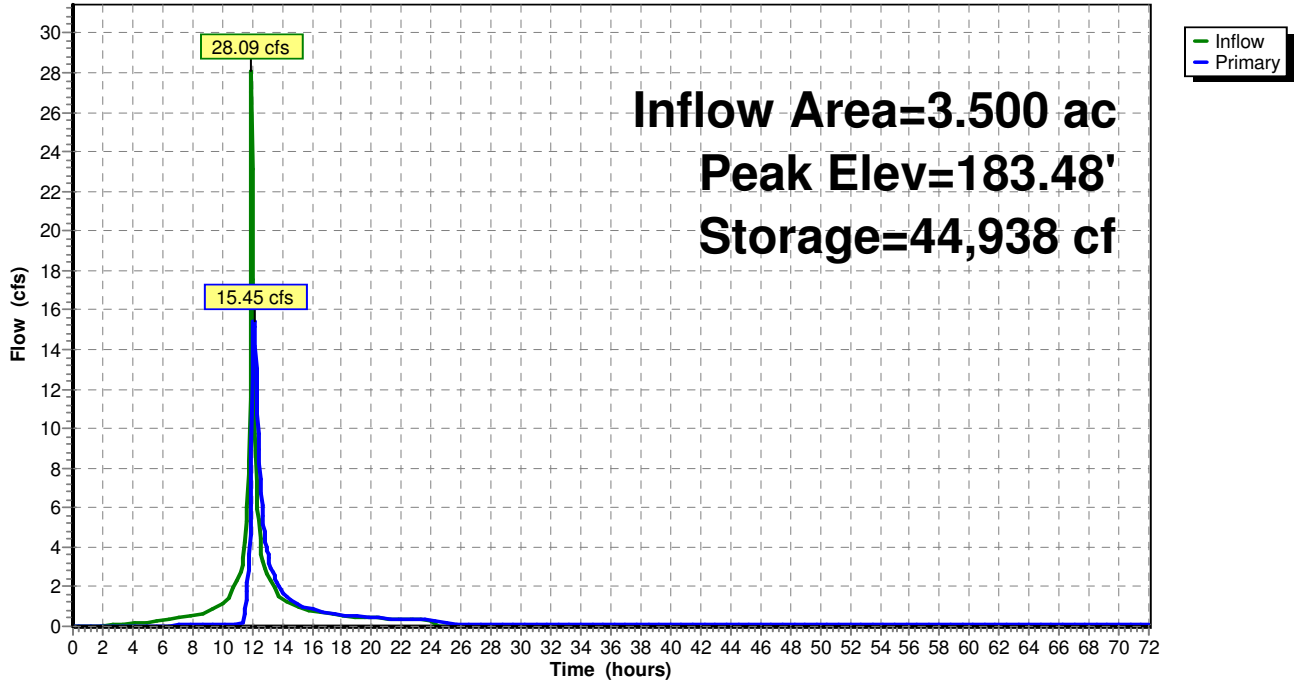
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Pond 1.1 P:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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Summary for Pond 1.2 FS:

Inflow Area = 0.500 ac, 76.00% Impervious, Inflow Depth = 7.59" for 100-yr event
 Inflow = 4.43 cfs @ 11.97 hrs, Volume= 0.316 af
 Outflow = 4.43 cfs @ 11.97 hrs, Volume= 0.316 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.72 cfs @ 11.94 hrs, Volume= 0.284 af
 Secondary = 2.73 cfs @ 11.97 hrs, Volume= 0.033 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 186.39' @ 11.97 hrs

Flood Elev= 187.70'

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|---------|--|
| #1 | Primary | 184.70' | 8.0" Round Culvert L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 184.70' / 184.50' S= 0.0167 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf |
| #2 | Secondary | 184.70' | 12.0" Round Culvert L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 184.70' / 184.00' S= 0.0233 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3 | Device 2 | 186.00' | 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 |

Primary OutFlow Max=1.62 cfs @ 11.94 hrs HW=186.33' TW=185.41' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 1.62 cfs @ 4.64 fps)

Secondary OutFlow Max=2.48 cfs @ 11.97 hrs HW=186.36' TW=0.00' (Dynamic Tailwater)

↑**2=Culvert** (Passes 2.48 cfs of 4.07 cfs potential flow)

↑**3=Broad-Crested Rectangular Weir** (Weir Controls 2.48 cfs @ 1.73 fps)

Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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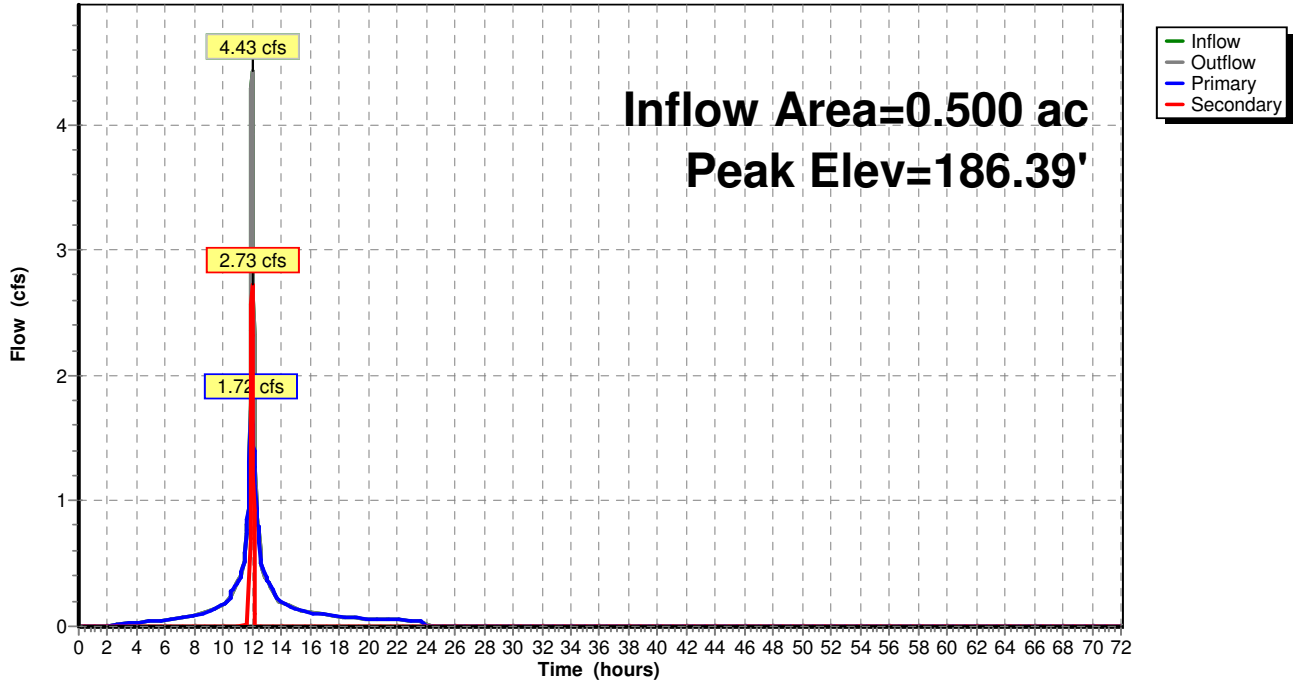
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Pond 1.2 FS:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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Summary for Pond 1.2 P:

Inflow Area = 0.500 ac, 76.00% Impervious, Inflow Depth = 6.81" for 100-yr event
Inflow = 1.72 cfs @ 11.94 hrs, Volume= 0.284 af
Outflow = 1.52 cfs @ 12.03 hrs, Volume= 0.284 af, Atten= 12%, Lag= 5.4 min
Discarded = 0.03 cfs @ 5.00 hrs, Volume= 0.103 af
Primary = 1.49 cfs @ 12.03 hrs, Volume= 0.181 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 185.49' @ 12.03 hrs Surf.Area= 0.030 ac Storage= 0.065 af

Plug-Flow detention time= 255.7 min calculated for 0.283 af (100% of inflow)
Center-of-Mass det. time= 256.4 min (1,016.8 - 760.4)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|---------|---------------|--|
| #1A | 182.00' | 0.028 af | 34.75'W x 38.04'L x 3.50'H Field A 0.106 af Overall - 0.037 af Embedded = 0.069 af x 40.0% Voids |
| #2A | 182.50' | 0.037 af | ADS StormTech SC-740 x 35 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 7 rows |
| | | 0.065 af | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|---------|---|
| #1 | Discarded | 182.00' | 1.000 in/hr Exfiltration over Horizontal area |
| #2 | Primary | 184.30' | 8.0" Round Culvert L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 184.30' / 184.10' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf |

Discarded OutFlow Max=0.03 cfs @ 5.00 hrs HW=182.04' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=1.48 cfs @ 12.03 hrs HW=185.49' TW=0.00' (Dynamic Tailwater)

↑**2=Culvert** (Barrel Controls 1.48 cfs @ 4.25 fps)

Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.

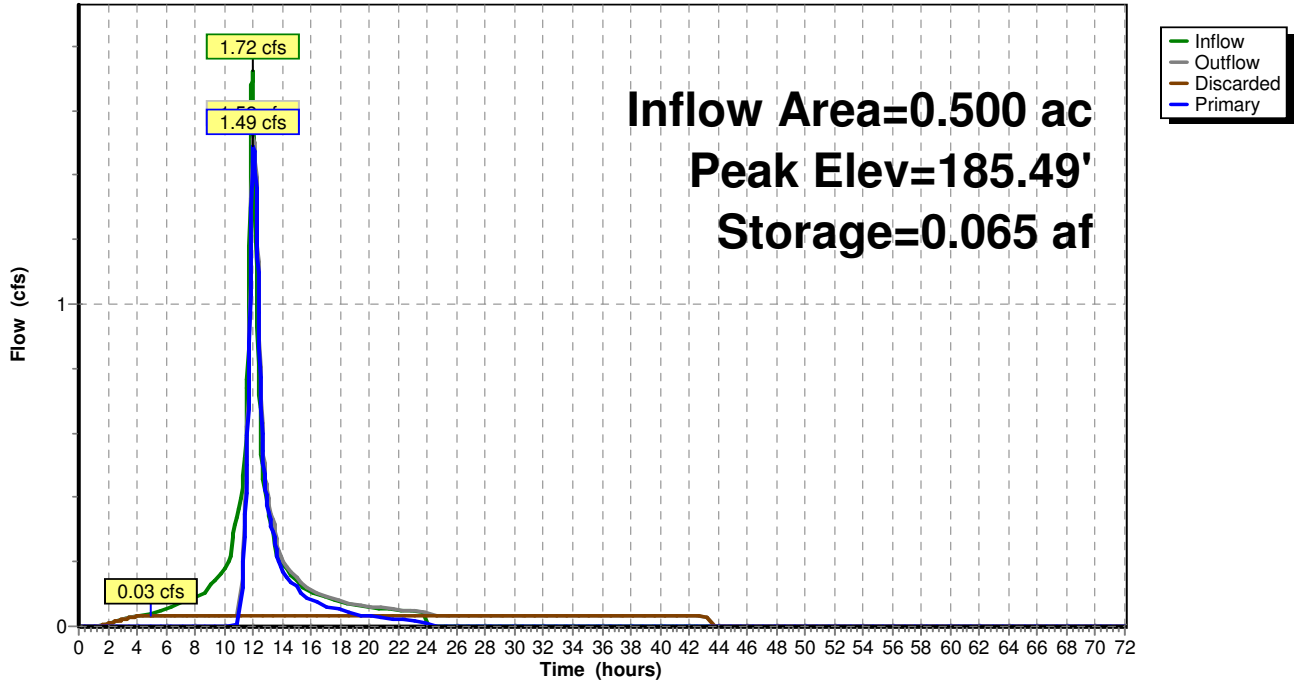
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Pond 1.2 P:

Hydrograph



Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

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Summary for Pond 1.3 P:

Inflow Area = 0.400 ac, 50.00% Impervious, Inflow Depth = 6.99" for 100-yr event
 Inflow = 3.06 cfs @ 12.02 hrs, Volume= 0.233 af
 Outflow = 2.71 cfs @ 12.07 hrs, Volume= 0.233 af, Atten= 11%, Lag= 2.9 min
 Primary = 2.71 cfs @ 12.07 hrs, Volume= 0.233 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 192.88' @ 12.07 hrs Surf.Area= 1,788 sf Storage= 1,342 cf

Plug-Flow detention time= 123.9 min calculated for 0.233 af (100% of inflow)
 Center-of-Mass det. time= 124.8 min (902.9 - 778.1)

| Volume | Invert | Avail.Storage | Storage Description |
|------------------|-------------------|------------------------|--|
| #1 | 192.00' | 3,720 cf | Custom Stage Data (Prismatic) Listed below (Recalc) |
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 192.00 | 1,270 | 0 | 0 |
| 194.00 | 2,450 | 3,720 | 3,720 |

| Device | Routing | Invert | Outlet Devices |
|--------|----------|---------|---|
| #1 | Primary | 188.20' | 12.0" Round Culvert L= 102.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 188.20' / 187.10' S= 0.0108 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #2 | Device 1 | 192.00' | 0.250 in/hr Exfiltration over Horizontal area |
| #3 | Device 1 | 192.50' | 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=2.63 cfs @ 12.07 hrs HW=192.87' TW=183.45' (Dynamic Tailwater)

- ↑ **1=Culvert** (Passes 2.63 cfs of 6.35 cfs potential flow)
- ↑ **2=Exfiltration** (Exfiltration Controls 0.01 cfs)
- ↑ **3=Broad-Crested Rectangular Weir** (Weir Controls 2.62 cfs @ 1.77 fps)

Post Development

NY-Beacon 24-hr SOP 100-yr Rainfall=8.31"

Prepared by Insite Engineering, Surveying & Landscape Architecture, P.C.

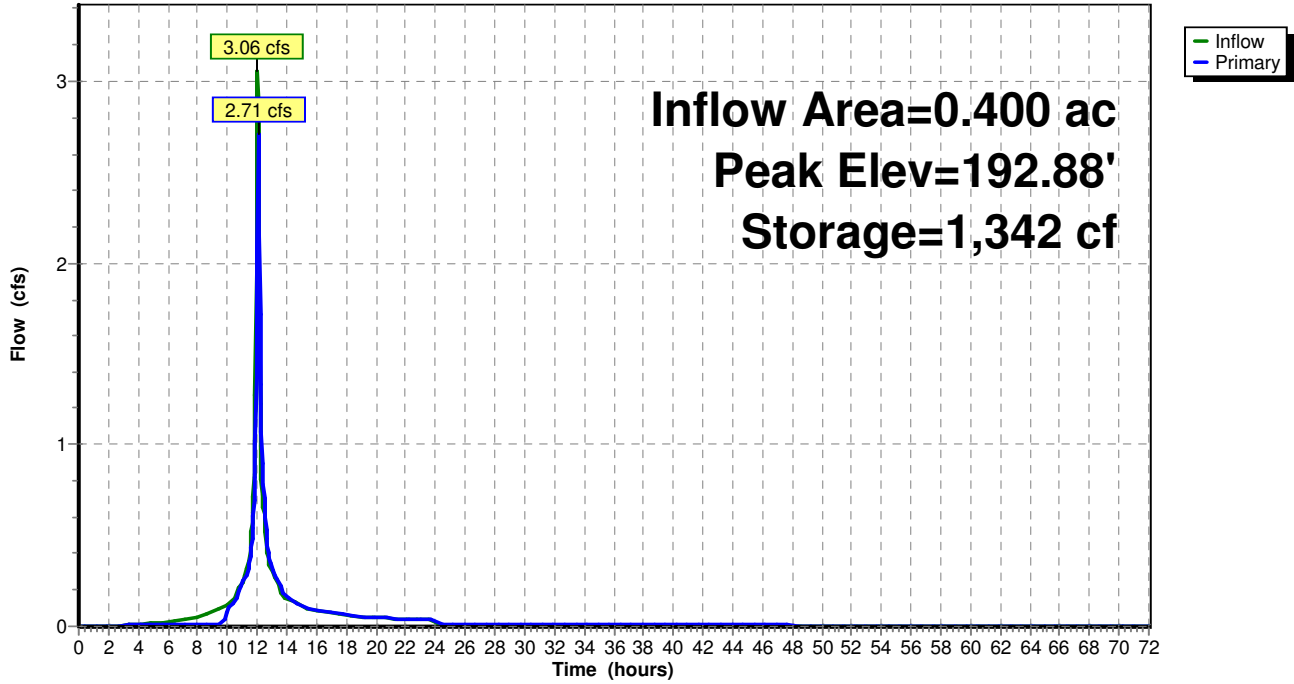
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Pond 1.3 P:

Hydrograph



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 inspector¹ conduct an assessment of the site prior to the commencement of construction² 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 stabilization³ 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.

APPENDIX F

NYSDEC Stormwater Design Manual Chapter 5 Analysis

Table Key: ● = Practice Used in Accordance with Chapter 5 Requirements
 ○ = Practice Not Used
 - = Practice is Not Applicable

| NYSDEC Chapter 5 Requirements | Subcatchments | | | Remarks |
|--|---------------|-----|-----|-------------|
| | 1.1 | 1.2 | 1.3 | |
| Chapter 5, Section 5.1: Preservation of 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 | ● | - | - | See Note #1 |
| 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 driveways and road have 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 standards shown on project plans.

APPENDIX G

NYSDEC Stormwater Management Practice Construction and Maintenance Inspection Checklist

Stormwater/Wetland Pond Construction Inspection Checklist

Project:
 Location:
 Site Status:

Date:

Time:

Inspector:

| CONSTRUCTION SEQUENCE | SATISFACTORY/ UNSATISFACTORY | COMMENTS |
|---|---------------------------------|----------|
| Pre-Construction/Materials and Equipment | | |
| Pre-construction meeting | | |
| Pipe and appurtenances on-site prior to construction and dimensions checked | | |
| 1. Material (including protective coating, if specified) | | |
| 2. Diameter | | |
| 3. Dimensions of metal riser or pre-cast concrete outlet structure | | |
| 4. Required dimensions between water control structures (orifices, weirs, etc.) are in accordance with approved plans | | |
| 5. Barrel stub for prefabricated pipe structures at proper angle for design barrel slope | | |
| 6. Number and dimensions of prefabricated anti-seep collars | | |
| 7. Watertight connectors and gaskets | | |
| 8. Outlet drain valve | | |
| Project benchmark near pond site | | |
| Equipment for temporary de-watering | | |

| CONSTRUCTION SEQUENCE | SATISFACTORY/ UNSATISFACTORY | COMMENTS |
|---|---------------------------------|----------|
| 2. Subgrade Preparation | | |
| Area beneath embankment stripped of all vegetation, topsoil, and organic matter | | |
| 3. Pipe Spillway Installation | | |
| Method of installation detailed on plans | | |
| A. Bed preparation | | |
| Installation trench excavated with specified side slopes | | |
| Stable, uniform, dry subgrade of relatively impervious material (If subgrade is wet, contractor shall have defined steps before proceeding with installation) | | |
| Invert at proper elevation and grade | | |
| B. Pipe placement | | |
| Metal / plastic pipe | | |
| 1. Watertight connectors and gaskets properly installed | | |
| 2. Anti-seep collars properly spaced and having watertight connections to pipe | | |
| 3. Backfill placed and tamped by hand under “haunches” of pipe | | |
| 4. Remaining backfill placed in max. 8 inch lifts using small power tamping equipment until 2 feet cover over pipe is reached | | |

| CONSTRUCTION SEQUENCE | SATISFACTORY/ UNSATISFACTORY | COMMENTS |
|---|---------------------------------|----------|
| 3. Pipe Spillway Installation | | |
| Concrete pipe | | |
| 1. Pipe set on blocks or concrete slab for pouring of low cradle | | |
| 2. Pipe installed with rubber gasket joints with no spalling in gasket interface area | | |
| 3. Excavation for lower half of anti-seep collar(s) with reinforcing steel set | | |
| 4. Entire area where anti-seep collar(s) will come in contact with pipe coated with mastic or other approved waterproof sealant | | |
| 5. Low cradle and bottom half of anti-seep collar installed as monolithic pour and of an approved mix | | |
| 6. Upper half of anti-seep collar(s) formed with reinforcing steel set | | |
| 7. Concrete for collar of an approved mix and vibrated into place (protected from freezing while curing, if necessary) | | |
| 8. Forms stripped and collar inspected for honeycomb prior to backfilling. Parge if necessary. | | |
| C. Backfilling | | |
| Fill placed in maximum 8 inch lifts | | |
| Backfill taken minimum 2 feet above top of anti-seep collar elevation before traversing with heavy equipment | | |

| CONSTRUCTION SEQUENCE | SATISFACTORY/ UNSATISFACTORY | COMMENTS |
|--|---------------------------------|----------|
| 4. Riser / Outlet Structure Installation | | |
| Riser located within embankment | | |
| A. Metal riser | | |
| Riser base excavated or formed on stable subgrade to design dimensions | | |
| Set on blocks to design elevations and plumbed | | |
| Reinforcing bars placed at right angles and projecting into sides of riser | | |
| Concrete poured so as to fill inside of riser to invert of barrel | | |
| B. Pre-cast concrete structure | | |
| Dry and stable subgrade | | |
| Riser base set to design elevation | | |
| If more than one section, no spalling in gasket interface area; gasket or approved caulking material placed securely | | |
| Watertight and structurally sound collar or gasket joint where structure connects to pipe spillway | | |
| C. Poured concrete structure | | |
| Footing excavated or formed on stable subgrade, to design dimensions with reinforcing steel set | | |
| Structure formed to design dimensions, with reinforcing steel set as per plan | | |
| Concrete of an approved mix and vibrated into place (protected from freezing while curing, if necessary) | | |
| Forms stripped & inspected for “honeycomb” prior to backfilling; pare if necessary | | |

| CONSTRUCTION SEQUENCE | SATISFACTORY/ UNSATISFACTORY | COMMENTS |
|---|---------------------------------|----------|
| 5. Embankment Construction | | |
| Fill material | | |
| Compaction | | |
| Embankment | | |
| 1. Fill placed in specified lifts and compacted with appropriate equipment | | |
| 2. Constructed to design cross-section, side slopes and top width | | |
| 3. Constructed to design elevation plus allowance for settlement | | |
| 6. Impounded Area Construction | | |
| Excavated / graded to design contours and side slopes | | |
| Inlet pipes have adequate outfall protection | | |
| Forebay(s) | | |
| Pond benches | | |
| 7. Earth Emergency Spillway Construction | | |
| Spillway located in cut or structurally stabilized with riprap, gabions, concrete, etc. | | |
| Excavated to proper cross-section, side slopes and bottom width | | |
| Entrance channel, crest, and exit channel constructed to design grades and elevations | | |

| CONSTRUCTION SEQUENCE | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|--|-------------------------------|----------|
| 8. Outlet Protection | | |
| A. End section | | |
| Securely in place and properly backfilled | | |
| B. Endwall | | |
| Footing excavated or formed on stable subgrade, to design dimensions and reinforcing steel set, if specified | | |
| Endwall formed to design dimensions with reinforcing steel set as per plan | | |
| Concrete of an approved mix and vibrated into place (protected from freezing, if necessary) | | |
| Forms stripped and structure inspected for “honeycomb” prior to backfilling; parge if necessary | | |
| C. Riprap apron / channel | | |
| Apron / channel excavated to design cross-section with proper transition to existing ground | | |
| Filter fabric in place | | |
| Stone sized as per plan and uniformly place at the thickness specified | | |
| 9. Vegetative Stabilization | | |
| Approved seed mixture or sod | | |
| Proper surface preparation and required soil amendments | | |
| Excelsior mat or other stabilization, as per plan | | |

| CONSTRUCTION SEQUENCE | SATISFACTORY/ UNSATISFACTORY | COMMENTS |
|---|---------------------------------|----------|
| 10. Miscellaneous | | |
| Drain for ponds having a permanent pool | | |
| Trash rack / anti-vortex device secured to outlet structure | | |
| Trash protection for low flow pipes, orifices, etc. | | |
| Fencing (when required) | | |
| Access road | | |
| Set aside for clean-out maintenance | | |
| 11. Stormwater Wetlands | | |
| Adequate water balance | | |
| Variety of depth zones present | | |
| Approved pondscaping plan in place Reinforcement budget for additional plantings | | |
| Plants and materials ordered 6 months prior to construction | | |
| Construction planned to allow for adequate planting and establishment of plant community (April-June planting window) | | |
| Wetland buffer area preserved to maximum extent possible | | |

Comments:

Actions to be Taken:

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 | | |

Bioretention Construction Inspection Checklist

Project:
 Location:
 Site Status:

Date:

Time:

Inspector:

| CONSTRUCTION SEQUENCE | SATISFACTORY/ UNSATISFACTORY | COMMENTS |
|---|---------------------------------|----------|
| 1. Pre-Construction | | |
| Pre-construction meeting | | |
| Runoff diverted | | |
| Facility area cleared | | |
| If designed as exfilter, soil testing for permeability | | |
| Facility location staked out | | |
| 2. Excavation | | |
| Size and location | | |
| Lateral slopes completely level | | |
| If designed as exfilter, ensure that excavation does not compact susoils. | | |
| Longitudinal slopes within design range | | |

| CONSTRUCTION SEQUENCE | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|---|-------------------------------|----------|
| 3. Structural Components | | |
| Stone diaphragm installed correctly | | |
| Outlets installed correctly | | |
| Underdrain | | |
| Pretreatment devices installed | | |
| Soil bed composition and texture | | |
| 4. Vegetation | | |
| Complies with planting specs | | |
| Topsoil adequate in composition and placement | | |
| Adequate erosion control measures in place | | |
| 5. Final Inspection | | |
| Dimensions | | |
| Proper stone diaphragm | | |
| Proper outlet | | |
| Soil/ filter bed permeability testing | | |
| Effective stand of vegetation and stabilization | | |
| Construction generated sediments removed | | |
| Contributing watershed stabilized before flow is diverted to the practice | | |

Stormwater Pond/Wetland Operation, Maintenance and Management Inspection Checklist

Project _____

Location: _____

Site Status: _____

Date: _____

Time: _____

Inspector: _____

| Maintenance Item | Satisfactory/ Unsatisfactory | Comments |
|--|---------------------------------|----------|
| 1. Embankment and emergency spillway (Annual, After Major Storms) | | |
| 1. Vegetation and ground cover adequate | | |
| 2. Embankment erosion | | |
| 3. Animal burrows | | |
| 4. Unauthorized planting | | |
| 5. Cracking, bulging, or sliding of dam | | |
| a. Upstream face | | |
| b. Downstream face | | |
| c. At or beyond toe | | |
| downstream | | |
| upstream | | |
| d. Emergency spillway | | |
| 6. Pond, toe & chimney drains clear and functioning | | |
| 7. Seeps/leaks on downstream face | | |
| 8. Slope protection or riprap failure | | |
| 9. Vertical/horizontal alignment of top of dam "As-Built" | | |

| Maintenance Item | Satisfactory/ Unsatisfactory | Comments |
|--|---------------------------------|----------|
| 10. Emergency spillway clear of obstructions and debris | | |
| 11. Other (specify) | | |
| 2. Riser and principal spillway (Annual) | | |
| Type: Reinforced concrete _____ Corrugated pipe _____ Masonry _____ | | |
| 1. Low flow orifice obstructed | | |
| 2. Low flow trash rack. a. Debris removal necessary | | |
| b. Corrosion control | | |
| 3. Weir trash rack maintenance a. Debris removal necessary | | |
| b. corrosion control | | |
| 4. Excessive sediment accumulation insider riser | | |
| 5. Concrete/masonry condition riser and barrels a. cracks or displacement | | |
| b. Minor spalling (<1") | | |
| c. Major spalling (rebars exposed) | | |
| d. Joint failures | | |
| e. Water tightness | | |
| 6. Metal pipe condition | | |
| 7. Control valve a. Operational/exercised | | |
| b. Chained and locked | | |
| 8. Pond drain valve a. Operational/exercised | | |
| b. Chained and locked | | |
| 9. Outfall channels functioning | | |
| 10. Other (specify) | | |

| Maintenance Item | Satisfactory/ Unsatisfactory | Comments |
|---|---------------------------------|----------|
| 3. Permanent Pool (Wet Ponds) (monthly) | | |
| 1. Undesirable vegetative growth | | |
| 2. Floating or floatable debris removal required | | |
| 3. Visible pollution | | |
| 4. Shoreline problem | | |
| 5. Other (specify) | | |
| 4. Sediment Forebays | | |
| 1. Sedimentation noted | | |
| 2. Sediment cleanout when depth < 50% design depth | | |
| 5. Dry Pond Areas | | |
| 1. Vegetation adequate | | |
| 2. Undesirable vegetative growth | | |
| 3. Undesirable woody vegetation | | |
| 4. Low flow channels clear of obstructions | | |
| 5. Standing water or wet spots | | |
| 6. Sediment and / or trash accumulation | | |
| 7. Other (specify) | | |
| 6. Condition of Outfalls (Annual , After Major Storms) | | |
| 1. Riprap failures | | |
| 2. Slope erosion | | |
| 3. Storm drain pipes | | |
| 4. Endwalls / Headwalls | | |
| 5. Other (specify) | | |
| 7. Other (Monthly) | | |
| 1. Encroachment on pond, wetland or easement area | | |

| Maintenance Item | Satisfactory/ Unsatisfactory | Comments |
|--|---------------------------------|----------|
| 2. Complaints from residents | | |
| 3. Aesthetics a. Grass growing required | | |
| b. Graffiti removal needed | | |
| c. Other (specify) | | |
| 4. Conditions of maintenance access routes. | | |
| 5. Signs of hydrocarbon build-up | | |
| 6. Any public hazards (specify) | | |
| 8. Wetland Vegetation (Annual) | | |
| 1. Vegetation healthy and growing Wetland maintaining 50% surface area coverage of wetland plants after the second growing season. (If unsatisfactory, reinforcement plantings needed) | | |
| 2. Dominant wetland plants: Survival of desired wetland plant species Distribution according to landscaping plan? | | |
| 3. Evidence of invasive species | | |
| 4. Maintenance of adequate water depths for desired wetland plant species | | |
| 5. Harvesting of emergent plantings needed | | |
| 6. Have sediment accumulations reduced pool volume significantly or are plants “choked” with sediment | | |
| 7. Eutrophication level of the wetland. | | |
| 8. Other (specify) | | |

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 dewaterers 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:

Bioretention Operation, Maintenance and Management Inspection Checklist

Project:
 Location:
 Site Status:

Date:

Time:

Inspector:

| MAINTENANCE ITEM | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|--|-------------------------------|----------|
| 1. Debris Cleanout (Monthly) | | |
| Bioretention and contributing areas clean of debris | | |
| No dumping of yard wastes into practice | | |
| Litter (branches, etc.) have been removed | | |
| 2. Vegetation (Monthly) | | |
| Plant height not less than design water depth | | |
| Fertilized per specifications | | |
| Plant composition according to approved plans | | |
| No placement of inappropriate plants | | |
| Grass height not greater than 6 inches | | |
| No evidence of erosion | | |
| 3. Check Dams/Energy Dissipaters/Sumps (Annual, After Major Storms) | | |
| No evidence of sediment buildup | | |

| MAINTENANCE ITEM | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|---|-------------------------------|----------|
| Sumps should not be more than 50% full of sediment | | |
| No evidence of erosion at downstream toe of drop structure | | |
| 4. Dewatering (Monthly) | | |
| Dewaters between storms | | |
| No evidence of standing water | | |
| 5. Sediment Deposition (Annual) | | |
| Swale clean of sediments | | |
| Sediments should not be > 20% of swale design depth | | |
| 6. Outlet/Overflow Spillway (Annual, After Major Storms) | | |
| Good condition, no need for repair | | |
| No evidence of erosion | | |
| No evidence of any blockages | | |
| 7. Integrity of Filter Bed (Annual) | | |
| Filter bed has not been blocked or filled inappropriately | | |

Comments:

Actions to be Taken:

APPENDIX H
Hydrodynamic Separator Sizing and Maintenance Manual



State of New Jersey

PHILIP D. MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CATHERINE R. McCABE
Acting Commissioner

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

SHEILA Y. OLIVER
Lt. Governor

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:

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.

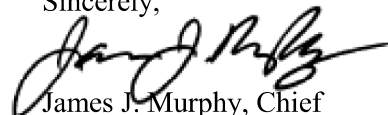
Table 1 HydroStorm Sizing Information

| HydroStorm Model | NJDEP 50% TSS Maximum Treatment Flow Rate (cfs) | Treatment Area (ft²) | Hydraulic Loading Rate (gpm/ft²) | 50% Maximum Sediment Storage (ft³) |
|-------------------------|--|--|--|--|
| 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.

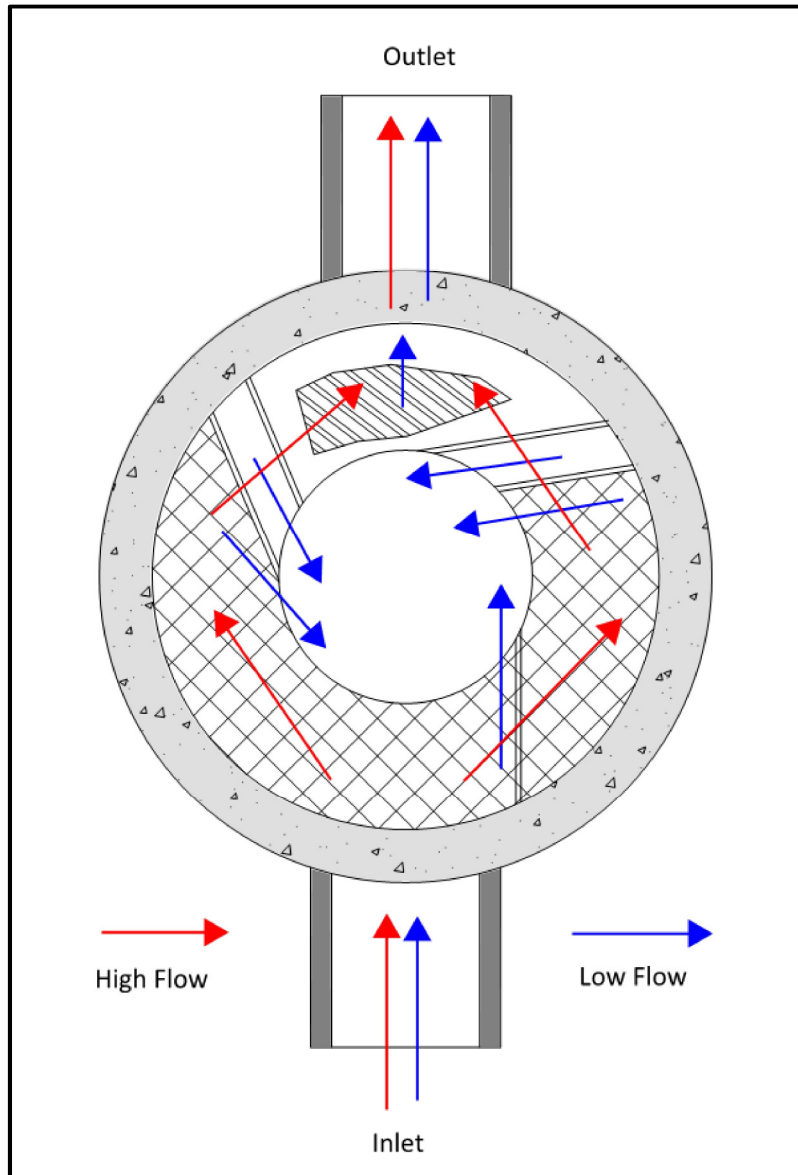


Figure 1. Hydroworks HydroStorm Operation – Plan View

Figure 2 is a profile view of the HydroStorm separator showing the flow patterns for low and high flows.

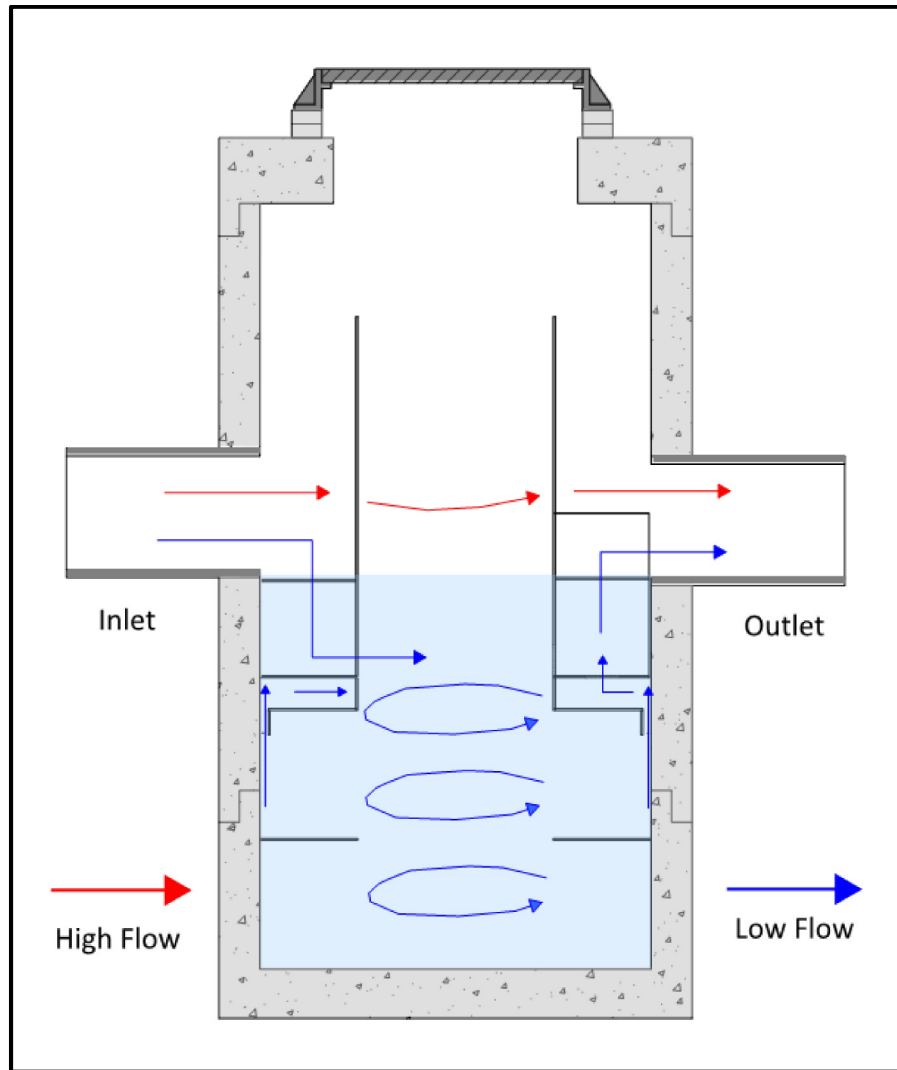


Figure 2. Hydroworks HydroStorm Operation – Profile View

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 underneath the grate on the frame and directs the water to the inlet side of the separator to ensure all low flows are properly treated. The whole funnel is removed for inspection and cleaning.

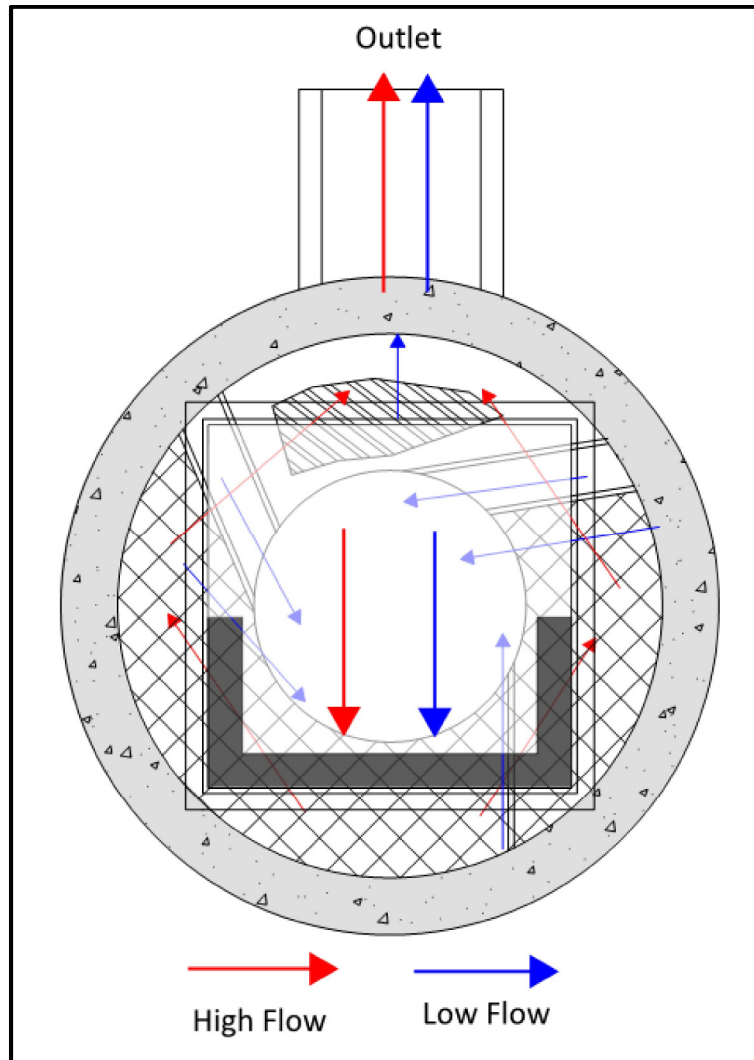


Figure 3. Hydroworks HS 4i Funnel

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).



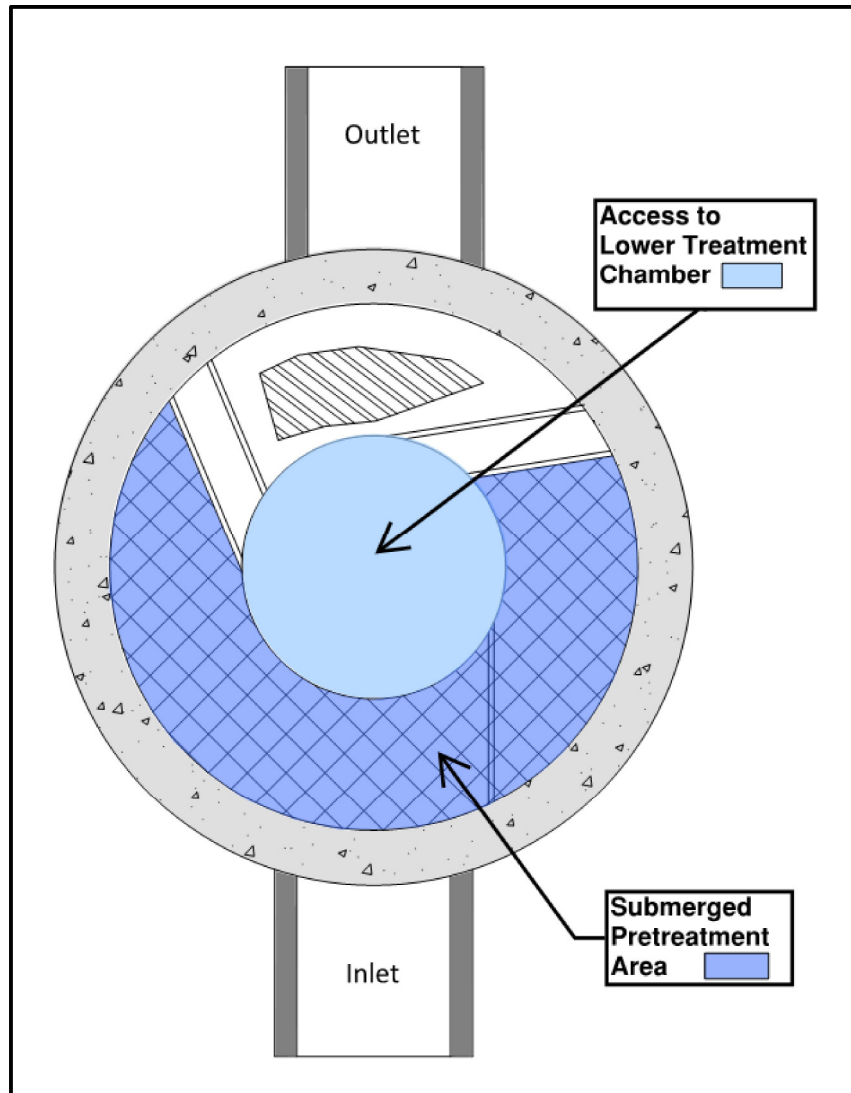


Figure 3. Maintenance Access

Frequency

Construction Period

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 | <input type="checkbox"/> | <input type="checkbox"/> |
| Exposed material storage on site | <input type="checkbox"/> | <input type="checkbox"/> |
| Large exposure to leaf litter (lots of trees) | <input type="checkbox"/> | <input type="checkbox"/> |
| High traffic (vehicle) area | <input type="checkbox"/> | <input type="checkbox"/> |

| HydroStorm | Yes | No |
|---|------------------------------|--------------------------|
| Obstructions in the inlet or outlet | <input type="checkbox"/> * | <input type="checkbox"/> |
| Missing internal components | <input type="checkbox"/> ** | <input type="checkbox"/> |
| Improperly installed inlet or outlet pipes | <input type="checkbox"/> *** | <input type="checkbox"/> |
| Internal component damage (cracked, broken, loose pieces) | <input type="checkbox"/> ** | <input type="checkbox"/> |
| Floating debris in the separator (oil, leaves, trash) | <input type="checkbox"/> | <input type="checkbox"/> |
| Large debris visible in the separator | <input type="checkbox"/> * | <input type="checkbox"/> |
| Concrete cracks/deficiencies | <input type="checkbox"/> *** | <input type="checkbox"/> |
| Exposed rebar | <input type="checkbox"/> ** | <input type="checkbox"/> |
| Water seepage (water level not at outlet pipe invert) | <input type="checkbox"/> *** | <input type="checkbox"/> |
| Water level depth below outlet pipe invert _____" | | |

| Routine Measurements | | | |
|-----------------------------|--|---|----------------------------|
| Floating debris depth | <input type="checkbox"/> < 0.5" (13mm) | <input type="checkbox"/> >0.5" 13mm) | <input type="checkbox"/> * |
| Floating debris coverage | <input type="checkbox"/> < 50% of surface area | <input type="checkbox"/> > 50% surface area | <input type="checkbox"/> * |
| Sludge depth | <input type="checkbox"/> < 12" (300mm) | <input type="checkbox"/> > 12" (300mm) | <input type="checkbox"/> * |

- * Maintenance required
- ** Repairs required
- *** Further investigation is required





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.

APPENDIX I
Bioretention Filter Sizing Calculations

SMP 1.3P - NYSDEC Bioretention Filter (Design F-5)

Project: Beacon Views, LLC

Project #: 19131.100

Date: 4/28/2020



1a. WQv Required for Downstream SMP = 0.022 ac-ft 942 c.f.

1b. Subcatchment % Imperviousness = 50.0% %

2. Required Practice Volume

2a. Total required volume = 75% of WQv (in filter) = 707 c.f.

2b. Total volume provided in filter = 709 c.f.
(Calculated using Stage - Volume information in HydroCAD output. Volume calculated at elevation 194.5)

3. Pretreatment Requirements:

Pretreatment will be provided by a grass filter strip, gravel diaphragm and mulch layer.

4. Required Filter Area:

4a. Required Filter Area =
$$\frac{WQv (df)}{k (hf + df) + tf}$$

df= 2.50 ft.

hf= 0.25 ft.

k= 0.50 ft./day

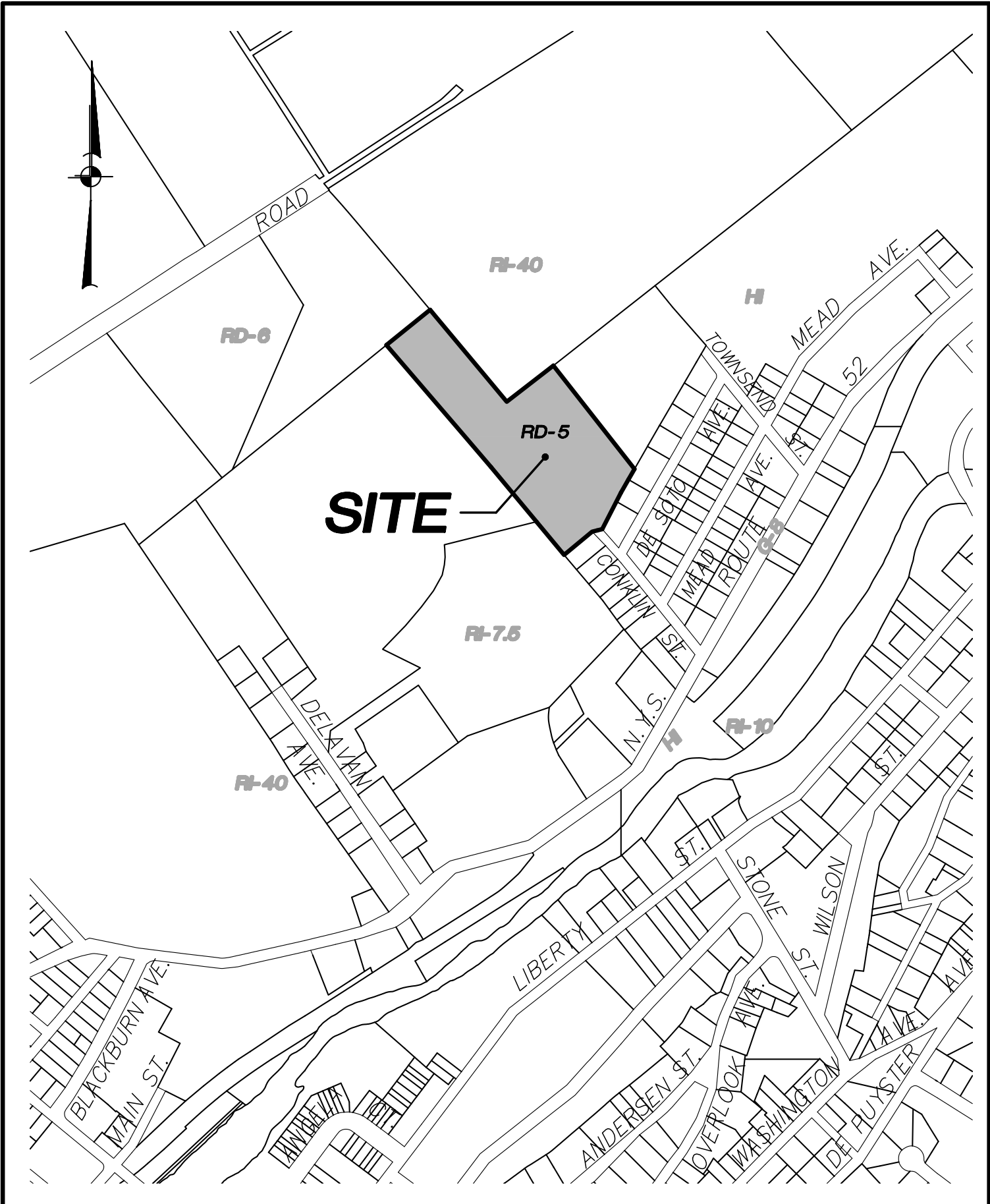
tf= 1.67 days

Required Filter Area= 1026 s.f.

4b. Provided Filter Area = 1,270 s.f.

FIGURES

Z:\E\19131100\Stormwater\Figures\Figure 1 - Location Map.dwg, 8/26/2019 7:56:56 AM, ependleton, 1:1



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

DRAWING: LOCATION MAP

PREPARED BY:

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

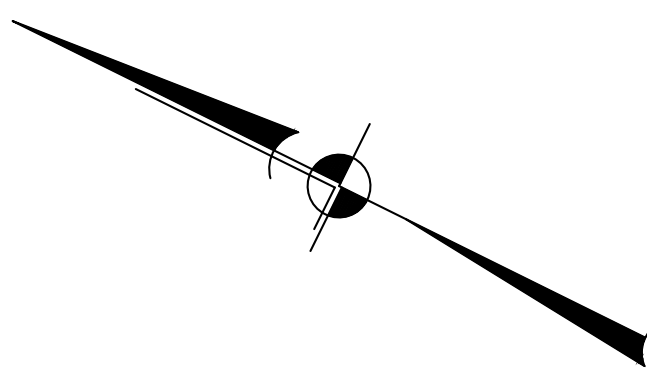
3 Garrett Place • Carmel, New York 10512
 Phone (845) 225-9690 • Fax (845) 225-9717
 www.insite-eng.com

DATE: 8-26-19

SCALE: 1" = 500'

PROJECT NO.: 19131.100

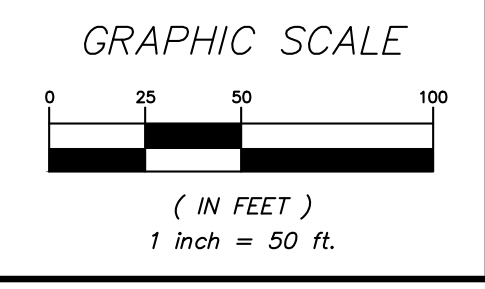
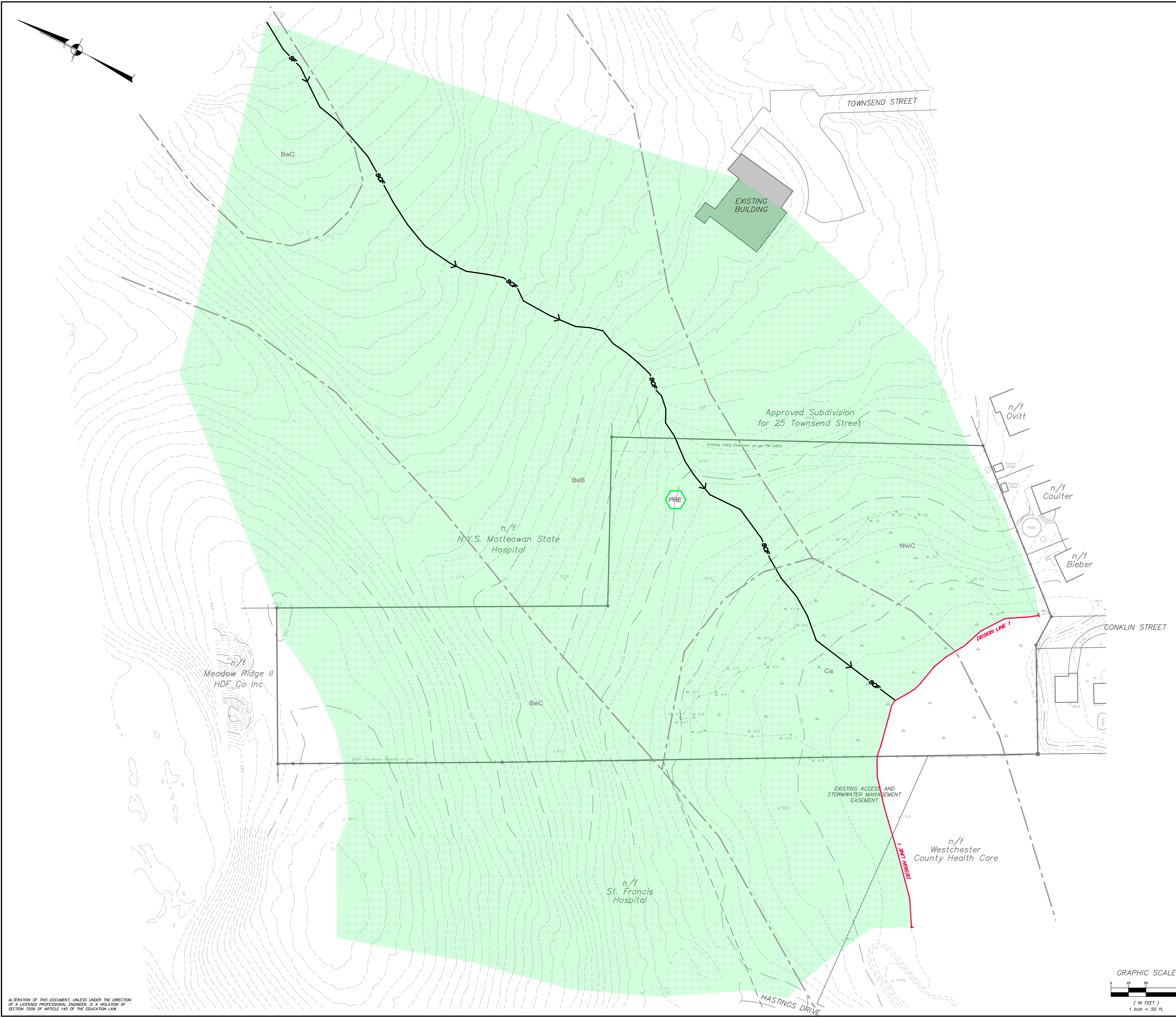
FIGURE: 1



| 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 | Canandigua Silt Loam, Neutral Substratum | C/D |
| NwC | Nassau-Cardigan Complex, Rolling, Very Rocky | D |

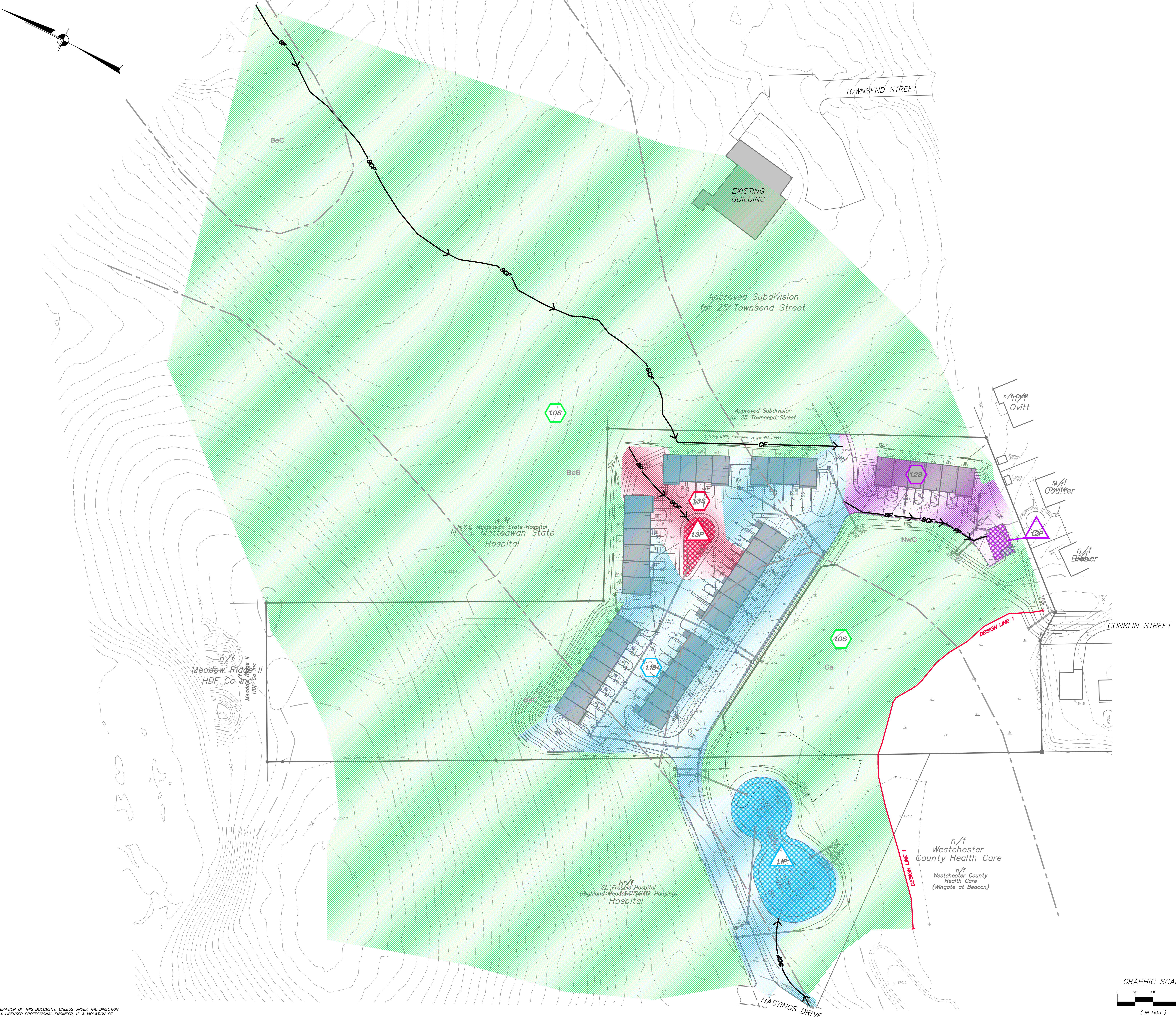
--- NRCS Soil Boundary Line

| LEGEND | |
|--------|---|
| | SUBCATCHMENT |
| | TIME OF CONCENTRATION SHEET FLOW |
| | TIME OF CONCENTRATION SHALLOW CONCENTRATED FLOW |
| | DESIGN LINE |
| | SUBCATCHMENT CONTRIBUTING AREA |



| NO. | DATE | REVISION | BY |
|---|-----------|-----------------|--------|
| | | | |
| PROJECT: BEACON VIEWS CITY OF BEACON, DUTCHESS COUNTY, NEW YORK | | | |
| DRAWING: PRE-DEVELOPMENT DRAINAGE MAP | | | |
| PROJECT NUMBER | 19131.100 | PROJECT MANAGER | J.J.C. |
| DATE | 8-26-19 | DRAWN BY | E.J.P. |
| SCALE | 1" = 50' | CHECKED BY | Z.M.P. |
| FIGURE NO. | | | 2 |

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2209 OF ARTICLE 145 OF THE EDUCATION LAW.

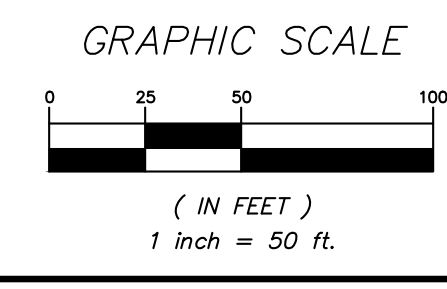


| SOILS LEGEND | | |
|--------------|--|--------------------|
| SOILS | DESCRIPTION | HYDROLOGICAL GROUP |
| BeB | Bernardston Silt Loam, 3% to 8% slope | C/D |
| BeC | Bernardston Silt Loam, 8% to 15% slope | C/D |
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| NwC | Nassau-Cardigan Complex, Rolling, Very Rocky | D |

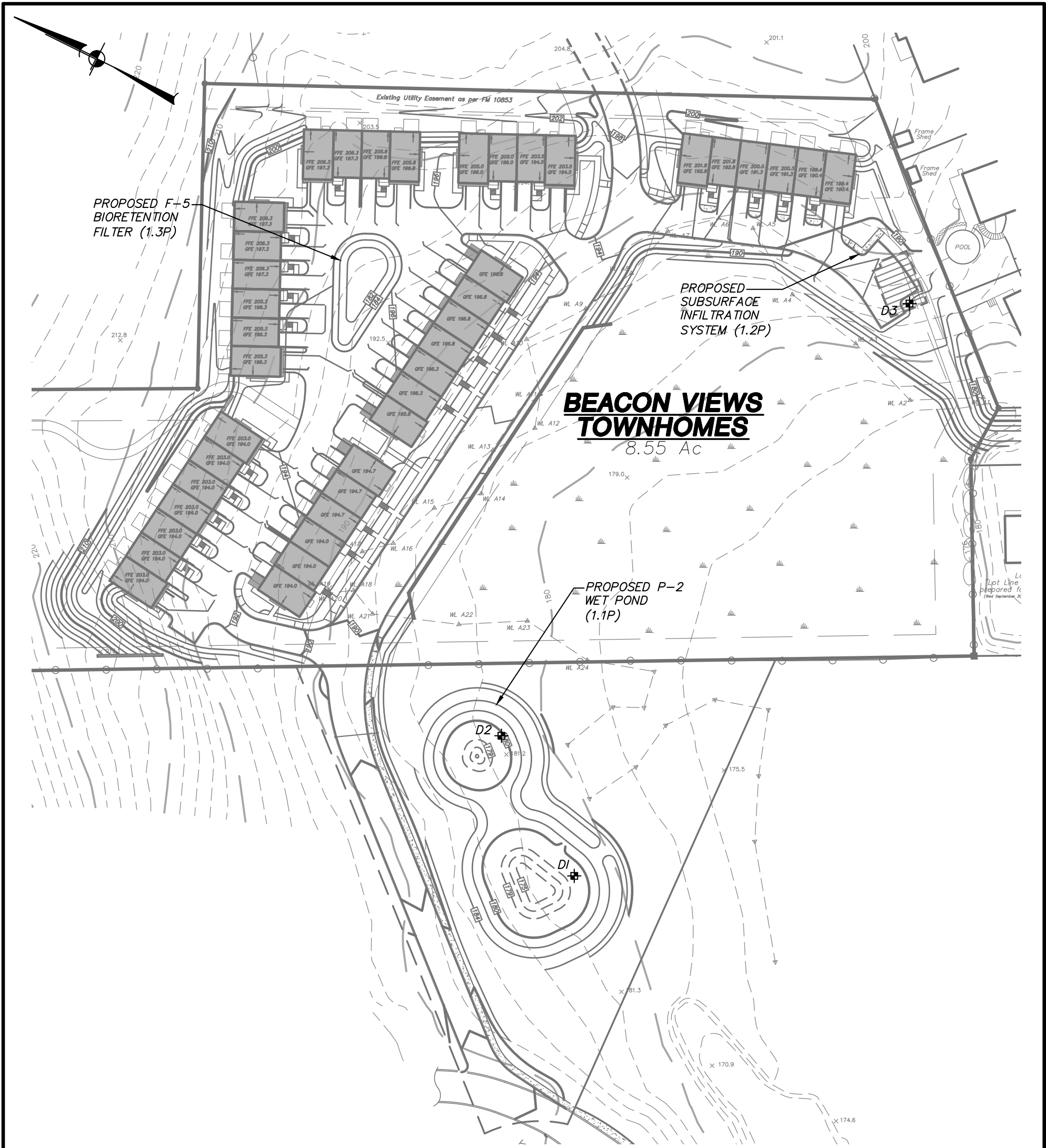
--- NRCS Soil Boundary Line

| LEGEND | |
|--------|---|
| | SUBCATCHMENT |
| | STORMWATER MANAGEMENT PRACTICE |
| | TIME OF CONCENTRATION SHEET FLOW |
| | TIME OF CONCENTRATION SHALLOW CONCENTRATED FLOW |
| | TIME OF CONCENTRATION PIPE FLOW |
| | TIME OF CONCENTRATION CHANNEL FLOW |
| | DESIGN LINE |
| | SUBCATCHMENT CONTRIBUTING AREA |
| | STORMWATER MANAGEMENT PRACTICE AREA |

| | | | |
|--|-----------|--------------------------------|---|
| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | EJP |
| NO. | DATE | REVISION | BY |
| INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C. | | | |
| PROJECT: BEACON VIEWS | | | 3 Garrett Place Carmel, NY 10512 (845) 225-9690 (845) 225-9717 fax www.insite-eng.com |
| CITY OF BEACON, DUTCHESS COUNTY, NEW YORK | | | |
| DRAWING: POST-DEVELOPMENT DRAINAGE MAP | | | |
| PROJECT NUMBER | 19131.100 | PROJECT MANAGER | J.J.C. |
| DATE | 8-26-19 | DRAWN BY | E.J.P. |
| SCALE | 1" = 50' | CHECKED BY | Z.M.P. |
| FIGURE NO. | | | 3 |



ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2209 OF ARTICLE 145 OF THE EDUCATION LAW.

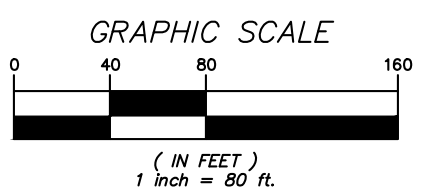


**BEACON VIEWS
TOWNHOMES**
8.55 Ac

DEEP HOLE TEST RESULTS:
 DEEP TESTS PERFORMED: 12/16/2019
 DEEP TESTS WITNESSED BY:
 EVAN PENDLETON (INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.) & CASSANDRA BIBBO (LANC AND TULLY ENGINEERING AND SURVEYING, P.C.)

NOTE: INFILTRATION TESTING FOR THE SUBSURFACE INFILTRATION SYSTEM 1.2P HAS YET TO BE PERFORMED. TESTING WILL BE PERFORMED AT A LATER DATE.

- D-1: 0"-2" TOPSOIL
2"-64"+ BROWN SILTY LOAM
GROUNDWATER @ 36". NO ROCK.
- D-2: 0"-2" TOPSOIL
2"-8"+ BROWN SILTY LOAM
GROUNDWATER @ 18". NO ROCK.
- D-3: 0"-2" TOPSOIL
2"-84"+ BROWN LOAM
GROUNDWATER @ 84". NO ROCK.



| | |
|----------|--|
| PROJECT: | BEACON VIEWS CITY OF BEACON, DUTCHESS COUNTY, NEW YORK |
| DRAWING: | TESTING PLAN |

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: | 4-28-20 |
| SCALE: | 1" = 80' |
| PROJECT NO.: | 19131.100 |
| FIGURE: | FIG - 4 |

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Wetland Evaluation and Impact Report

Beacon Views Site
Conklin Street
City of Beacon
Dutchess County, New York

March 14, 2020

Prepared by:

Michael Nowicki
Ecological Solutions, LLC
1248 Southford Road
Southbury, Connecticut 06488

| | |
|--|----------|
| 1.0 EXISTING CONDITIONS/SUMMARY | 3 |
| 2.0 WETLAND FUNCTIONS/IMPACTS/MITIGATION..... | 4 |
| 2.1 Wetland Functions | 4 |
| 2.2 Wetland Impacts..... | 6 |
| 2.2 Wetland Mitigation | 6 |
| 3.0 PHOTOGRAPHS..... | 8 |

1.0 EXISTING CONDITIONS/SUMMARY

Regulatory Review - Ecological Solutions, LLC completed a wetland evaluation and impact assessment for the proposed residential townhouse development located on Conklin Street in the City of Beacon (*Attachment 1*). The proposed project is sited on the undeveloped central section of the site since there is no other area for the development other than in the proposed location.

The wetland boundary on the property was delineated by Ecological Solutions, LLC on October 17, 2019 in accordance with the Routine Onsite Determination Method prescribed in the 1987 USACE Wetlands Delineation Manual and recent Northcentral/Northeast supplement. The US Army Corps of Engineers (USACE) regulates the delineated wetland and a Nationwide Permit #29 will be required for the discharge of fill material to the wetland up to 0.5 acres. A New York State Department of Environmental Conservation (NYSDEC) Individual Water Quality Certification is required for wetland impacts that exceed 0.25 acres. Impacts to wetlands under 0.25 acres are covered under a blanket Water Quality Certification. The City of Beacon Code – Chapter 223-16 requires the Applicant to evaluate the functions of the wetlands and impacts associated with this development.

Existing Wetland– The wetland is located on the southern section of the site and is best described as a small segment of red maple swamp which contains red maple, pin oak, American elm with spicebush and red-osier dogwood in the understory and skunk cabbage as the dominant herbaceous plant. This area is a dense thicket of multiflora rose, poison ivy, and stunted trees of about 4-5 inches dbh. This area is almost impenetrable with a tangle of trees, vines, and ground cover.

Project Description/Impacts - The Applicant is seeking to construct 40 multifamily residential units and appurtenant features including stormwater detention, grading, landscaping, and walkways.

2.0 WETLAND FUNCTIONS/IMPACTS/MITIGATION

2.1 Wetland Functions

An assessment of wetland functions and values was conducted on the wetland identified and delineated on the property. Using a widely accepted method for wetland functions and values assessment developed by the New England District, U.S. Army Corps of Engineers, 13 distinct wetland functions and values were assessed for the delineated wetland on the site. This method yielded an objective, descriptive quality index. This assessment had two major objectives:

1. Objectively identify the functions and values provided by the wetland identified on the site.
2. Provide baseline data with which the Applicant could work in planning land uses, and against which the Applicant could assess potential impacts of proposed development of the site.

The descriptive quality index of each wetland, based on this methodology, is summarized in this report.

Wetlands are legally protected because of the functions they perform and the benefits that society reaps from those functions. Wetland functions are chemical, physical, and biological processes that wetlands naturally perform as a matter of course, such as absorption of nutrients or floodwaters, or provision of habitat for fish and wildlife. Wetland values are the benefits that society derives from wetland functions, such as flood abatement, or water quality maintenance.

The functions and values assessment conducted on the property was based on the method outlined in *The Highway Methodology Workbook Supplement: Wetland Functions and Values, A Descriptive Approach*, by the U.S. Army Corps of Engineers New England District. This method was selected over an arbitrary numeric quantifying assessment scheme because it provides an objective, descriptive approach to functions and values assessment based on professional observation and judgment rather than a simple numeric value rating system. Quantified functions and values assessments do not always provide for descriptive information about wetlands and therefore may overlook important aspects of wetland functions and values.

The Highway Method provides for assessment of each wetland for thirteen defined functions and values. Of these, the first eight are considered wetland functions, and the last five are considered to be wetland values. These are:

1. **Groundwater Recharge/Discharge** – the potential for a wetland to serve as a recharge area for an aquifer or as a surface discharge point for groundwater.
2. **Floodflow Attenuation**– A wetland's ability to store and attenuate floodwaters during prolonged precipitation events, thereby reducing or preventing flood damage.
3. **Fish and Shellfish Habitat** – The ability of permanent or temporary water bodies to provide suitable habitat for fish or shellfish.

4. **Sediment/Toxicant/Pathogen Retention** – The effectiveness of the wetland in trapping sediments, toxicants or pathogens, thereby protecting water quality.
5. **Nutrient Removal/Retention/Transformation** – The effectiveness of the wetland at absorbing, retaining, and transforming or binding excess nutrients, thereby protecting water quality.
6. **Production Export** – The wetland’s ability to produce food or usable products for humans or other living organisms.
7. **Sediment/Shoreline Stabilization** – The wetland’s ability to prevent erosion and sedimentation by stabilizing soils along stream banks or the shorelines of water bodies.
8. **Wildlife Habitat** – The ability of wetlands to provide food, water, cover, or space for wildlife populations typically associated with wetlands or their adjacent areas, both resident and migratory. *
9. **Recreation** – The value placed on a wetland by society for providing consumptive and non-consumptive as well as active or passive recreational opportunities such as canoeing/boating, fishing, hunting, bird/wildlife watching, hiking, etc.
10. **Education/Scientific Value** – The value placed on a wetland by society for providing subjects for scientific study or research or providing a teaching resource for schools.
11. **Uniqueness/Heritage** – The value placed on a wetland by society for having unique characteristics such as archaeological sites or sites of historical events, unusual aesthetic qualities, or unique plants, animals, or geologic features, etc.
12. **Visual Quality/Aesthetics** – The value placed on a wetland by society for having visual and/or other aesthetic qualities.
13. **Threatened or Endangered Species Habitat** – The value placed on a wetland by society for effectively harboring or providing habitat for threatened or endangered species.

Each function or value in the list has a set list of qualifiers for identifying which functions and values are performed or provided by each wetland. The qualifiers are referenced by number on a standard evaluation form to document the functions and values assessment. In addition to outlining qualifying rationale for each function and value, the data forms also document information on each wetland’s size, distance to nearest road or other development, adjacent land uses, position in the watershed, impacts from human activity, tributaries, cover types, connectivity to other wetlands, and general condition. All of these elements factor into the functions and values assessment. The forested wetland is a well developed red maple swamp that is fed by overland flow and groundwater discharge. The wetland continues offsite to the west. Functions and values provided by the wetland includes floodflow attenuation, sediment trapping, nutrient removal, and fish/wildlife habitat. Of these, the most significant functions based on extent of rationale in identifying

functions and values are floodflow attenuation and fish/wildlife habitat. Wildlife useage noted in the wetland is consistent with other sites in the area since there were deer tracks observed in the substrate as well as raccoon tracks and other mammals. Common bird species would also be expected to utilize the wetland for nesting and foraging.

2.2 Wetland Impacts

Impacts to the wetland will occur and permits will be required from the USACE and NYSDEC. The impacts are to the wetland edge and existing upland boundary adjacent to the wetland and are associated with the proposed private road. Impacts to the wetland cannot be avoided due to the site topography but can be minimized through grading techniques and retaining walls if necessary. The impact to the wetland will not be significant since the project can obtain a Nationwide Permit. The impacts around the periphery of the wetland will not reduce the effectiveness of the wetland in performing it's vital functions of storing floodflows, providing wildlife habitat, and removing nutrients from flows into this area. A mitigation plan will create wetland from current upland area to replace the directly impacted wetland area.

2.2 Wetland Mitigation

The proposed layout for the development and associated features sought to minimize encroachments into Federal regulated wetlands. The proposed project is designed to provide a suitable layout for the development that meets the City of Beacon Building and Highway Code and meets the Phase II Stormwater Regulations for treating stormwater from impervious surfaces prior to discharge.

The site design minimizes wetland disturbances to the maximum extent practicable. To compensate for the loss of wetland area and functional capacity, the Applicant is committed to the establishment of additional wetland in one area on the site in a ratio of 1:1 with the proposed impacts. The compensatory wetland establishment plan will be based on the proposed establishment area being similar in spatial relation and existing features, and the following principles:

- The water table in the establishment wetlands must be maintained near the finished grade;
- The establishment area must not be flooded for prolonged periods of time as a result of significant rainstorms;
- The area must be planted with sufficient hydrophytic vegetation and seed to allow wetland communities to emerge within a reasonable time period.

The final design of the establishment area will strive to create edge habitat around the existing wetland type. Wetland plantings will be installed after the placement of suitable substrate material in the establishment area. This bedding material will keep soil moisture high during summer dry periods when establishment of vegetation is critical. The design of an interconnected system of existing wetland with forested and shrub wetland is intended so that the existing wetlands serve as a "regeneration nucleus" around which a forested vegetative cover type could be established. This layout will exploit the predicted hydrologic condition of the establishment area. Generally, wildlife populations thrive when edge habitat

between cover and food types is increased. Increased edge equates to more resources being available to an animal in a smaller area.

The placement of suitable substrate in the establishment area will provide an ecotonal microhabitat of value to certain wildlife species, while the wooded swamp interface with shrubs will provide two additional ecotones or "edge habitat". By maximizing the amounts and types of these ecotonal areas both the colonization of the area by local wildlife and the natural successional formation of shrub swamp and wooded swamp habitats will be considerably accelerated.

3.0 PHOTOGRAPHS

Forested wetland on site



Site wetland area to remain in this condition





Environmental, Planning, and Engineering Consultants

34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

Memorandum

To: Beacon Views LLC; City of Beacon Planning Board
From: AKRF, Inc. (Peter Feroe, AICP)
Date: April 22, 2020
Re: Beacon Views Townhouse Development: School Impact Analysis – *UPDATED*

A. INTRODUCTION

AKRF, Inc. has prepared detailed analyses relating to the potential for public school-age children to live in a proposed 40-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 40 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, with the exception of four units, which will be priced Below Market Rate (BMR) pursuant to the City of Beacon’s Affordable Workforce Housing Law (AWHL).

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 generated an estimate of the number of PSAC that may live at the Proposed Project using a case study of similarly sized and programmed attached townhome developments within the Beacon City School District. AKRF's case study utilized actual enrollment data from nine townhouse developments in the Beacon School District; five of which are in the City of Beacon and four of which are in the Town of Fishkill (see **Appendix 1** for the information on the townhouse developments surveyed and the survey results). This case-study based estimate has the benefit of being based on current demographic trends in similar developments within Beacon, and may be more likely to accurately reflect the anticipated potential PSAC generated by the Proposed Project than the use of the Rutgers multipliers.

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 2**), 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, for the 36 market-rate townhouses proposed, 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 10.08 PSAC living in the 38 market-rate units (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.

With respect to the four BMR units, AKRF conservatively applied the PSAC rate for the lowest tercile of housing value, which in the case of attached 3-BR attached houses is 0.69 per unit. This results in an estimate of 2.76 PSAC within the four BMR units (see **Table 1**). Combined, the Proposed Project, inclusive of the BMR and market-rate units, would be anticipated to have 13 PSAC.

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

| Type of Unit | Number of Townhouse Units | Multiplier | Number PSAC |
|---|---------------------------|------------|--------------|
| 3-BR Single-Family Attached Top tercile housing value | 36 | 0.28 | 10.08 |
| 3-BR Single-Family Attached Lowest tercile housing value | 4 | 0.69 | 2.76 |
| TOTAL | 40 | | 12.84 |
| 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 | | | |

Case Study

Table 2 below presents the PSAC multipliers derived from a sample set of nine single-family attached (townhouse) developments in the Beacon School District. Current student enrollment data was obtained from the Beacon City School District and is included in **Appendix 1**. Where the development contains more than one unit size, the ratio should be considered a ‘blended’ ratio. Based on ratios of PSAC to units in these townhouse developments, the Proposed Project would be expected to generate an average of eight (8) PSAC.

Table 2
Anticipated Number of Public School Age Children Based on Case Study of Townhouses in Beacon City School District

| Townhouse Developments | Town/ City | Year Built | Units Size | Market Value | Number of Units | Number of PSAC* | Ratio | Ratio Applied to Proposed Project |
|--|-------------|------------|---|--------------|-----------------|-----------------|--------------|-----------------------------------|
| Helen Court | C/ Beacon | 1989 | 100% 3-BR | \$240-280k | 29 | 13 | 0.448 | 18 |
| Sycamore Drive | C/ Beacon | 1975-77 | 42% 2-BR and 58% 3-BR | \$230-270k | 52 | 19 | 0.365 | 15 |
| Roundtree Court | C/ Beacon | 1992-93 | 87% 2-BR and 13% 3-BR | \$230-240k | 30 | 13 | 0.433 | 17 |
| Angela Court | C/ Beacon | 1988 | 100% 3-BR | \$230-290k | 35 | 5 | 0.143 | 6 |
| Verplanck Ave/ Schenck Ave. | C/ Beacon | 1998-2002 | 100% 3-BR | \$290-315k | 27 | 14 | 0.519 | 21 |
| Fishkill Woods | T/ Fishkill | 2012-2016 | 82% 2-BR and 18% 3-BR | \$430-500k | 93 | 6 | 0.065 | 3 |
| Sylvan Loop / Huron Court | T/ Fishkill | 2011-2013 | 6% 1-BR 28% 2-BR 52 % 3-BR 4% 4-BR | \$320k-600k | 48 | 3 | 0.063 | 3 |
| N. River Road / Clearwater Court | T/ Fishkill | 2006-2012 | 100% 3-BR | \$355-400k | 88 | 4 | 0.045 | 2 |
| Hollyridge | T/ Fishkill | 2003-2005 | 41% 2-BR 57% 3-BR 2% 4+BR | \$300-390k | 180 | 41 | 0.238 | 9 |
| Total | | | | | 582 | 118 | 0.203 | 8 |
| Notes: * Based on average enrollment of 2016-17 through 2018-19 school years. | | | | | | | | |
| Sources: Beacon City School District (See Appendix 1). Dutchess County GIS | | | | | | | | |

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 3** 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

Table 3
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 total 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 4**). For the 2019-2020 school year, Beacon CSD expects to receive \$29,474,648 in State Aid, which

² Cornell Program on Applied Demographics. [Pad.human.cornell.edu/schools/enrollment.cfm](http://pad.human.cornell.edu/schools/enrollment.cfm).

³ Cornell Program on Applied Demographics. [Pad.human.cornell.edu/schools/projections.cfm](http://pad.human.cornell.edu/schools/projections.cfm).

is 40.1 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 5**).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. For purposes of a conservative analysis, this report assumes that each new student to the Beacon CSD would require \$18,742 in expenses, an amount equal to the current per student instructional budget cost. As stated above, state aid accounts for 40.1 percent of the District's revenue. Therefore, the cost to Beacon CSD taxpayers for the instructional cost of each additional student would be expected to be \$11,226 { $\$18,742 \times 59.9\% = \$11,226$ }.

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.

Table 4
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 5
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.

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

⁵ <https://www.beaconk12.org/domain/437>

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 For purposes of this analysis, we assumed all units would be assessed at the mid-point of this range (i.e., \$387,500). The 2019 Beacon CSD mill rate for homestead properties is 15.78.⁸ Therefore, the Proposed Project would generate approximately \$244,590 in property taxes for the Beacon CSD $\{15.78 \times 387.5 \times 40 = \$244,590\}$, which is an increase of \$238,128 from existing conditions (see **Table 6**).

E. CONCLUSION

The Proposed Project would generate a total of \$432,605 in annual property tax revenue for the four taxing jurisdictions that serve the Project Site, including Dutchess County, the City of Beacon, Beacon CSD, and the Howland Library District. This is an increase of \$421,191 in property tax revenue from what is currently generated by the Project Site (see **Table 6**).

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 6
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 | \$53,475 | \$52,437 |
| City | \$3,735 | 8.25 | \$127,875 | \$124,140 |
| Beacon CSD | \$6,462 | 15.78 | \$244,590 | \$238,128 |
| Howland Library District | \$178 | 0.43 | \$6,665 | \$6,487 |
| Total | \$11,414 | 27.91 | \$432,605 | \$421,191 |
| 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 ** Based on estimated value of \$387,500 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 8 to 13 PSAC to the Beacon CSD, as estimated in this memorandum, would adversely affect the capacity of the District's facilities.

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>

Based on the Rutgers multiplier-based estimate of 13 PSAC and the per student instructional cost attributable to the tax levy (\$11,226), the Proposed Project could be expected to add approximately \$145,944 in annual expenses to the Beacon CSD { $11,226 \times 13 = \$145,938$ }. In this scenario, the Proposed Project would result in a surplus to the Beacon CSD of approximately \$92,104 per year (see **Table 7**).

Based on the case-study estimate of eight PSAC and the per student instructional cost attributable to the tax levy (\$11,226), the Proposed Project could be expected to add approximately \$89,812 in annual expenses to the Beacon CSD { $11,226 \times 8 = 89,808$ }. In this scenario, the Proposed Project would result in a surplus to the Beacon CSD of approximately \$148,316 per year (see **Table 7**).

Table 7
Projected Fiscal Impact to the Beacon CSD

| Methodology | Estimated Number of PSAC | Instructional Cost per Student Attributable to Tax Levy | Total Instructional Cost (Project) | Estimated Increase in Project Property Taxes | Surplus to Beacon CSD |
|---|---------------------------------|--|---|---|------------------------------|
| Rutgers | 13 | \$11,226 | \$145,944 | \$238,128 | \$92,184 |
| Case Study | 8 | \$11,226 | \$89,808 | \$238,128 | \$148,316 |
| Note: Numbers may not add due to rounding. | | | | | |

It can therefore be concluded that the estimate of eight (8) to thirteen (13) 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 - Correspondence from BCSD



Environmental, Planning, and Engineering Consultants

34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

July 30, 2019

Kelly Pologe
District Clerk/Records Access Officer
Beacon City School District
10 Education Drive
Beacon, NY 12508

Re: FOIL – Enrollment at certain addresses

Dear Ms. Pologe:

AKRF, Inc. is conducting a study to analyze the potential generation of public school age children from potential future residential townhouse development within the City. As part of that study, AKRF requests the number of public school students enrolled in the Beacon City School District, per grade (K-5, 6-8, 9-12) if available, for this past school year (2018-2019) and the two previous school years (2017-2018 and 2016-2017) for the following addresses:

- 11-29, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50 Helen Court Beacon, NY
- 1-39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65 Sycamore Drive Beacon, NY
- 50-66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92 Roundtree Court Beacon, NY
- 1-14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56 Angela Court Beacon, NY
- 20, 22, 24, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58 Schenck Avenue Beacon, NY
- 341, 343, 345, 347, 349, 351, 353, 355, 357, 359, 361 Verplanck Avenue Beacon, NY

Thank you for your time and consideration of this request for information. Responses can be mailed to the address above or e-mailed to me at kprabhakaran@akrf.com. If you have any questions about this request, or need additional information to process the request, please contact me at 914-922-2353.

Sincerely,
AKRF, Inc.

A handwritten signature in cursive script that reads "Krithika P.".

Krithika Prabhakaran
Urban Planner



Environmental, Planning, and Engineering Consultants

34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

August 12, 2019

Kelly Pologe
District Clerk/Records Access Officer
Beacon City School District
10 Education Drive
Beacon, NY 12508

Re: FOIL – Enrollment at certain addresses

Dear Ms. Pologe:

AKRF, Inc. is conducting a study to analyze the potential generation of public school age children from potential future residential townhouse development within the City. As part of that study, AKRF requests the number of public school students enrolled in the Beacon City School District, per grade (K-5, 6-8, 9-12) if available, for this past school year (2018-2019) and the two previous school years (2017-2018 and 2016-2017) for the following addresses:

Addresses included in the FOIL submitted on August 1, 2019:

- 11-29, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50 Helen Court Beacon, NY
- 1-39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65 Sycamore Drive Beacon, NY
- 50-66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92 Roundtree Court Beacon, NY
- 1-14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56 Angela Court Beacon, NY
- 20, 22, 24, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58 Schenck Avenue Beacon, NY
- 341, 343, 345, 347, 349, 351, 353, 355, 357, 359, 361 Verplanck Avenue Beacon, NY

Additional addresses to FOIL:

Fishkill Woods

- All addresses on Pritchard Court [1-14, 16-19, 21, 23-38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68-72 Pritchard Court Fishkill, NY]
- All addresses on Evan Court [1-13, 15, 17-34, 36, 38, 40, 42, 44, 46, 48 Evan Court Fishkill, NY]

Sylvan Loop/Huron Court

- All addresses on Sylvan Loop [2301, 2303, 2305, 2307, 2309, 2311, 2401, 2403, 2405, 2407, 2409, 2422, 2501, 2503, 2505, 2507, 2509, 2511, 2601, 2603, 2605, 2607, 2609, 2611 Sylvan Loop Fishkill, NY]
- All addresses on Huron Court [2702, 2704, 2706, 2708, 2710, 2712, 2714, 2716, 2802, 2804, 2806, 2808, 2810, 2812, 2814, 2816, 2902, 2904, 2906, 2908, 2910, 2012, 2914, 2916 Huron Court Fishkill, NY]

N. River Road/Clearwater Court

- All addresses on N River Drive [5, 7, 9, 11, 17, 19, 21-27, 31, 33, 35, 37, 39, 41, 51, 53, 55, 57, 59, 61, 69, 71, 73, 75, 100, 102, 104, 106, 118, 120, 122, 124, 129-140, 146, 148, 150, 152, 154, 158, 160, 162, 164, 170, 172, 174-181, 183, 185 N. River Drive Fishkill, NY]
- All addresses on Clearwater Court [2-10, 14-21, 23 Clearwater Court Fishkill, NY]

Holly Ridge

- All addresses on Ridgcrest Drive [4001, 4003, 4005, 4007, 4009, 4011, 4101, 4103, 4105, 4107, 4109, 4111, 4202, 4204, 4206, 4208, 4301, 4303, 4305, 4307, 4309, 4311, 4501, 4503, 4505, 4507, 4701, 4703, 4705, 4707, 4802, 4804, 4806, 4901, 4903, 4905, 4907 Ridgcrest Drive Fishkill, NY]
- All addresses on High Ridge Court [6101, 6103, 6105, 6107, 6109, 6111, 6202, 6204, 6206, 6208, 6301, 6303, 6305, 6307, 6309, 6311 High Ridge Court Fishkill, NY]
- All addresses on Boulder Way [5002, 5004, 5006, 5008, 5010, 5012, 5101, 5103, 5105, 5107, 5202, 5204, 5206, 5208, 5301, 5303, 5305, 5307, 5402, 5404, 5406, 5408, 5410, 5412, 5501, 5503, 5505, 5507, 5602, 5604, 5606, 5608, 5610, 5612, 5701, 5702, 5705, 5707, 5709, 5711, 5802, 5804, 5806, 5808, 5810, 5812, 59001, 5903, 5905, 5907, Boulder Way Fishkill, NY]
- All addresses on Pondview Loop [202, 204, 206, 208, 301, 303, 305, 307, 501, 503, 505, 507, 701, 703, 705, 707, 802, 804, 806, 808, 810, 812, 901, 903, 905, 907, 1002, 1004, 1006, 1008, 1010, 1012, 1101, 1103, 1105, 1107, 1202, 1204, 1206, 1208, 1402, 1404, 1406, 1602, 1604, 1606, 1608, 1802, 1804, 1806, 1808 Pondview Loop Fishkill, NY]
- All addresses on Rockledge Court [2101, 2103, 2105, 2107, 2109, 2111, 2301, 2303, 2305, 2307, 2402, 2404, 2406, 2408 Rockledge Court Fishkill, NY]
- All addresses on Granite Court [3103, 3103, 3105, 3107, 3202, 3204, 3206, 3208, 3402, 3404, 3406, 3408 Granite Court Fishkill, NY]

Thank you for your time and consideration of this request for information. Responses can be mailed to the address above or e-mailed to me at kprabhakaran@akrf.com. If you have any questions about this request, or need additional information to process the request, please contact me at 914-922-2353.

Sincerely,
AKRF, Inc.



Krithika Prabhakaran
Urban Planner



**BEACON CITY SCHOOL DISTRICT
ADMINISTRATIVE OFFICES**

10 Education Drive
Beacon, New York 12508
845-838-6900 phone
845-838-6905 fax

Ms. Ann Marie Quartironi
Deputy Superintendent

Mr. Erik Wright
*Assistant Superintendent
of Curriculum and Student Support*

Dr. William Rolon
*Assistant Superintendent
for Personnel and Policy*

Dr. Matthew Landahl
Superintendent of Schools

September 18, 2019

Ms. Krithika Prabhakaran
AKRF
Environmental, Planning, and Engineering Consultants
34 South Broadway, Suite 401
White Plains, NY 10601

Re: FOIL Request of August 1, 2019, with amended request of August 12, 2019

Dear Ms. Prabhakaran:

Attached please find the Beacon City School District's response to your August 12th request pursuant to the Freedom of Information Law.

Please note that records wholly or partially containing information constituting an unwarranted invasion of personal privacy, protected student information under the Family Educational Rights to Privacy Act (FERPA), 20 U.S.C. § 1232g, attorney/client privileged communications, and/or inter-agency or intra-agency materials that are reflective of opinion, advice, recommendation and the like have been withheld.

Very truly yours,

Kelly Pologe
Records Access Officer

BEACON CITY SCHOOL DISTRICT: PUBLIC SCHOOL STUDENTS ENROLLED

9/18/2019

| STREET | # | 2016-17 | | | 2017-18 | | | 2018-19 | | |
|-------------------|--|---------|-------|--------|---------|-------|--------|---------|-------|--------|
| | | K - 5 | 6 - 8 | 9 - 12 | K - 5 | 6 - 8 | 9 - 12 | K-5 | 6 - 8 | 9 - 12 |
| Angela Court | 1-14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56 | 2 | 1 | 4 | 2 | 2 | | 3 | | 1 |
| Boulder Way | All | 8 | 4 | | 12 | 6 | 1 | 9 | 4 | 4 |
| Clearwater Court | All | | | | | | | | | |
| Evan Court | All | 2 | | 1 | 2 | 1 | | 2 | 1 | 1 |
| Granite Court | | 2 | 1 | | 1 | 1 | 1 | 1 | 1 | 2 |
| Helen Court | 11-29, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50 | 6 | 3 | 5 | 7 | 2 | 4 | 8 | | 4 |
| High Ridge Court | All | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 |
| Huron Court | All | 1 | 1 | | 1 | 1 | | | 1 | 1 |
| North River Drive | All | 4 | | 1 | 4 | | | | 1 | 1 |
| Pondview Loop | All | 2 | 2 | 1 | 2 | 1 | 2 | 5 | 3 | 2 |
| Pritchard Court | All | 1 | 2 | | 1 | 2 | | 1 | | 2 |
| Ridgecrest Drive | All | 8 | 1 | 3 | 6 | 1 | 3 | 4 | 1 | 3 |
| Rockledge Court | All | 1 | | | 1 | | | | | |
| Roundtree Court | 50-66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92 | 5 | 4 | 5 | 6 | 3 | 4 | 4 | 3 | 5 |
| Schenck Avenue | 20, 22, 24, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58 | 5 | 3 | 2 | 6 | 3 | 2 | 3 | 2 | 1 |
| Sycamore Avenue | 1-39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65 | 14 | 1 | 4 | 16 | 1 | 3 | 9 | 7 | 1 |
| Sylvan Loop | All | | 1 | 1 | | | 2 | | | |
| Verplanck Avenue | 341, 343, 345, 347, 349, 351, 353, 355, 357, 359, 361 | 2 | 3 | 1 | | 1 | 2 | | 2 | 3 |

Appendix 2 - Table 3-1 from 2006 "Rutgers" Study

**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 | | | |
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April 27, 2020

VIA EMAIL

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

Re: Beacon Views Townhomes
City of Beacon, New York
MC Project No. 19002075A

Dear Chairman Gunn and Members of the Planning Board:

The following items are in response to the Creighton Manning Engineering (CM) letter to you dated November 8, 2019. The items are numbered according to their review comments.

1. CM concurs with Maser's trip generation forecast, which assumes 25 trips during the weekday morning hour and 30 trips during the weekday evening peak hour.

Response: Comment noted. No further response necessary.

2. The access change will transpose site-generated traffic from the intersection of Fishkill Avenue and Delavan Avenue to the intersection of Fishkill Avenue and Townsend Street. While the level of peak-hour traffic generated by the project is not expected to have a significant impact on the roadway network, CM recommends that the Maser TIS be amended to include an analysis of the Fishkill Avenue-Townsend Street intersection.

Response: As requested, the latest revised Traffic Impact Study dated March 26, 2020 includes an analysis of the Fishkill Avenue/Townsend Street intersection.



3. CM recommends that signage be placed in advance of the proposed emergency access gate to alert drivers that the road does not continue. The signage should be placed prior to (east of) the last driveway before the gate so unfamiliar drivers can utilize the driveway and parking area to turn around. The emergency gate should have reflectors.

Response: *The site plan will include the appropriate signing as part of the final design and the placement of such will be coordinated with CM and the City of Beacon. The gate will include reflectors and the appropriate advance signage for the emergency access area.*

4. The revised plan shows two crosswalks spanning the extended public right-of-way connecting the site with Townsend Street. One of the crosswalks leads to an area where no sidewalk is proposed. CM recommends that sidewalk be proposed on both sides of the roadway and that a sidewalk connection be provided to the proposed walkway to Conklin Street. The crosswalks should include the appropriate pedestrian warning signs as per the MUTCD.

Response: *Sidewalk connections will be reflected on the final site plans and will include crosswalks and appropriate pedestrian warning signs consistent with the MUTCD.*

5. The plans should demonstrate that adequate sight distance is provided at each of the driveways along the extended public right-of-way.

Response: *The site plans have been updated to indicate the sight distances for entering and exiting vehicles at each of the driveways along the extended public right-of-way.*

6. The plans for this project should include the proposed connection to the Townsend Street cul-de-sac. The plans should depict the appropriate traffic control devices (i.e., signs and/or markings) within and in advance of the cul-de-sac area to guide drivers.

Response: *The site plans for the Townsend Street alternate show the connection to the Townsend Street cul-de-sac which is proposed as part of that development.*



The signage and pavement markings at that connection have been included on the plans. Additional advanced signage will be included on the final site plans to guide drivers to and from the development. This will be coordinated with CM and the City of Beacon.

7. A recent site visit performed by CM revealed that there is no Stop sign on Townsend Street approach to Fishkill Avenue. The City of Beacon should determine if the sign is miss and, if so, take the appropriate action to replace it.

Response: As noted in the revised Traffic Impact Study, there is no stop sign and this will be installed if required by the City of Beacon.

If you have any questions regarding the above, please do not hesitate to contact us.

Very truly yours,

MASER CONSULTING P.A.

A handwritten signature in blue ink, which appears to read 'Philip J. Greal', is written over the printed name below.

Philip J. Greal, Ph.D., P.E.
Principal/Department Manager

PJG/ces



Traffic Impact Study

Beacon Views
City of Beacon, Dutchess County, New York

August 16, 2019
Revised March 26, 2020

Prepared For
Beacon Views LLC
500 River Avenue, Suite 145
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Prepared By
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License No. 59858

MC Project No. 19002075A





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I. INTRODUCTION

This report has been updated to reflect the reduction in the number of dwelling units from 42 to 40 and to also include additional analyses in response to the City’s traffic consultant and other comments received from the Planning Board and the public. This report now includes a complete evaluation of two access alternatives as described in more detail below.

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 40 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 is proposed to be served with the provision of a full access connection to 25 Townsend Street via the public road and the provision of an appropriate emergency access to be constructed as part of that development to Hastings Drive conforming with the City specifications in anticipation of potential future dedication to the City of Beacon. Also, since the Applicant does not control the timing of the construction of 25 Townsend Street, a separate analysis was completed with a future access to the extension of Hastings Drive, which in turn connects to Delavan Avenue with an emergency access connection to the 25 Townsend Street property located to the north of the Project. Each of these scenarios are evaluated herein.

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 and as previously discussed, the proposed Project will be accessed from Townsend Street via a right-of-way through the pending 25 Townsend Street Subdivision and/or a connection to 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.

3. Townsend Street

Townsend Street is a two-lane City Street that originates at a “T” intersection with Fishkill Avenue. The roadway is currently unstriped and serves both commercial and residential uses and currently terminates at the 25 Townsend Street property and is planned to be extended as part of that project to connect to the Beacon Views site. It also intersects with De Soto Avenue and Mead Avenue.

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 including the 25 Townsend Street project. These also included those counts 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
- Fishkill Avenue and Townsend Street

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

- | | |
|------------------------|-------------------|
| ▪ Weekday Peak AM Hour | 7:45 AM – 8:45 AM |
| ▪ Weekday Peak PM Hour | 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 was requested from the New York State Department of Transportation (NYSDOT) for the intersection of Route 52 and Delavan Avenue and is contained in Appendix E.

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 and the 25 Townsend Street project, 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; 10A and 11A)

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. Figures No. 10 and 11 show the distributions for the access scenario using 25 Townsend Street as the full access while Figures No. 10A and 11A show the distributions with full access via Hastings Drive.

D. 2022 BUILD CONDITIONS TRAFFIC VOLUMES

(Figures No. 12 through 15; 12A through 15A)

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. Figures No. 12A through 15A shown the corresponding figures with the full access via Hastings Drive.

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 and 2A)

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.

Tables No. 2 and 2A summarizes the results of the capacity analysis for the 2019 Existing, 2022 No-Build and 2022 Build Conditions for the two access scenarios. 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. Observations of this intersection were also completed on Sunday mornings to evaluate conditions when the Salem Tabernacle Church is holding services. During this time, there is a significant increase in on-street parking and pedestrian and traffic flows before and after services.

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 regardless of this project. 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 under the Hastings Drive access scenario, 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.

Hastings Drive, which currently serves the St. Francis Hospital property as well as Wingate at Beacon and Highland Meadow Senior Apartments, has the capacity to accommodate the additional traffic from the Beacon Views project without significantly impacting the operation along this circular drive. Based on our review of the existing and future traffic volumes with the anticipated peak hour generation for Beacon Views development, the site access drive connection to this circular drive is also expected to operate at a Level of Service “A” during peak hours (see attached capacity analysis).

3. Fishkill Avenue and Townsend Street

Townsend Street intersects with Fishkill Avenue at a “T” intersection. This intersection currently operates at a Level of Service “C” or better during peak periods.

The analysis indicates that under future Build conditions with the additional traffic generated by the Beacon Views development Levels of Service “C” or better will be maintained during peak periods. It is recommended that regardless of the project, centerline striping be added on Townsend Street together with a “Stop” sign. These improvements will be coordinated with the City.

IV. OTHER CONSIDERATIONS AND RECOMMENDATIONS

In addition to the improvements outlined above, the following items should also be noted and coordinated on the final site plans.

- a) Signing will be installed in advance of the emergency access gate to identify for drivers the driveway and parking area turnaround. The treatment on the emergency gate will include appropriate reflectors and signing to make drivers aware of it.
- b) The final treatment of the sidewalks will be dependent on the wetland area. The provision of sidewalk on at least one side will be included. The addition of a sidewalk on the other side of the road for minimal activity would increase impervious, possibly additional wetland impacts, and an alternate configuration is being provided.
- c) The site plans have been updated to indicate the sight distances for entering and exiting vehicles.

V. SUMMARY AND CONCLUSION

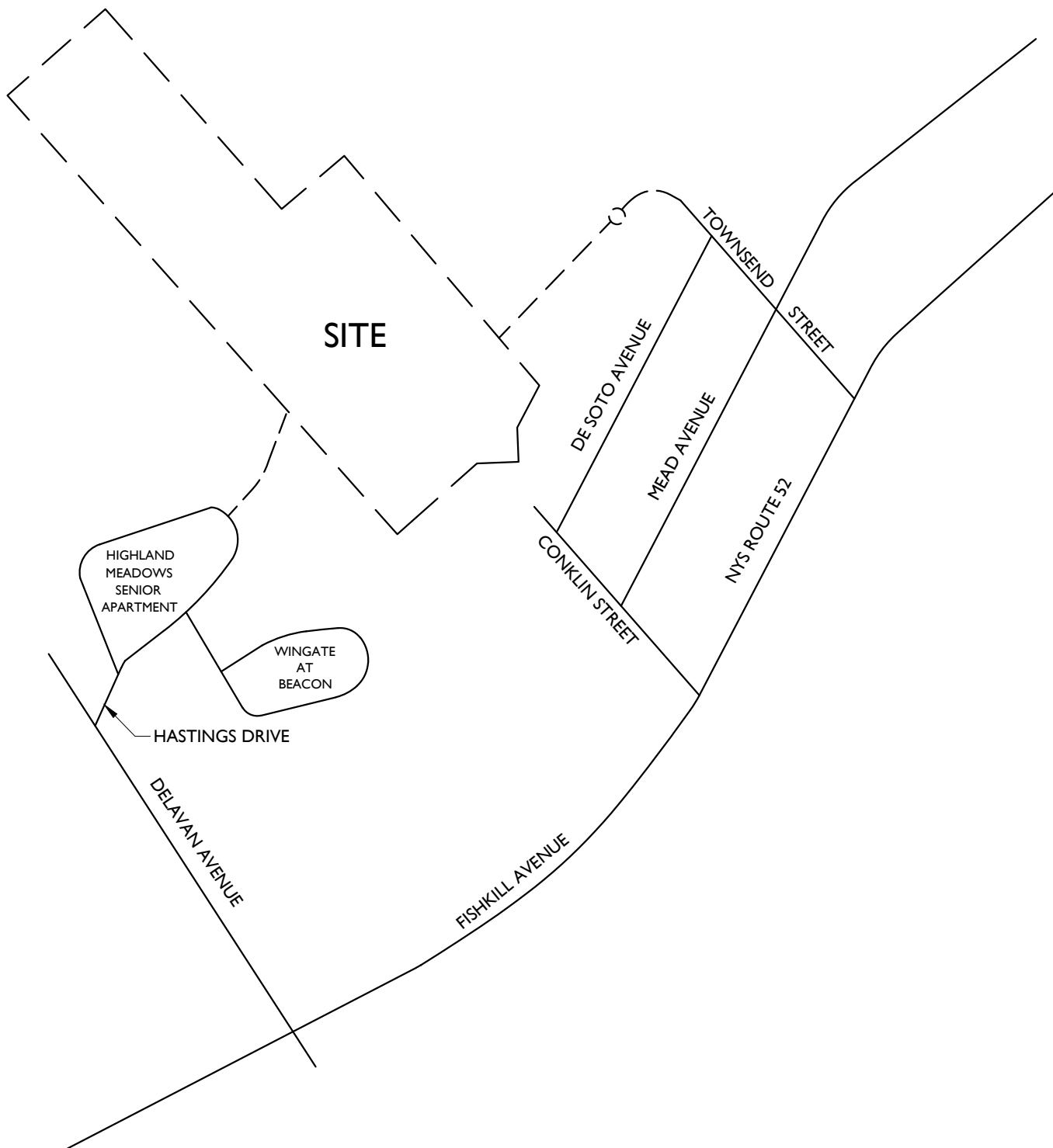
Based on the analyses summarized above under either access scenario, similar Levels of Service and delays will be experienced at the area intersections under the future No-Build and future Build Conditions. Thus, the Beacon Views development traffic is not expected to cause any significant impact in overall traffic operations.



BEACON VIEWS

APPENDIX A

FIGURES



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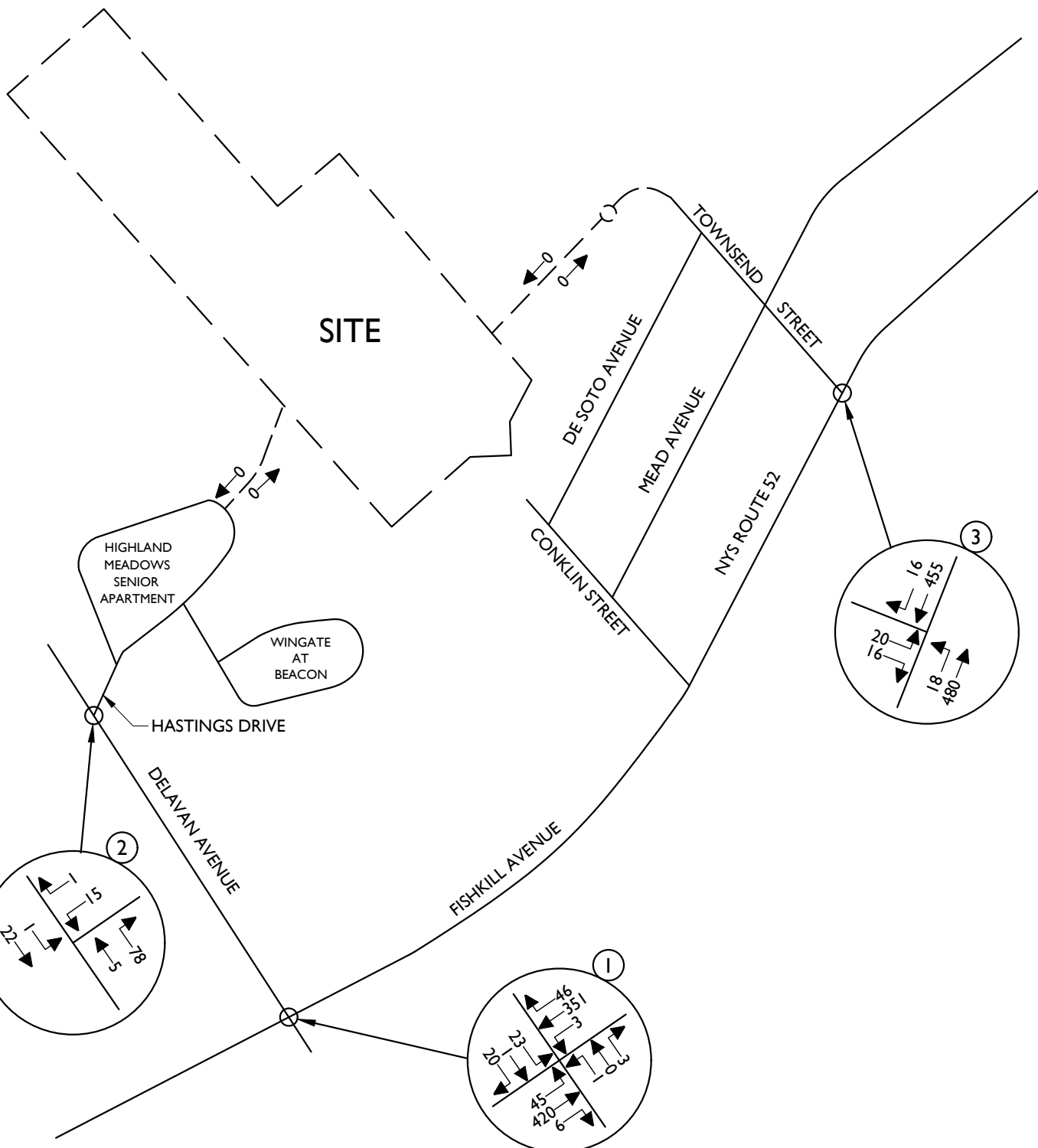
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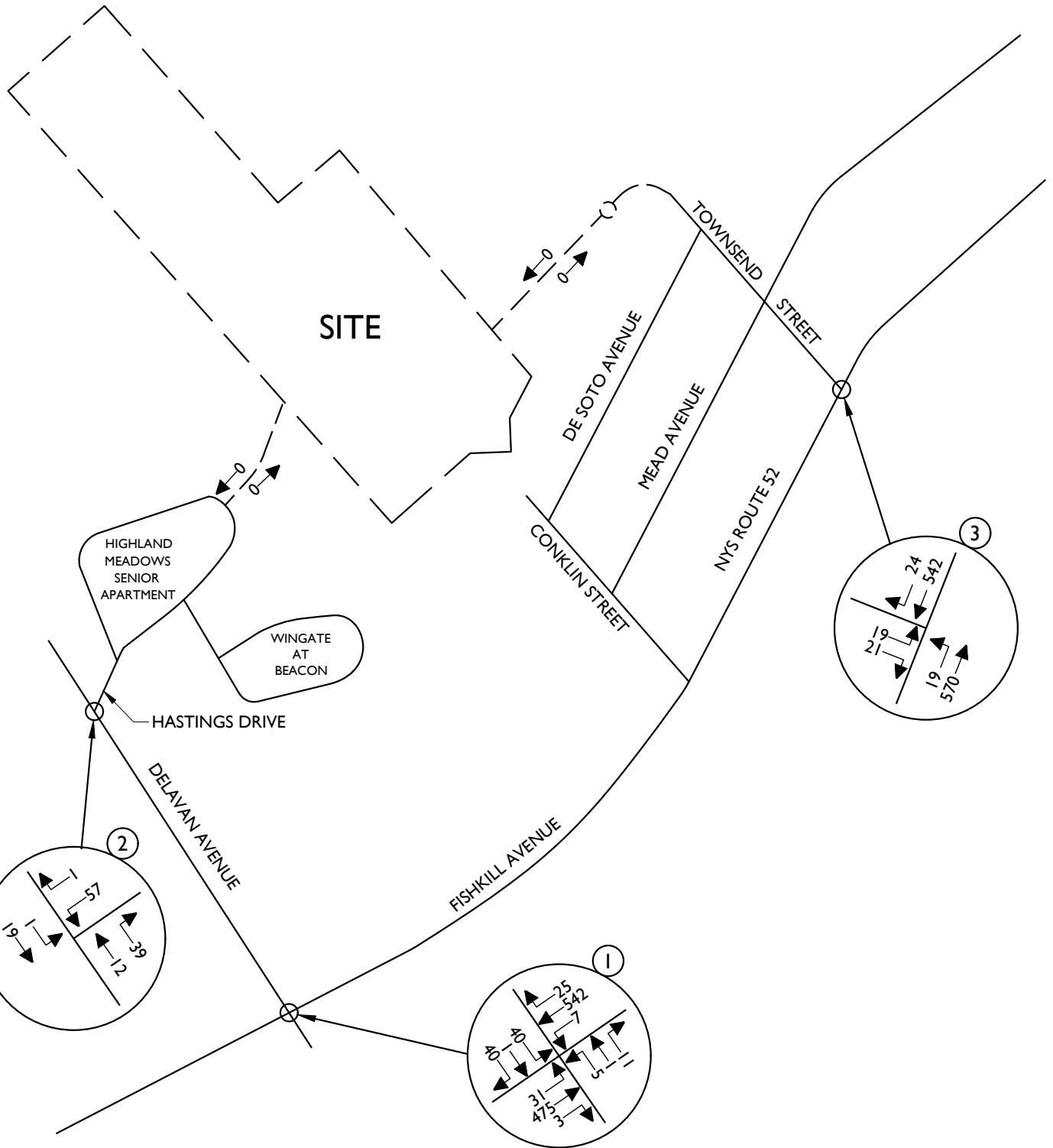
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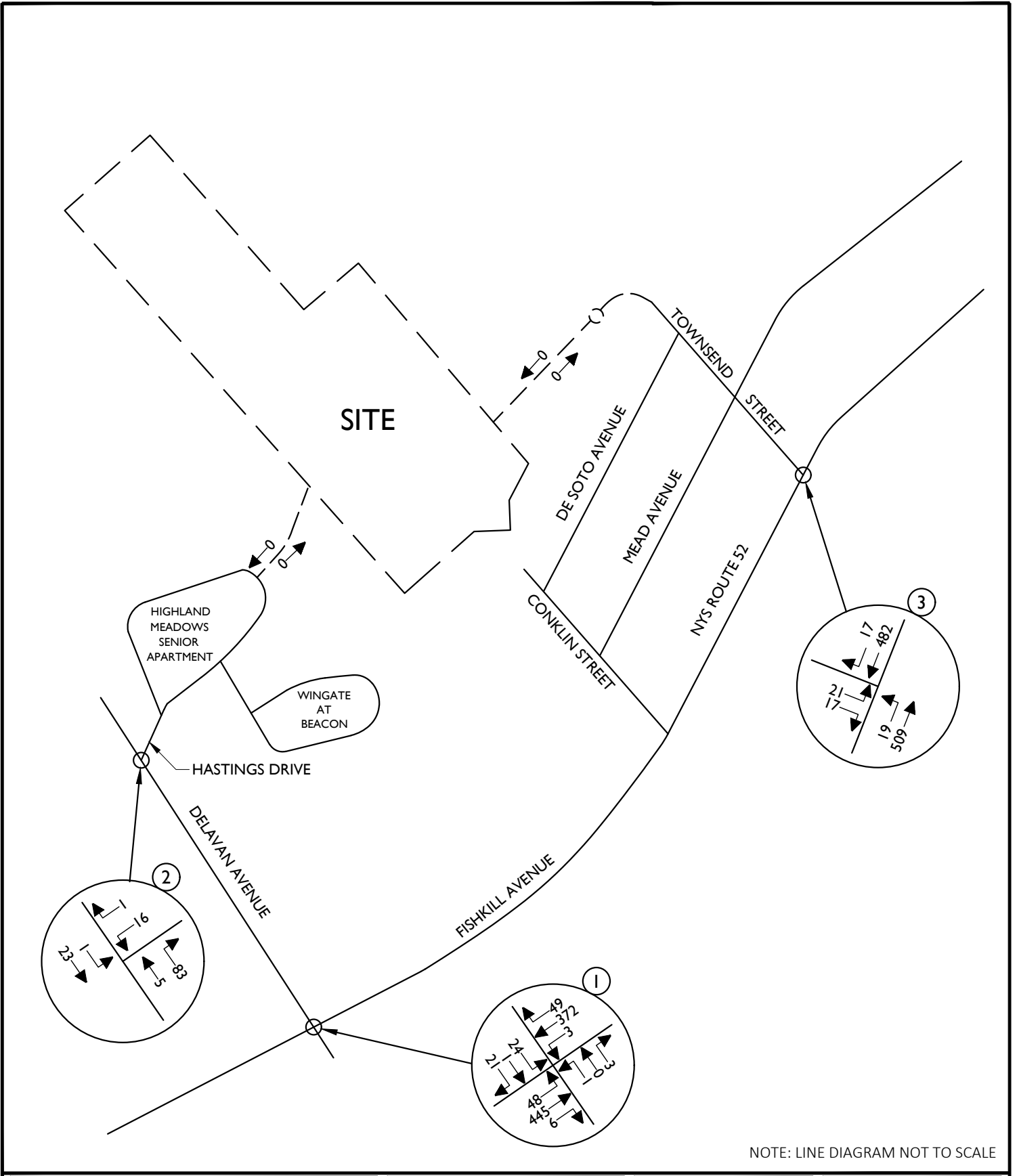
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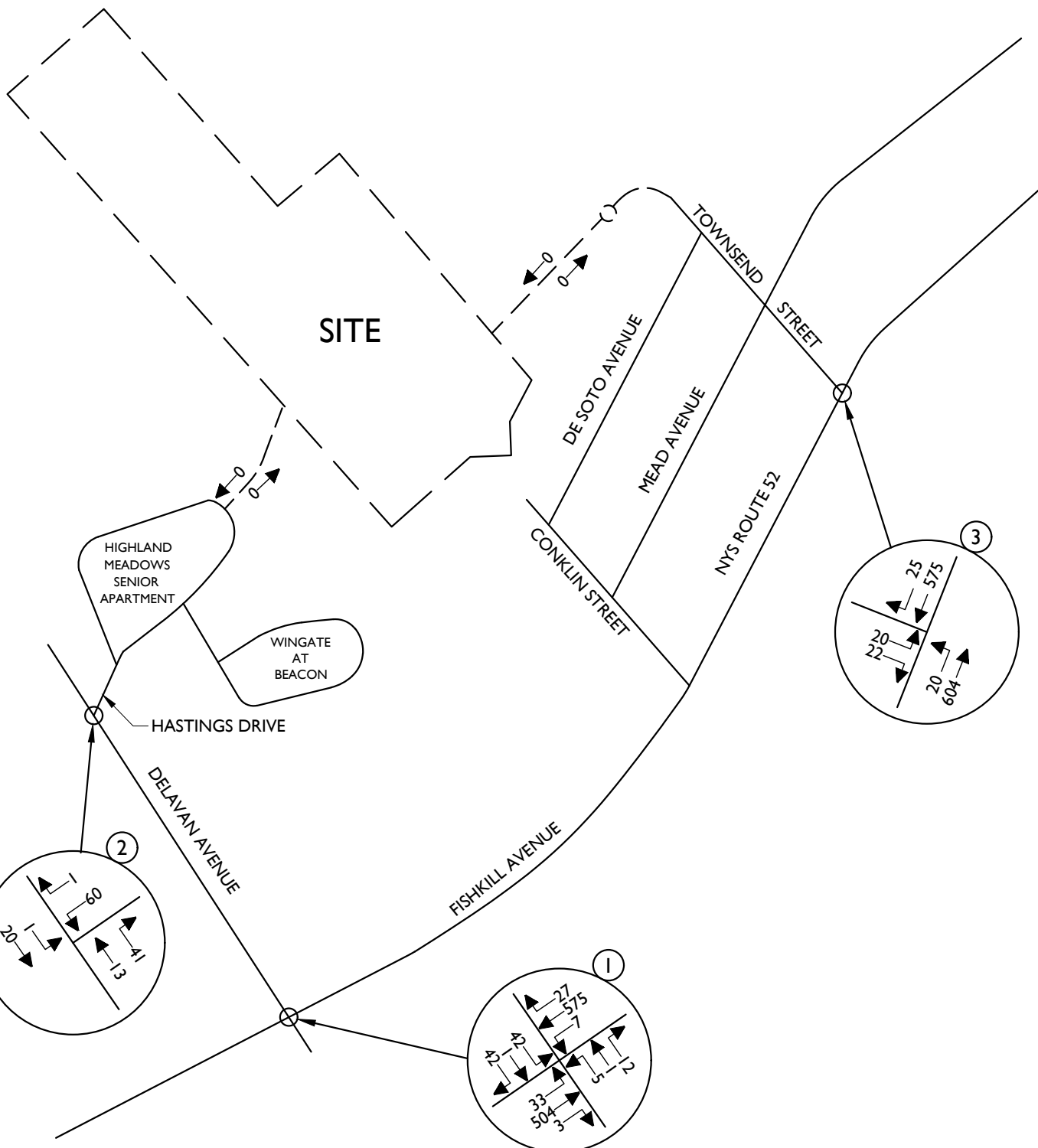
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SHEET TITLE:
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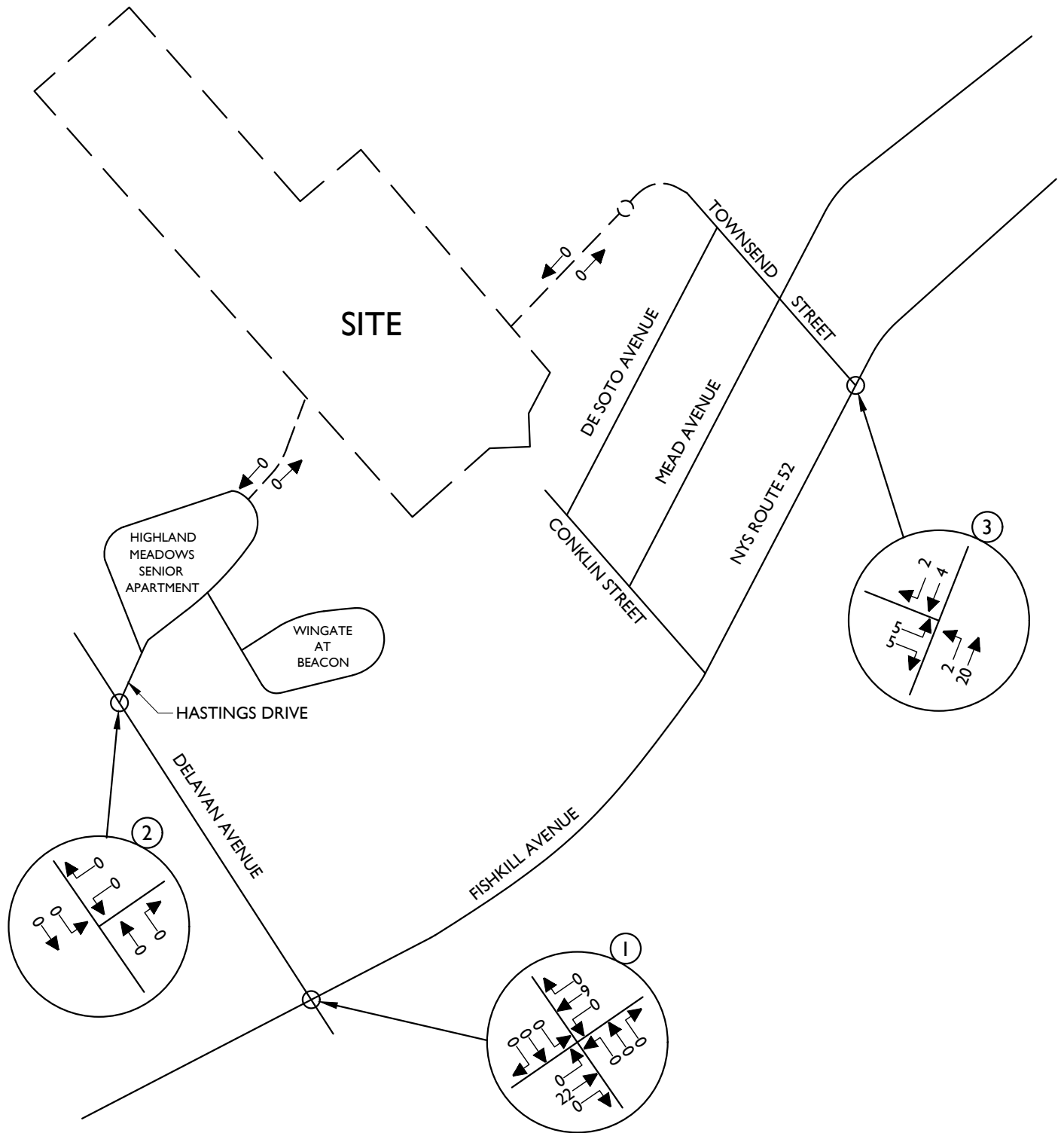
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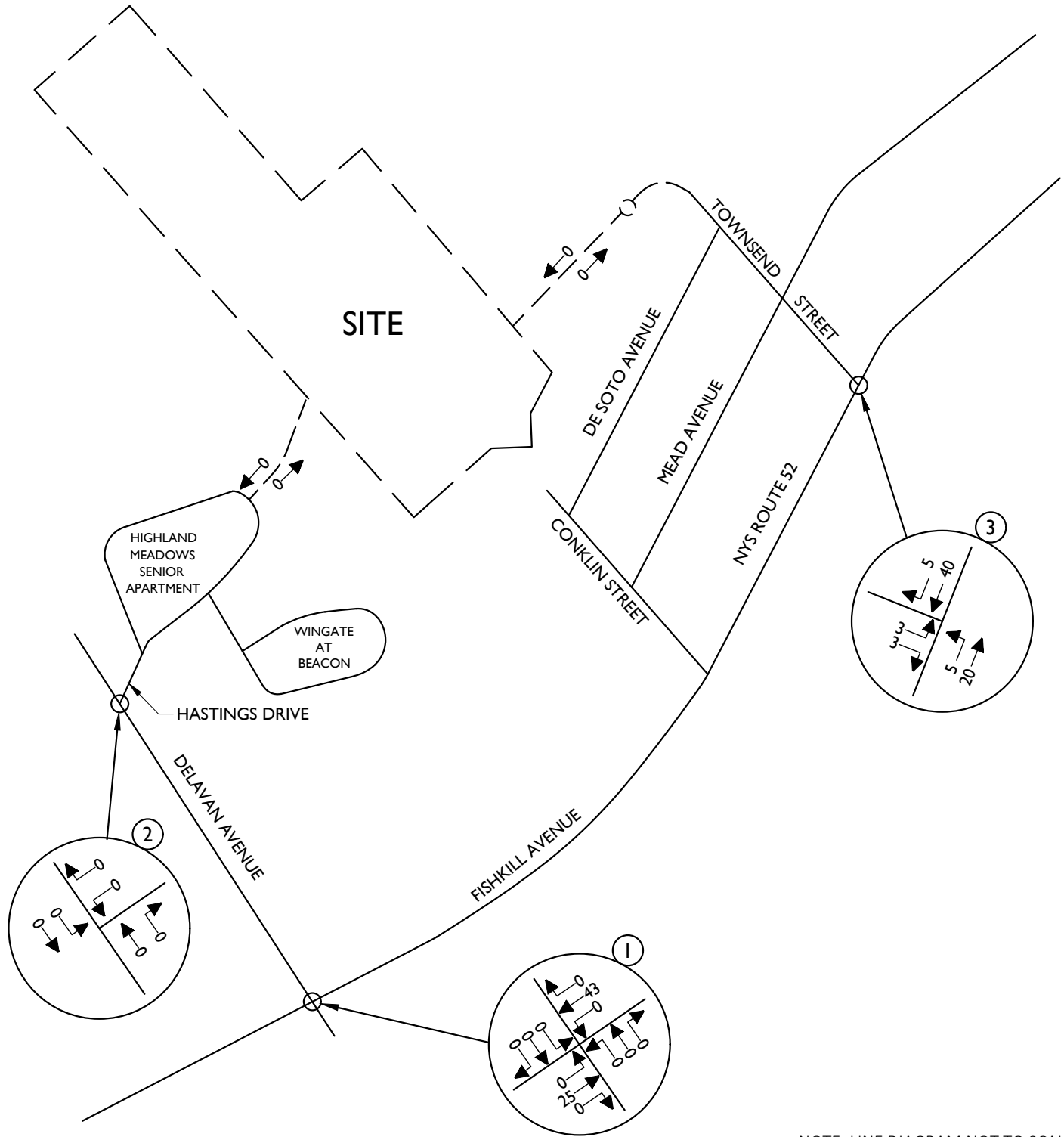
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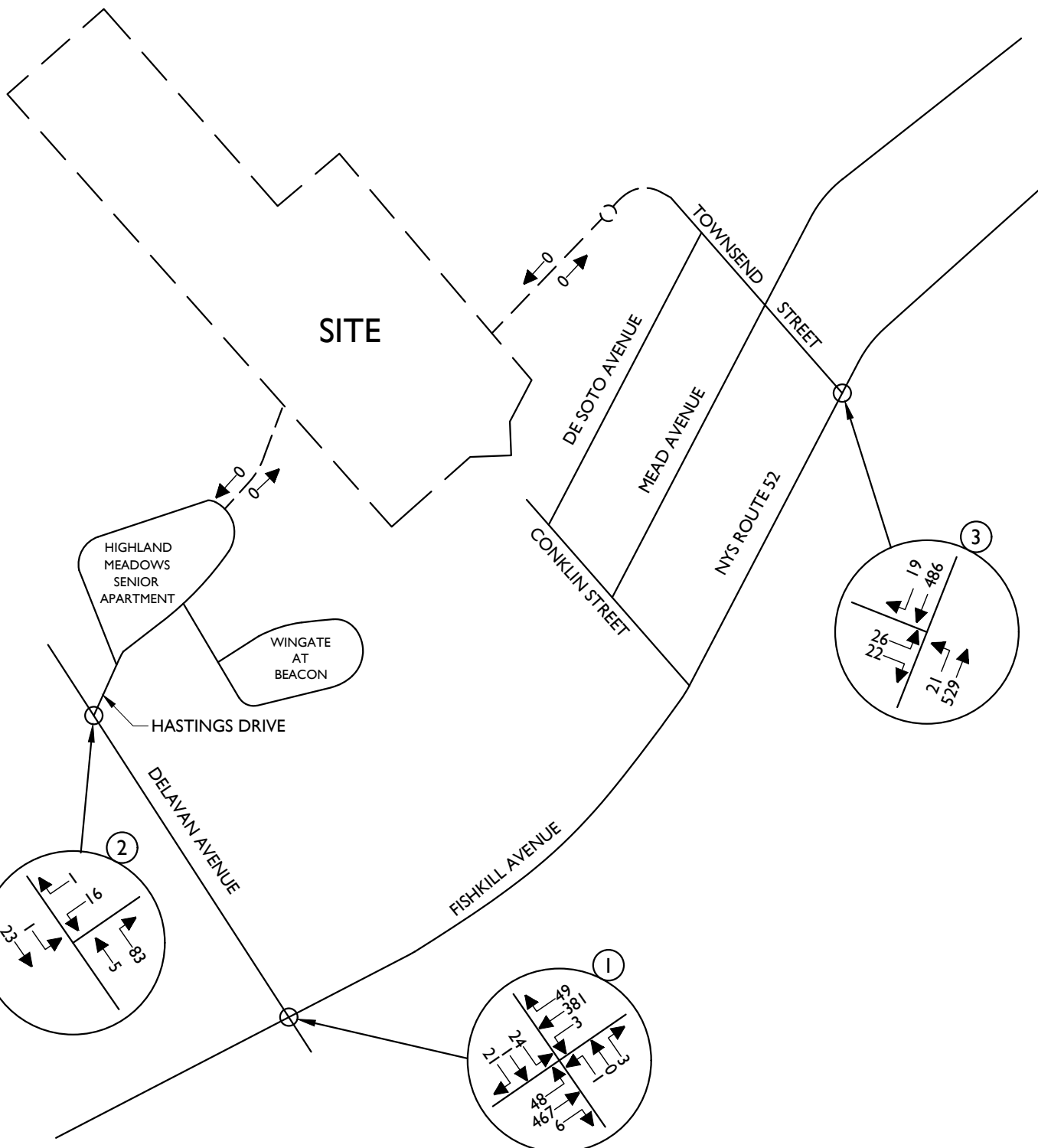
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SHEET TITLE
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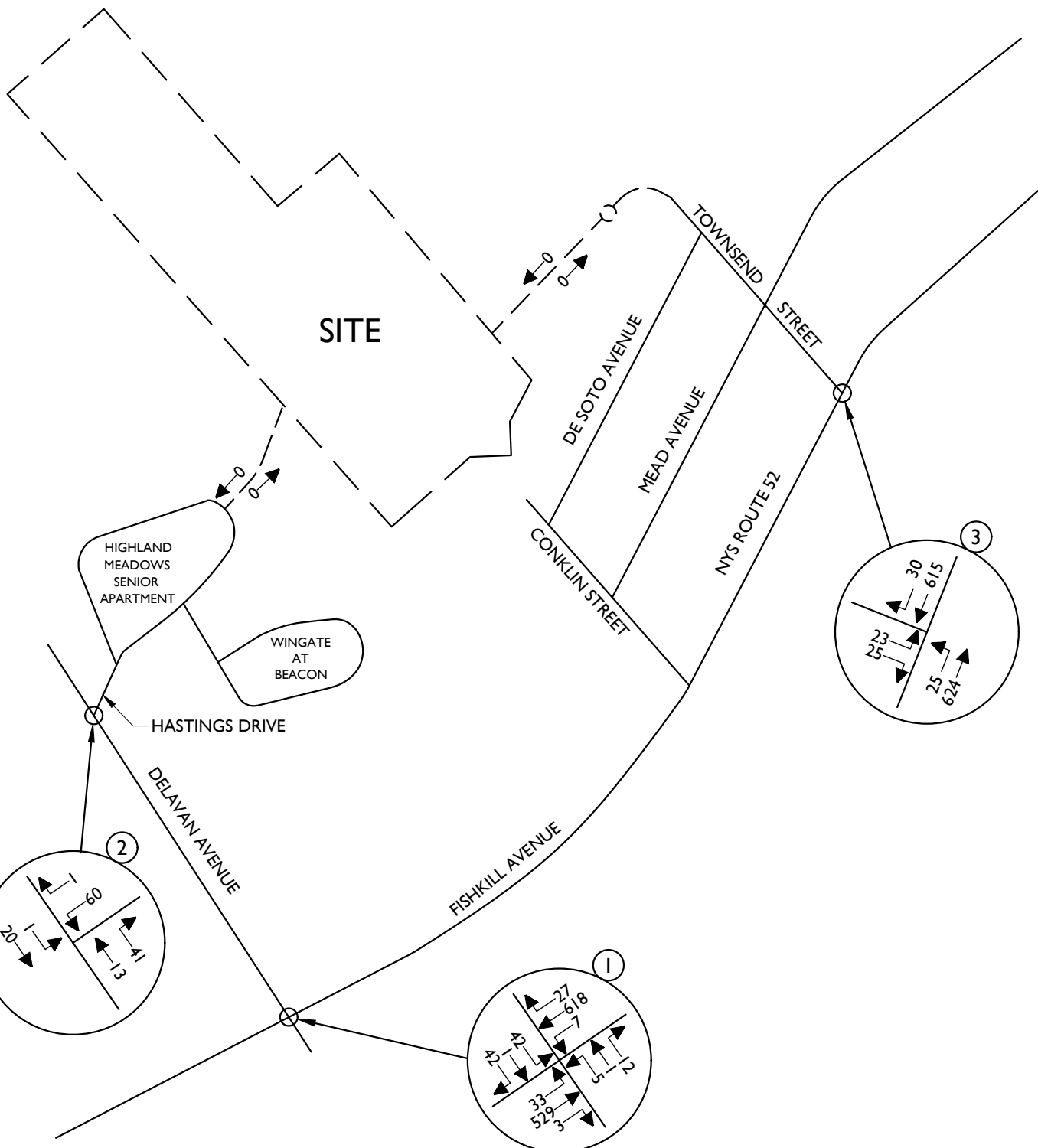
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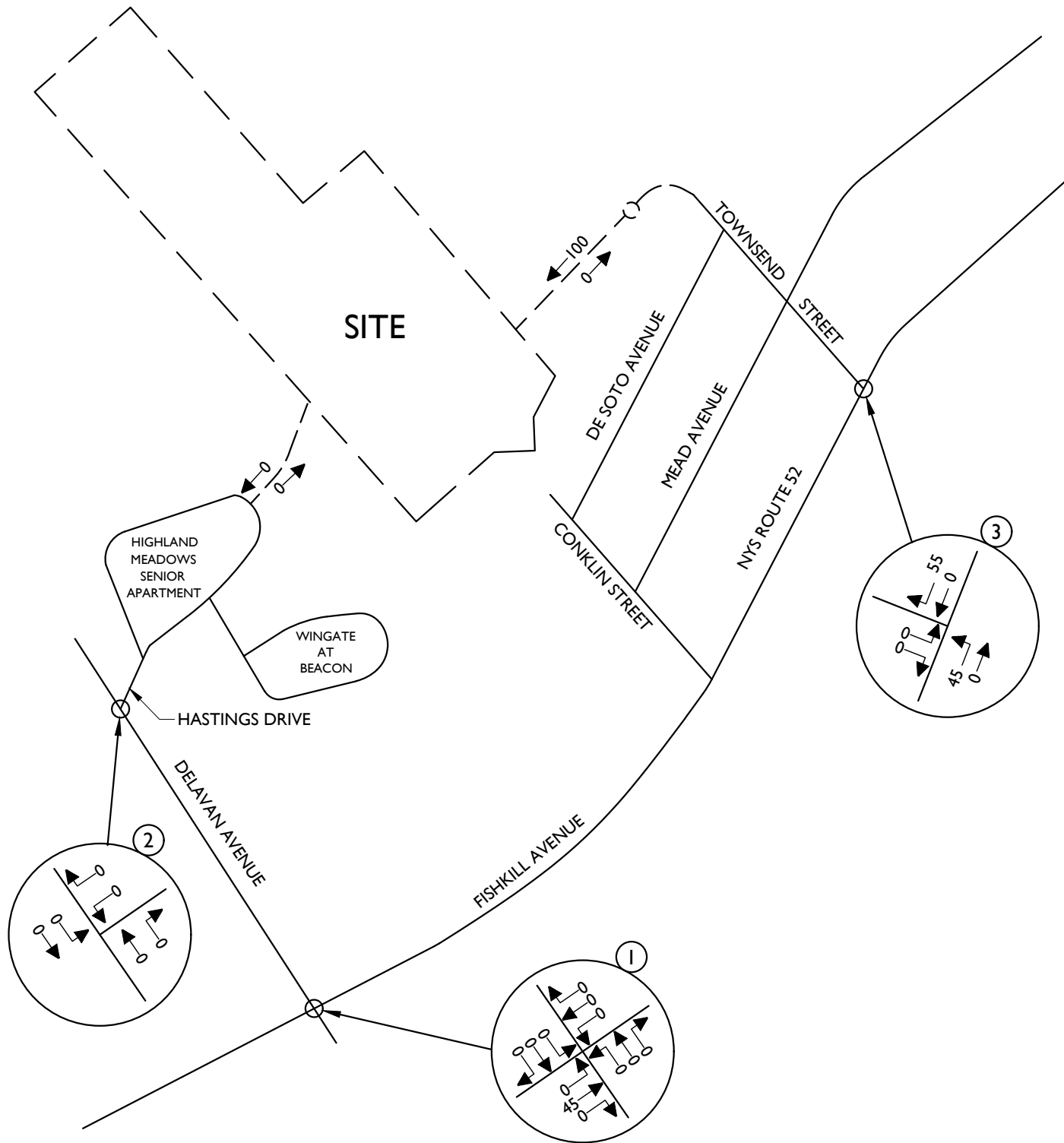
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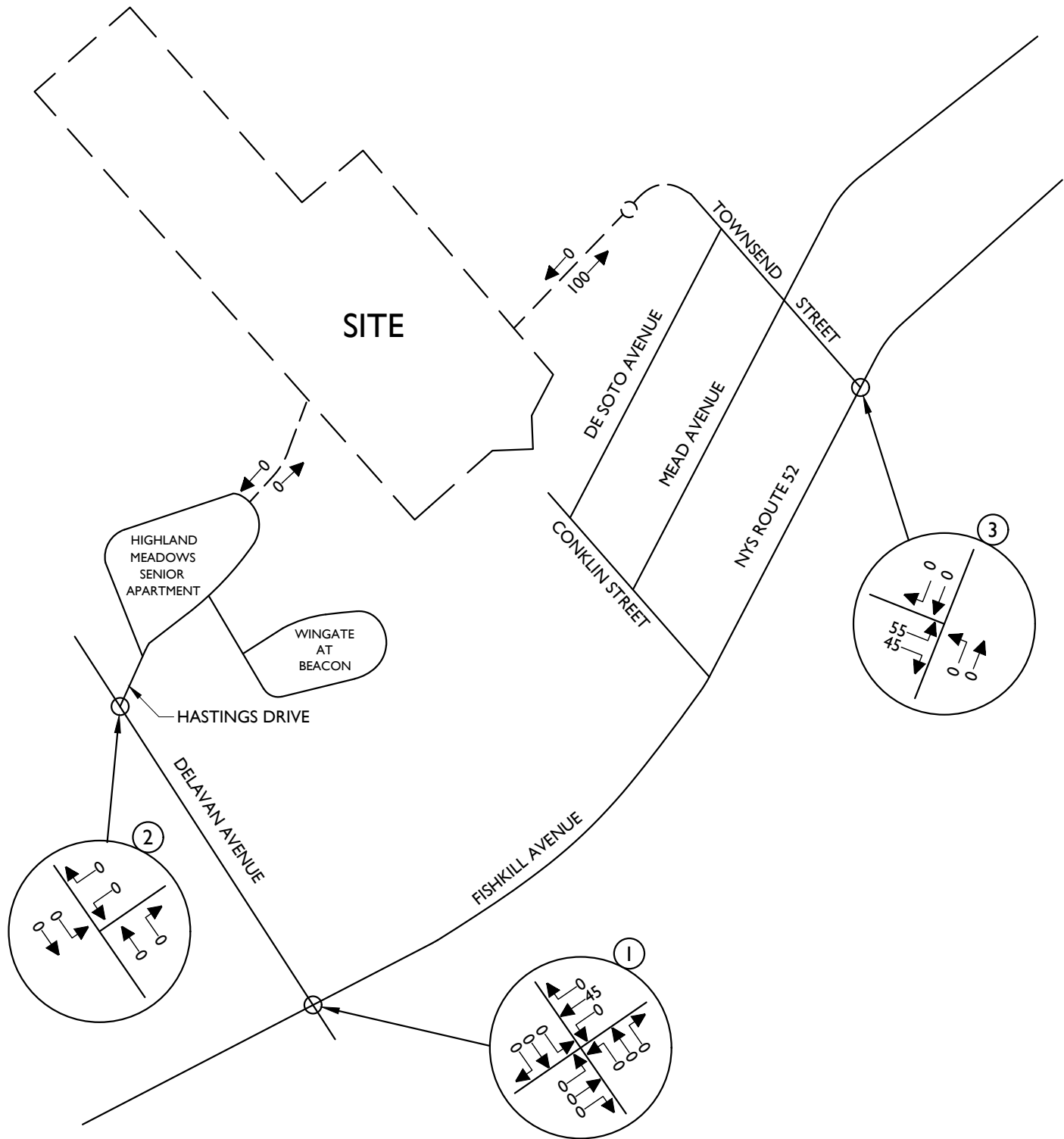
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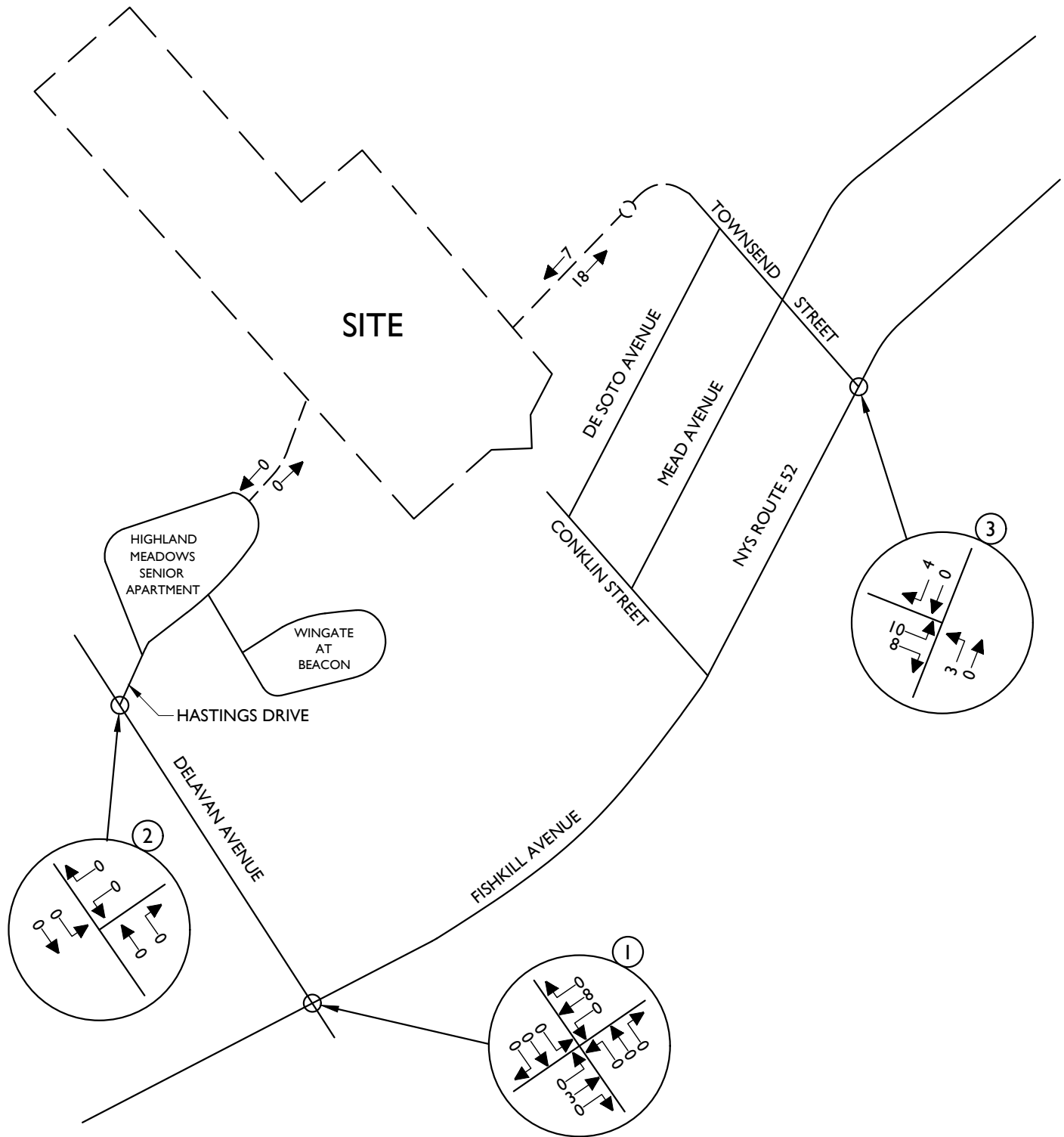
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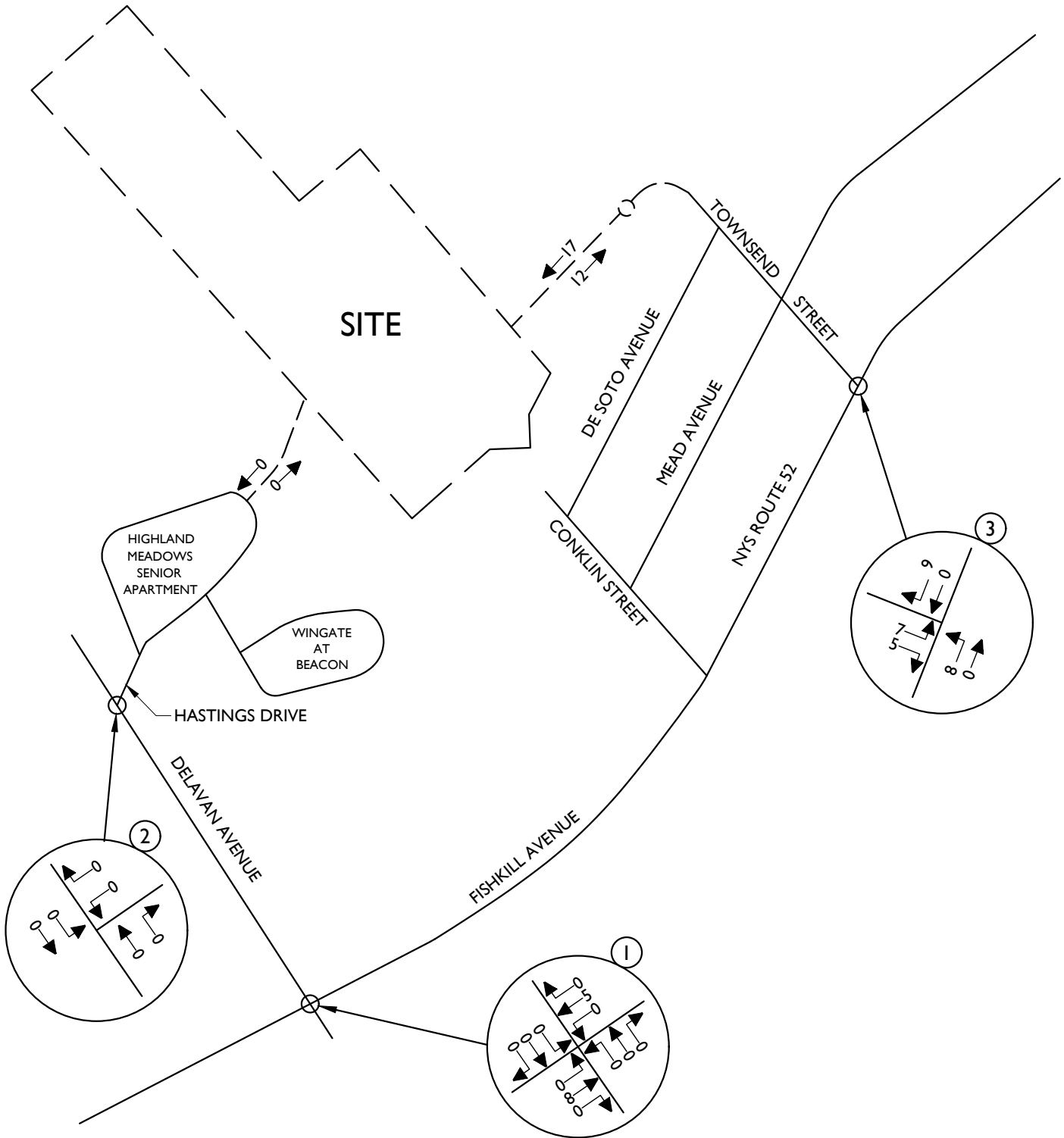
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SHEET 5 OF 5
**SITE GENERATED TRAFFIC
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WEEKDAY PEAK AM HOUR
(TOWNSEND STREET ACCESS)**

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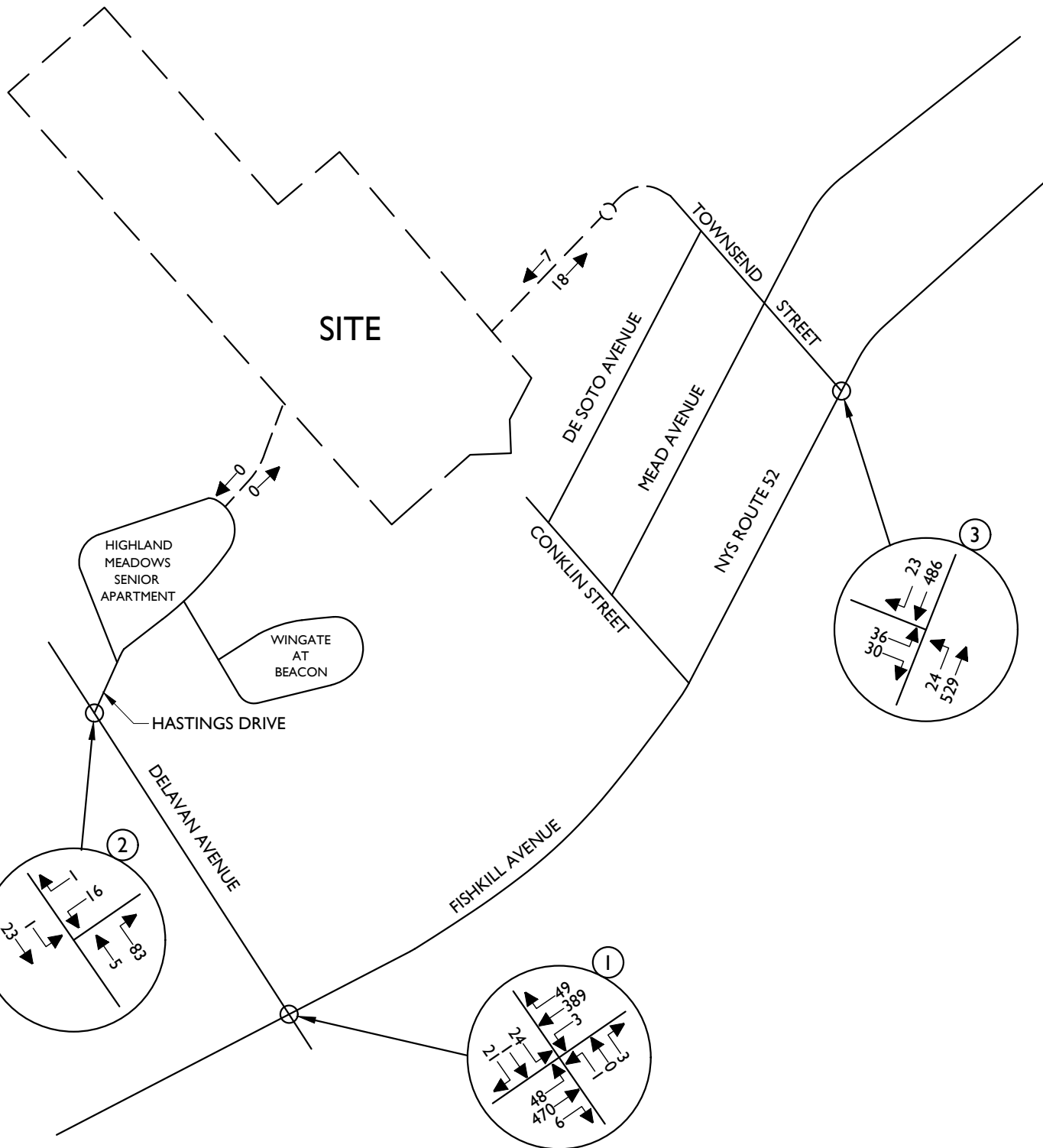
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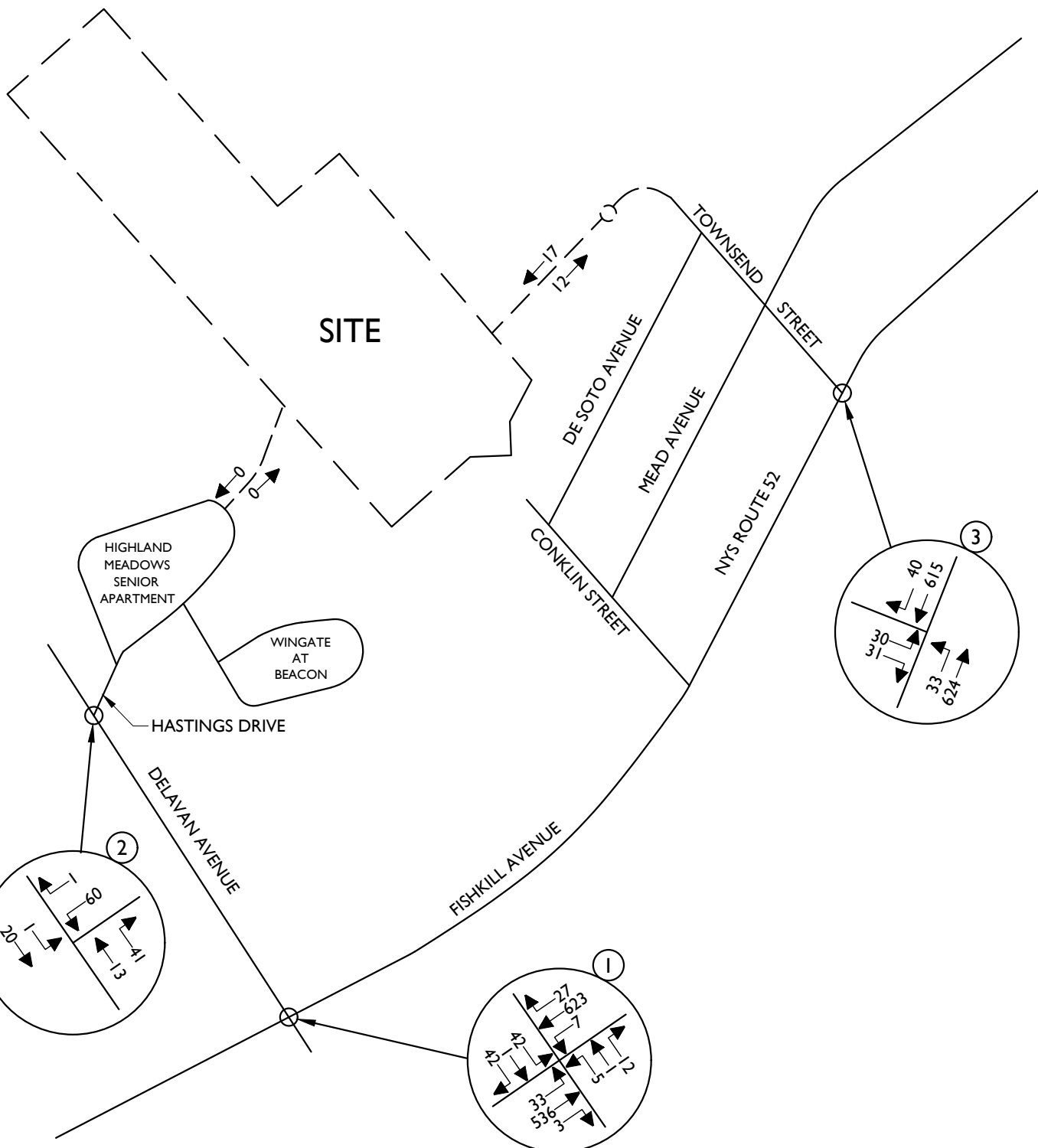
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SHEET TITLE:
**2022 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR
(TOWNSEND STREET ACCESS)**

SHEET NUMBER:

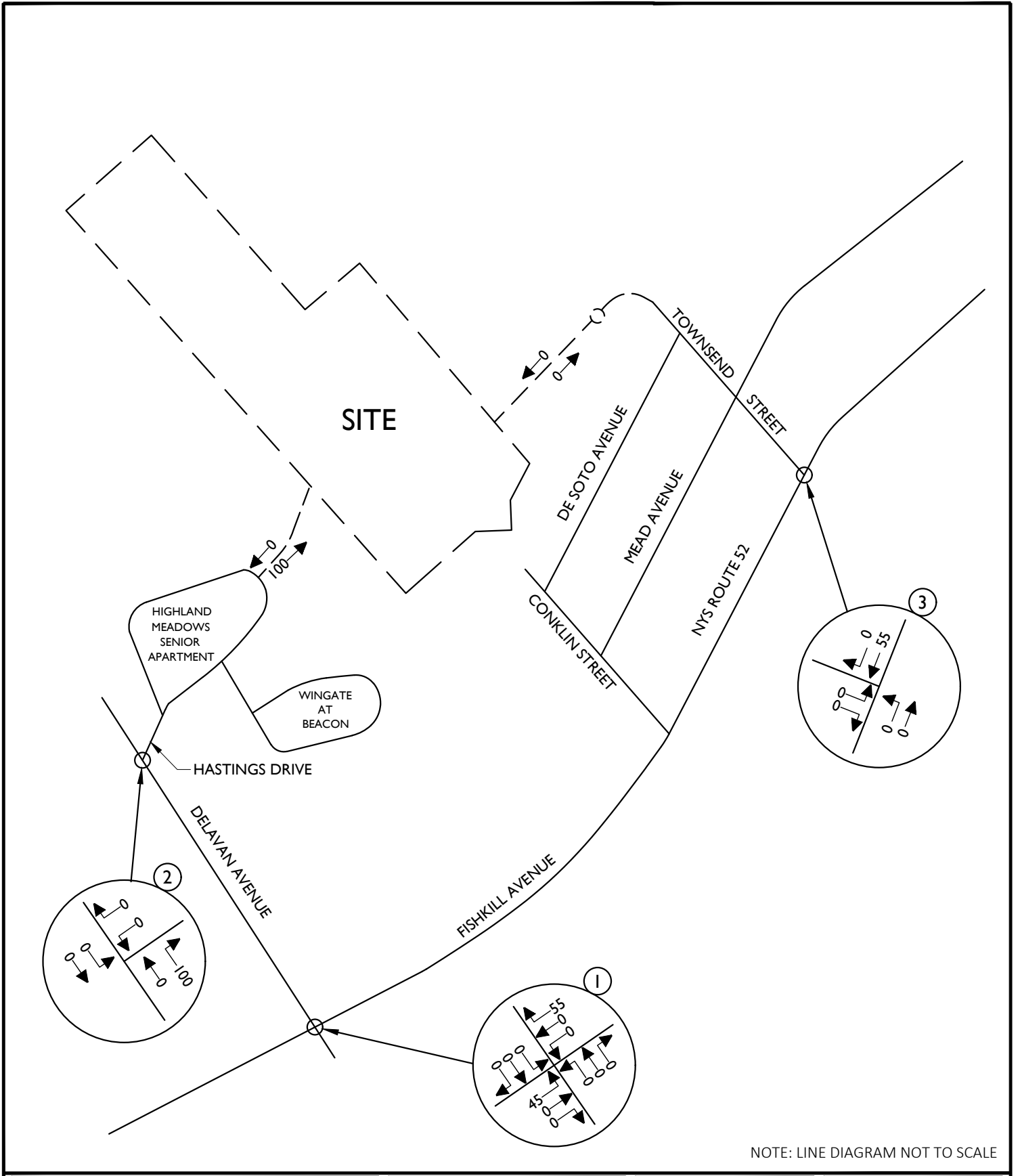
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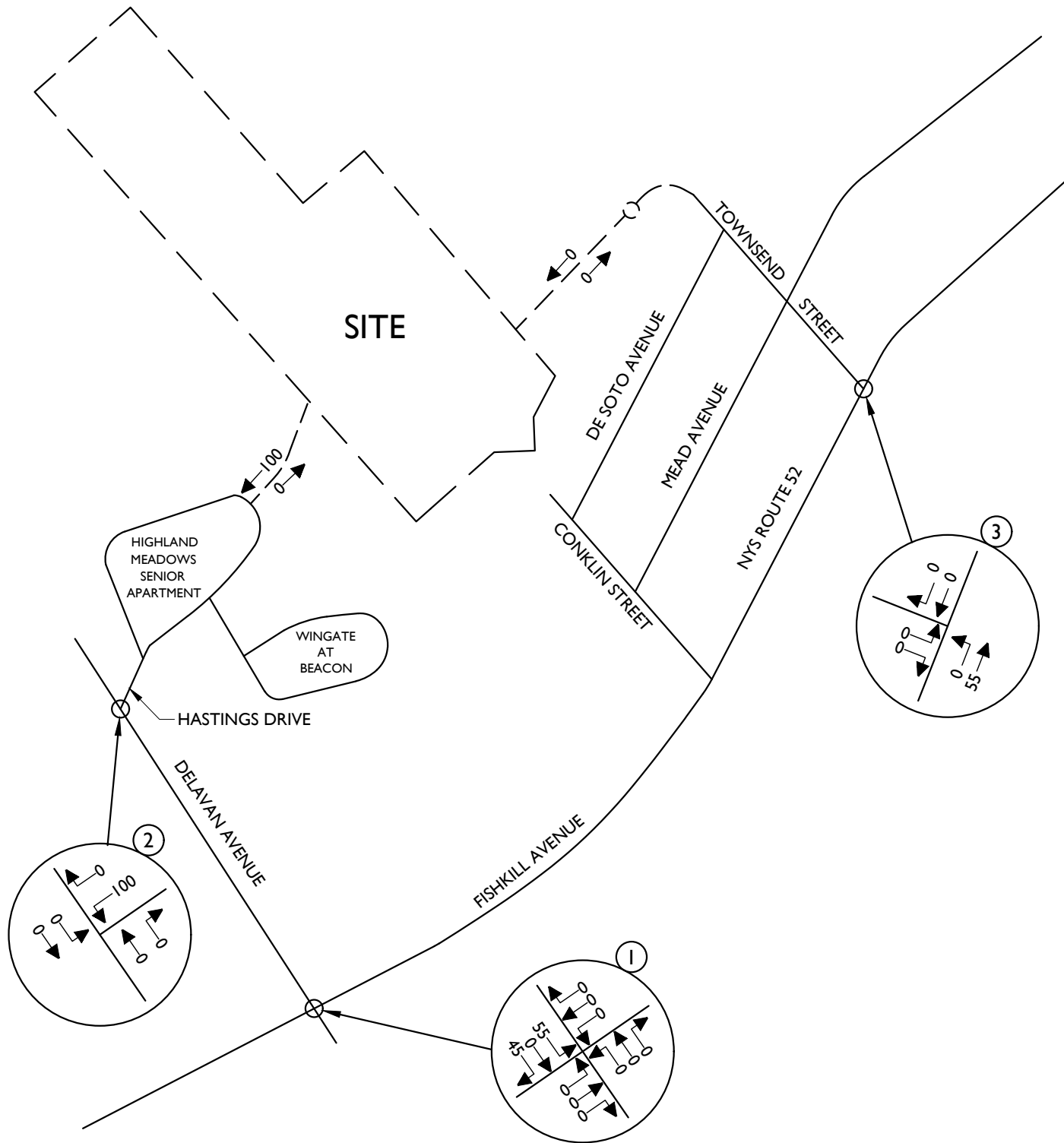
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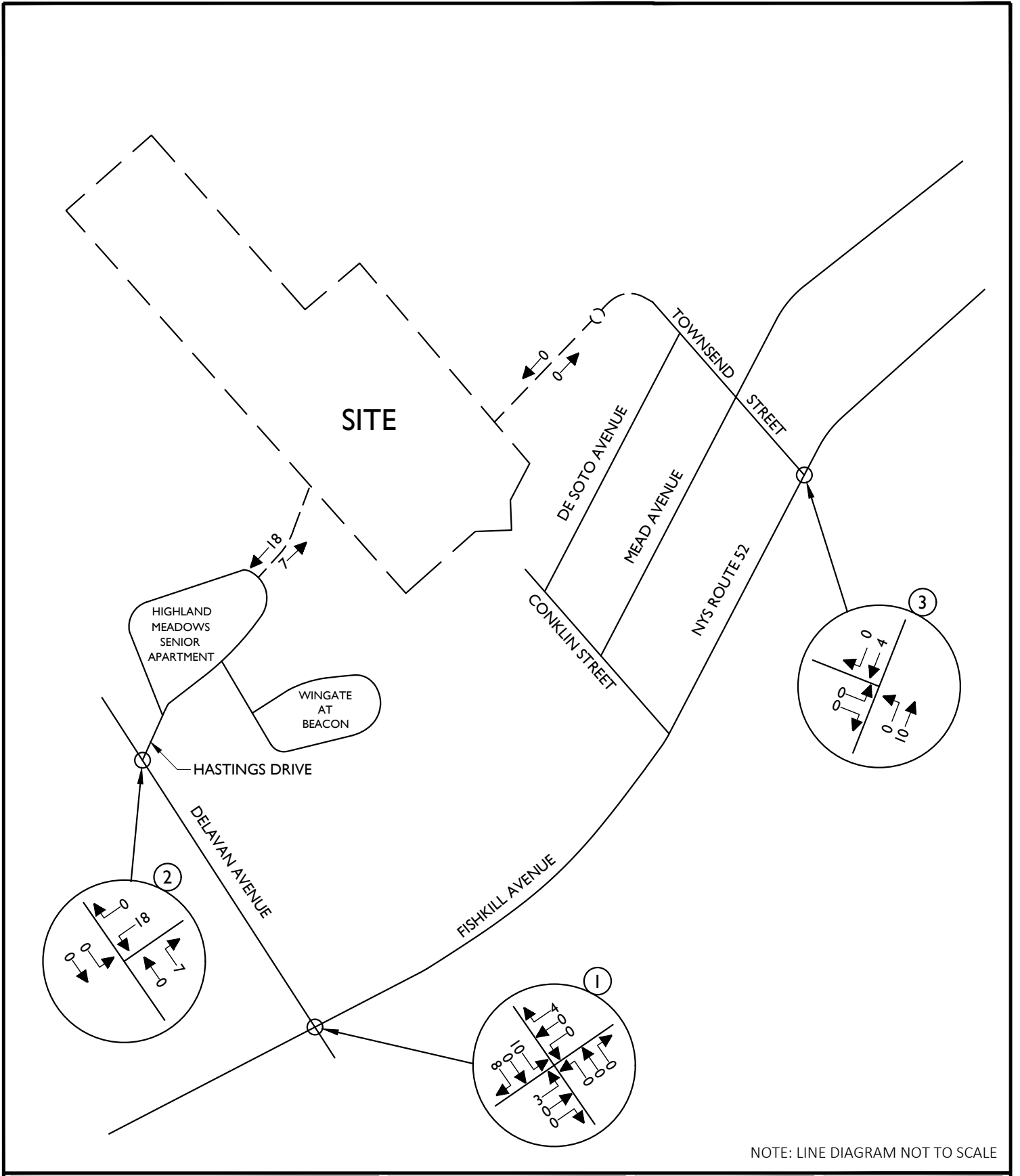
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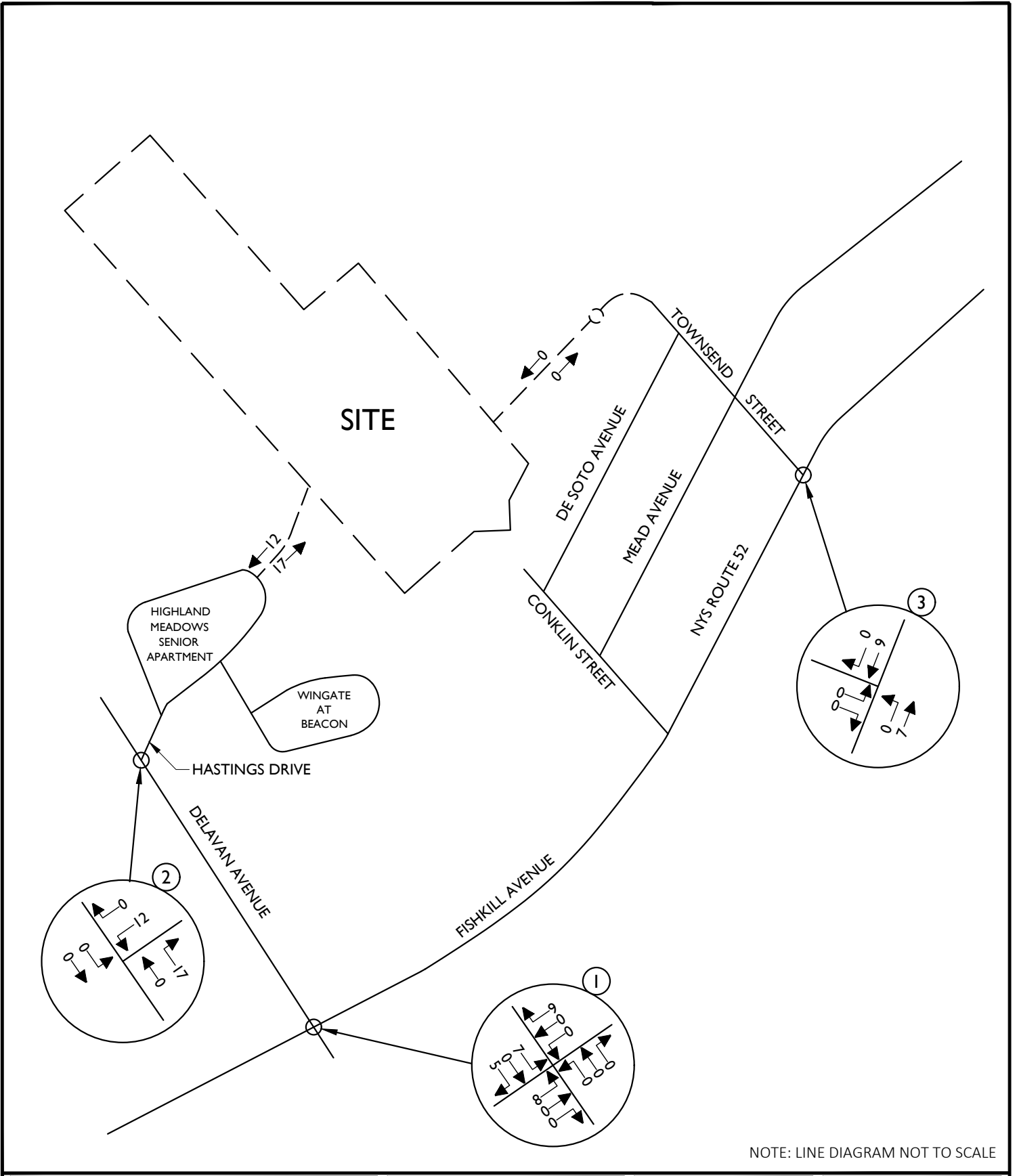
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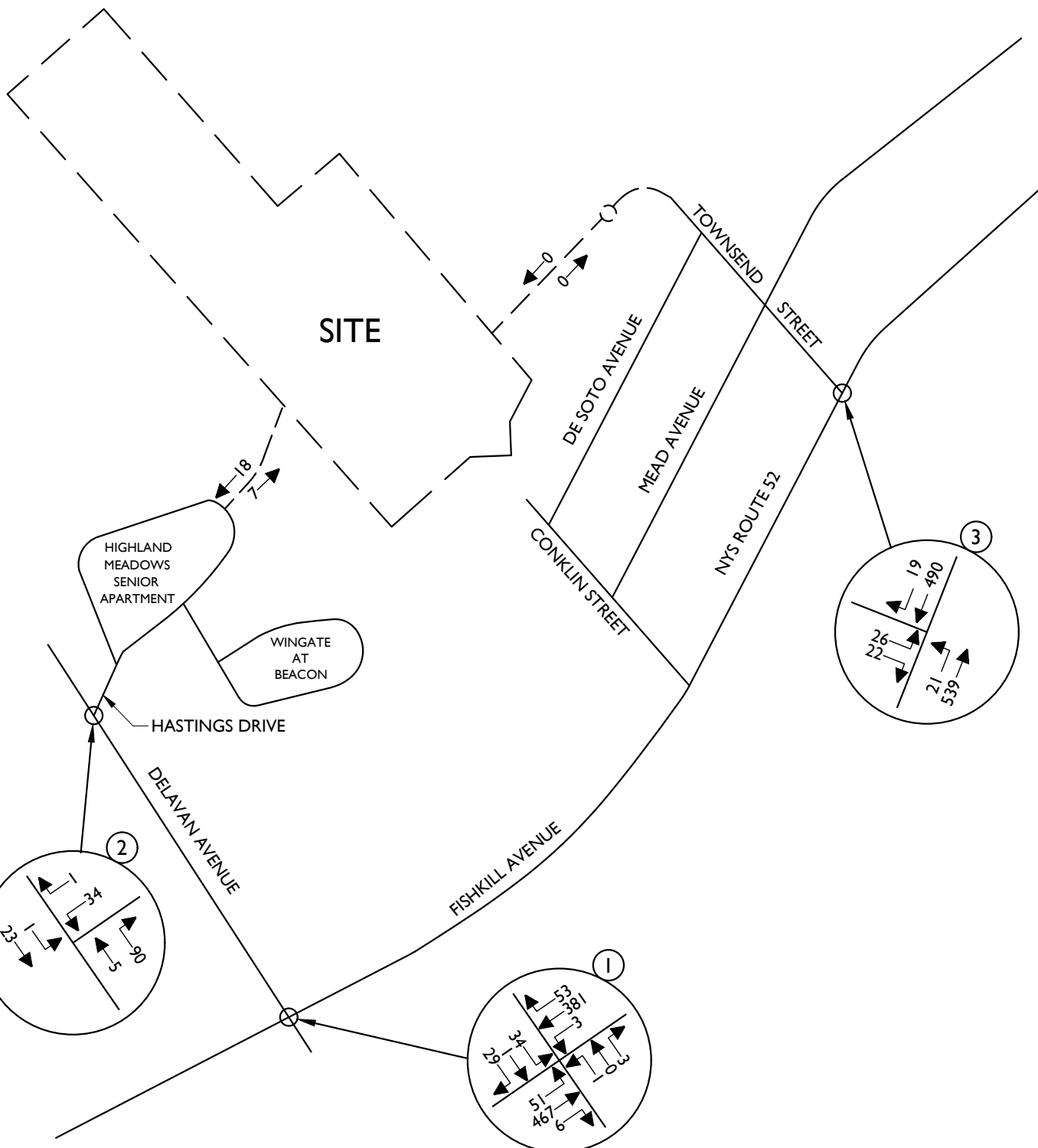
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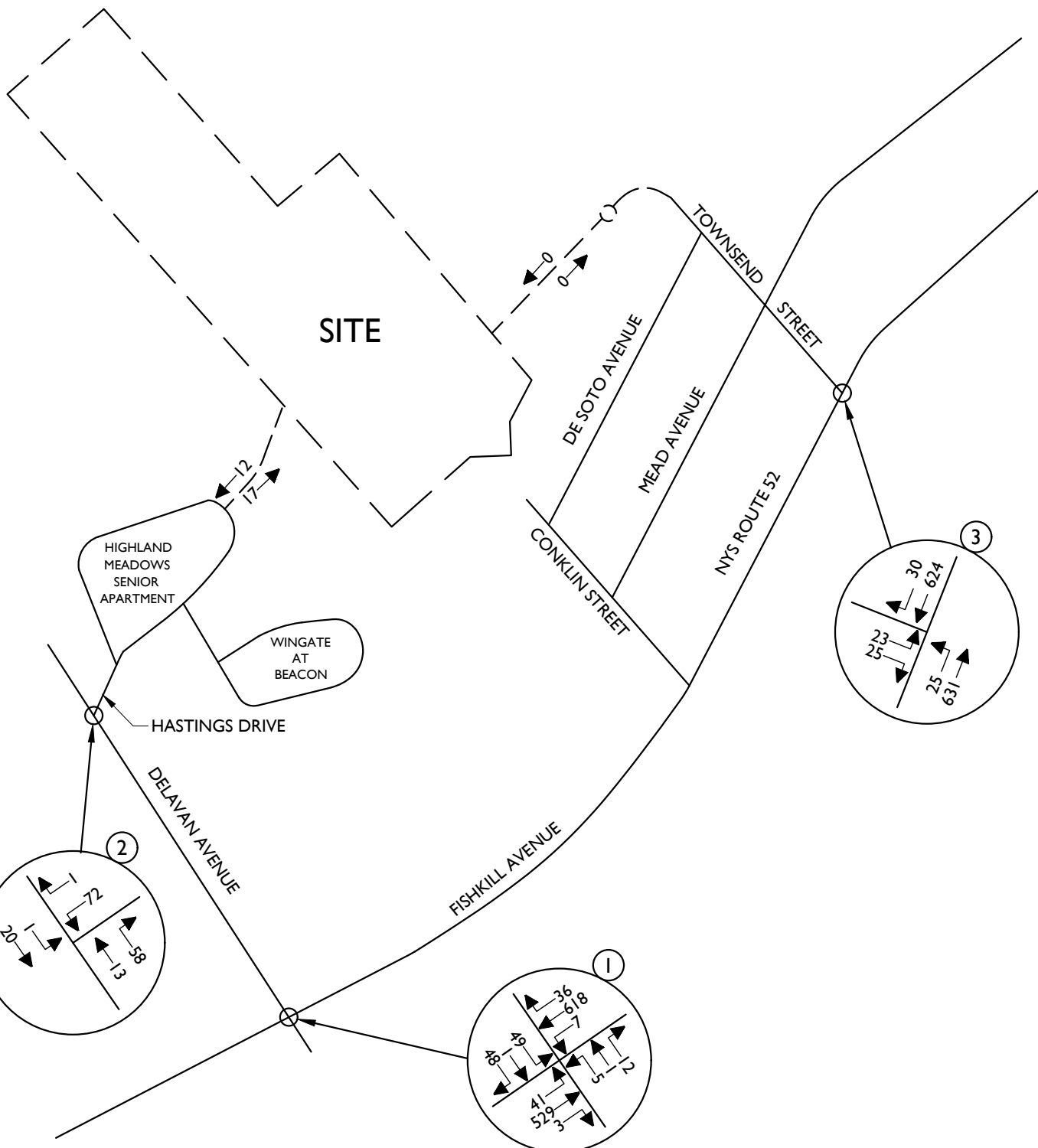
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APPENDIX B

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 (40 DWELLING UNITS) | | | | |
| PEAK AM HOUR | 0.17 | 7 | 0.43 | 18 |
| PEAK PM HOUR | 0.41 | 17 | 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 Peak Hour
LEVEL OF SERVICE SUMMARY TABLE**

| | | | | TOWNSEND STREET ACCESS | | | | | | | | | CHANGE IN DELAY NO-BUILD TO BUILD |
|---|---|-----------------|--------|------------------------|-----|------|---------------|-----|------|------------|-----|------|---|
| | | | | 2019 EXISTING | | | 2022 NO-BUILD | | | 2022 BUILD | | | |
| | | | | AM | V/C | LOS | DELAY | V/C | LOS | DELAY | V/C | LOS | |
| 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 | 14.8 | 0.01 | B | 14.9 | 0.1 |
| | | DELAVAN AVENUE | SB LTR | 0.15 | C | 17.8 | 0.17 | C | 19.8 | 0.18 | C | 20.2 | 0.4 |
| 2 | DELAVAN AVENUE & HASTINGS DRIVE | | | UNSIGNALIZED | | | | | | | | | |
| | | HASTINGS DRIVE | WB LR | 0.02 | A | 9.0 | 0.02 | A | 9.1 | 0.02 | A | 9.1 | 0.0 |
| | | DELAVAN AVENUE | SB L | 0.00 | A | 7.5 | 0.00 | A | 7.5 | 0.00 | A | 7.5 | 0.0 |
| 3 | NYS ROUTE 52 & TOWNSEND STREET | | | UNSIGNALIZED | | | | | | | | | |
| | | TOWNSEND STREET | EB LR | 0.10 | C | 15.7 | 0.15 | C | 17.4 | 0.21 | C | 18.5 | 1.1 |
| | | NYS ROUTE 52 | NB LT | 0.02 | A | 8.4 | 0.02 | A | 8.5 | 0.02 | A | 8.6 | 0.1 |

NOTES:

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

**TABLE NO. 2 -PM Peak Hour
LEVEL OF SERVICE SUMMARY TABLE**

| | | | | TOWNSEND STREET ACCESS | | | | | | | | | CHANGE IN DELAY NO-BUILD TO BUILD | |
|---|---|-----------------|--------|------------------------|---------------|------|-------|---------------|------|-------|------------|------|---|-------|
| | | | | PM | 2019 EXISTING | | | 2022 NO-BUILD | | | 2022 BUILD | | | |
| | | | | | 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 | 0.04 | A | 9.3 | 0.1 | |
| | | NYS ROUTE 52 | WB LTR | 0.01 | A | 8.5 | 0.01 | A | 8.6 | 0.01 | A | 8.7 | 0.1 | |
| | | MAVIS DRIVEWAY | NB LTR | 0.07 | C | 18.5 | 0.08 | C | 21.2 | 0.08 | C | 21.5 | 0.3 | |
| | | DELAVAN AVENUE | SB LTR | 0.35 | D | 26.9 | 0.45 | E | 36.5 | 0.46 | E | 37.6 | 1.1 | |
| 2 | DELAVAN AVENUE & HASTINGS DRIVE | | | UNSIGNALIZED | | | | | | | | | | |
| | | HASTINGS DRIVE | WB LR | 0.08 | A | 9.2 | 0.09 | A | 9.3 | 0.09 | A | 9.3 | 0.0 | |
| | | DELAVAN AVENUE | SB L | 0.00 | A | 7.4 | 0.00 | A | 7.4 | 0.00 | A | 7.4 | 0.0 | |
| 3 | NYS ROUTE 52 & TOWNSEND STREET | | | UNSIGNALIZED | | | | | | | | | | |
| | | TOWNSEND STREET | EB LR | 0.13 | C | 17.9 | 0.19 | C | 21.3 | 0.25 | C | 23.5 | 2.2 | |
| | | NYS ROUTE 52 | NB LT | 0.02 | A | 8.7 | 0.03 | A | 9.0 | 0.04 | A | 9.1 | 0.1 | |

NOTES:

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

**TABLE NO. 2A - AM Peak Hour
LEVEL OF SERVICE SUMMARY TABLE**

| | AM | 2019 EXISTING | | | 2022 NO-BUILD | | | HASTINGS DRIVE ACCESS 2022 BUILD | | | CHANGE IN DELAY NO-BUILD TO BUILD | | |
|---|---|---------------|---------------------|-------|---------------|------|-------|-------------------------------------|------|-------|---|------|-----|
| | | 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 | 14.8 | 0.01 | C | 15.0 | 0.2 |
| | DELAVAN AVENUE | SB | LTR | 0.15 | C | 17.8 | 0.17 | C | 19.8 | 0.25 | C | 21.6 | 1.8 |
| 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 |
| 3 | NYS ROUTE 52 & TOWNSEND STREET | | UNSIGNALIZED | | | | | | | | | | |
| | TOWNSEND STREET | EB | LR | 0.10 | C | 15.7 | 0.15 | C | 17.4 | 0.21 | C | 18.5 | 1.1 |
| | NYS ROUTE 52 | NB | LT | 0.02 | A | 8.4 | 0.02 | A | 8.5 | 0.02 | A | 8.6 | 0.1 |

NOTES:

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

**TABLE NO. 2A - PM Peak Hour
LEVEL OF SERVICE SUMMARY TABLE**

| | | | | HASTINGS DRIVE ACCESS | | | | | | | | | CHANGE IN DELAY NO-BUILD TO BUILD | |
|---|---|-----------------|--------|-----------------------|---------------|------|-------|---------------|------|-------|------------|------|---|-------|
| | | | | PM | 2019 EXISTING | | | 2022 NO-BUILD | | | 2022 BUILD | | | |
| | | | | | 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 | 21.2 | 0.09 | C | 22.0 | 0.8 | |
| | | DELAVAN AVENUE | SB LTR | 0.35 | D | 26.9 | 0.45 | E | 36.5 | 0.54 | E | 43.3 | 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 | |
| 3 | NYS ROUTE 52 & TOWNSEND STREET | | | UNSIGNALIZED | | | | | | | | | | |
| | | TOWNSEND STREET | EB LR | 0.13 | C | 17.9 | 0.19 | C | 21.3 | 0.19 | C | 21.7 | 0.4 | |
| | | NYS ROUTE 52 | NB LT | 0.02 | A | 8.7 | 0.03 | A | 9.0 | 0.03 | A | 9.1 | 0.1 | |

NOTES:

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



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

| Control Delay (s/veh) | LOS by Volume-to-Capacity Ratio | |
|------------------------------|--|--------------------|
| | 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

| Control Delay (s/veh) | LOS by Volume-to-Capacity Ratio | |
|-----------------------|---------------------------------|----------|
| | 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

| Control Delay (s/veh) | LOS by Volume-to-Capacity Ratio | |
|-----------------------|---------------------------------|----------|
| | 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

2019 Existing Traffic Volumes
1: NYS Route 52 & Delavan Avenue

Peak AM Hour
03/25/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| 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 |
| Fr _t | | 0.939 | | | 0.899 | | | 0.998 | | | 0.984 | |
| Fl _t Protected | | 0.974 | | | 0.988 | | | 0.995 | | | | |
| Satd. Flow (prot) | 0 | 1672 | 0 | 0 | 1884 | 0 | 0 | 1813 | 0 | 0 | 1808 | 0 |
| Fl _t 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 Maneuve | 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 Maneuve | 233 | 252 | 645 | 213 | 234 | 601 | 1103 | - | - | 1088 | - | - |
| Mov Cap-2 Maneuve | 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 | NWL | NELn1 | SWL | SWT | SWR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1103 | - | - | 413 | 329 | 1088 | - | - |
| HCM Lane V/C Ratio | 0.045 | - | - | 0.110 | 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 | - | - |

2019 Existing Traffic Volumes
2: Delavan Avenue & Hastings Drive

Peak AM Hour
03/25/2020



| 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 | 88 |
| Stage 1 | - | - | 57 |
| Stage 2 | - | - | 31 |
| Critical Hdwy | 4.15 | - | 6.45 |
| Critical Hdwy Stg 1 | - | - | 5.45 |
| Critical Hdwy Stg 2 | - | - | 5.45 |
| Follow-up Hdwy | 2.245 | - | 3.345 |
| Pot Cap-1 Maneuver | 1465 | - | 906 |
| Stage 1 | - | - | 958 |
| Stage 2 | - | - | 984 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 1465 | - | 905 |
| 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 | SE | 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 |

2019 Existing Traffic Volumes
 3: NYS Route 52 & Townsend Street

Peak AM Hour
 03/25/2020

| |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|
| Lane Group | NBL | NBT | SBT | SBR | SEL | SER |
| Lane Configurations | |  |  | |  | |
| Traffic Volume (vph) | 18 | 480 | 455 | 16 | 20 | 16 |
| Future Volume (vph) | 18 | 480 | 455 | 16 | 20 | 16 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Grade (%) | | 1% | -1% | | -2% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.995 | | 0.940 | |
| Flt Protected | | 0.998 | | | 0.973 | |
| Satd. Flow (prot) | 0 | 1850 | 1863 | 0 | 1721 | 0 |
| Flt Permitted | | 0.998 | | | 0.973 | |
| Satd. Flow (perm) | 0 | 1850 | 1863 | 0 | 1721 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 302 | 299 | | 386 | |
| Travel Time (s) | | 6.9 | 6.8 | | 8.8 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph) | 19 | 500 | 474 | 17 | 21 | 17 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 519 | 491 | 0 | 38 | 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 | 1.01 | 1.01 | 0.99 | 0.99 | 0.99 | 0.99 |
| 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 0.7

| Movement | NBL | NBT | SBT | SBR | SEL | SER |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↑ | ↑ | | ↑ | |
| Traffic Vol, veh/h | 18 | 480 | 455 | 16 | 20 | 16 |
| Future Vol, veh/h | 18 | 480 | 455 | 16 | 20 | 16 |
| 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 | 0 | 0 | 0 |
| Grade, % | - | 1 | -1 | - | -2 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 19 | 500 | 474 | 17 | 21 | 17 |

















| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 491 | 0 | 0 |
| Stage 1 | - | - | 483 |
| Stage 2 | - | - | 538 |
| Critical Hdwy | 4.12 | - | 6.02 |
| Critical Hdwy Stg 1 | - | - | 5.02 |
| Critical Hdwy Stg 2 | - | - | 5.02 |
| Follow-up Hdwy | 2.218 | - | -3.518 |
| Pot Cap-1 Maneuver | 1072 | - | 293 |
| Stage 1 | - | - | 655 |
| Stage 2 | - | - | 621 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 1072 | - | 286 |
| Mov Cap-2 Maneuver | - | - | 286 |
| Stage 1 | - | - | 639 |
| Stage 2 | - | - | 621 |

| Approach | NB | SB | SE |
|----------------------|-----|----|------|
| HCM Control Delay, s | 8.3 | 0 | 15.7 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBL | NBTSELn1 | SBT | SBR |
|-----------------------|-------|----------|------|-----|
| Capacity (veh/h) | 1072 | - | 373 | - |
| HCM Lane V/C Ratio | 0.017 | -0.101 | - | - |
| HCM Control Delay (s) | 8.4 | 0 | 15.7 | - |
| HCM Lane LOS | A | A | C | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.3 | - |

2019 Existing Traffic Volumes
1: NYS Route 52 & Delavan Avenue

Peak PM Hour
03/25/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| 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 | | | | | | | | | | | |

2019 Existing Traffic Volumes
1: NYS Route 52 & Delavan Avenue

Peak PM Hour
03/25/2020

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 | All1211 | 1206 | 603 | 1227 |
| Stage 1 | 619 | 619 | - | 586 |
| Stage 2 | 592 | 587 | - | 641 |
| Critical Hdwy | 6.75 | 6.15 | 6.05 | 6.92 |
| Critical Hdwy Stg 1 | 5.75 | 5.15 | - | 5.92 |
| Critical Hdwy Stg 2 | 5.75 | 5.15 | - | 5.92 |
| Follow-up Hdwy | 3.545 | 4.045 | 3.345 | 3.518 |
| Pot Cap-1 Maneuver | 180 | 207 | 510 | 166 |
| Stage 1 | 505 | 509 | - | 513 |
| Stage 2 | 521 | 525 | - | 480 |
| Platoon blocked, % | | | | |
| Mov Cap-1 Maneuver | 167 | 194 | 510 | 144 |
| Mov Cap-2 Maneuver | 167 | 194 | - | 144 |
| Stage 1 | 480 | 503 | - | 487 |
| Stage 2 | 483 | 499 | - | 433 |

| 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 | NWL | NELn1 | 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 | - | - |

2019 Existing Traffic Volumes
2: Delavan Avenue & Hastings Drive

Peak PM Hour
03/25/2020



| 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 | 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 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | 4.15 | - | - |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | 2.245 | - | - |
| Pot Cap-1 Maneuver | 1516 | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 1516 | - | - |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

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

| Minor Lane/Major Mvmt | NWT | NWR | SEL | SE | 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 |

2019 Existing Traffic Volumes
 3: NYS Route 52 & Townsend Street

Peak PM Hour
 03/25/2020

| |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|
| Lane Group | NBL | NBT | SBT | SBR | SEL | SER |
| Lane Configurations | |  |  | |  | |
| Traffic Volume (vph) | 19 | 570 | 542 | 24 | 19 | 21 |
| Future Volume (vph) | 19 | 570 | 542 | 24 | 19 | 21 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Grade (%) | | 1% | -1% | | -2% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.994 | | 0.929 | |
| Flt Protected | | 0.998 | | | 0.977 | |
| Satd. Flow (prot) | 0 | 1850 | 1861 | 0 | 1708 | 0 |
| Flt Permitted | | 0.998 | | | 0.977 | |
| Satd. Flow (perm) | 0 | 1850 | 1861 | 0 | 1708 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 443 | 381 | | 638 | |
| Travel Time (s) | | 10.1 | 8.7 | | 14.5 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph) | 20 | 594 | 565 | 25 | 20 | 22 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 614 | 590 | 0 | 42 | 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 | 1.01 | 1.01 | 0.99 | 0.99 | 0.99 | 0.99 |
| 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 0.7

| Movement | NBL | NBT | SBT | SBR | SEL | SER |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | ↔ | | ↕ | |
| Traffic Vol, veh/h | 19 | 570 | 542 | 24 | 19 | 21 |
| Future Vol, veh/h | 19 | 570 | 542 | 24 | 19 | 21 |
| 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, % | - | 1 | -1 | - | -2 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 20 | 594 | 565 | 25 | 20 | 22 |

















| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 590 | 0 | 0 |
| Stage 1 | - | - | 578 |
| Stage 2 | - | - | 634 |
| Critical Hdwy | 4.12 | - | 6.02 |
| Critical Hdwy Stg 1 | - | - | 5.02 |
| Critical Hdwy Stg 2 | - | - | 5.02 |
| Follow-up Hdwy | 2.218 | - | 3.318 |
| Pot Cap-1 Maneuver | 885 | - | 230 |
| Stage 1 | - | - | 598 |
| Stage 2 | - | - | 567 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 885 | - | 223 |
| Mov Cap-2 Maneuver | - | - | 223 |
| Stage 1 | - | - | 580 |
| Stage 2 | - | - | 567 |

| Approach | NB | SB | SE |
|----------------------|-----|----|------|
| HCM Control Delay, s | 8.3 | 0 | 17.9 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBL | NBTSELn1 | SBT | SBR |
|-----------------------|------|----------|------|-----|
| Capacity (veh/h) | 985 | - | 321 | - |
| HCM Lane V/C Ratio | 0.02 | - | 0.13 | - |
| HCM Control Delay (s) | 8.7 | 0 | 17.9 | - |
| HCM Lane LOS | A | A | C | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.4 | - |

2022 No-Build Traffic Volumes
1: NYS Route 52 & Delavan Avenue

Peak AM Hour
03/25/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| 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 | 467 | 6 | 3 | 381 | 49 |
| Future Volume (vph) | 24 | 1 | 21 | 1 | 0 | 3 | 48 | 467 | 6 | 3 | 381 | 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 |
| Fr _t | | 0.939 | | | 0.899 | | | 0.998 | | | 0.985 | |
| Fl _t Protected | | 0.974 | | | 0.988 | | | 0.995 | | | | |
| Satd. Flow (prot) | 0 | 1672 | 0 | 0 | 1884 | 0 | 0 | 1813 | 0 | 0 | 1809 | 0 |
| Fl _t 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 | 519 | 7 | 3 | 423 | 54 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 51 | 0 | 0 | 4 | 0 | 0 | 579 | 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 | | | | | | | | | | | |

2022 No-Build Traffic Volumes
1: NYS Route 52 & Delavan Avenue

Peak AM Hour
03/25/2020

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 | 467 | 6 | 3 | 381 | 49 |
| Future Vol, veh/h | 24 | 1 | 21 | 1 | 0 | 3 | 48 | 467 | 6 | 3 | 381 | 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 | 519 | 7 | 3 | 423 | 54 |

| Major/Minor | Minor2 | Minor1 | Major1 | Major2 |
|---------------------|---------|--------|-------------|-------------------|
| Conflicting Flow | All1086 | 1088 | 450 1097 | 1112 523 477 |
| Stage 1 | 456 | 456 | - 629 629 | - - - |
| Stage 2 | 630 | 632 | - 468 483 | - - - |
| Critical Hdwy | 6.75 | 6.15 | 6.05 6.92 | 6.32 6.12 4.15 |
| 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 |
| Pot Cap-1 Maneuve | 216 | 240 | 618 202 | 222 562 1070 |
| Stage 1 | 608 | 592 | - 487 492 | - - - |
| Stage 2 | 498 | 503 | - 591 568 | - - - |
| Platoon blocked, % | | | | - - - |
| Mov Cap-1 Maneuve | 203 | 222 | 618 183 | 206 562 1070 |
| Mov Cap-2 Maneuve | 203 | 222 | - 183 206 | - - - |
| Stage 1 | 565 | 590 | - 453 458 | - - - |
| Stage 2 | 460 | 468 | - 565 566 | - - - |

| Approach | SE | NW | NE | SW |
|----------------------|------|------|-----|-----|
| HCM Control Delay, s | 19.8 | 14.8 | 0.8 | 0.1 |
| HCM LOS | C | B | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWL | NELn1 | SWL | SWT | SWR |
|-----------------------|------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1070 | - | - | 370 | 294 | 1041 | - | - |
| HCM Lane V/C Ratio | 0.05 | - | - | 0.012 | 0.174 | 0.003 | - | - |
| HCM Control Delay (s) | 8.5 | 0 | - | 14.8 | 19.8 | 8.5 | 0 | - |
| HCM Lane LOS | A | A | - | B | C | A | A | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0 | 0.6 | 0 | - | - |

2022 No-Build Traffic Volumes
2: Delavan Avenue & Hastings Drive

Peak AM Hour
03/25/2020



| 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 |
| Stage 1 | - | - | 60 |
| Stage 2 | - | - | 32 |
| Critical Hdwy | 4.15 | - | 6.45 |
| Critical Hdwy Stg 1 | - | - | 5.45 |
| Critical Hdwy Stg 2 | - | - | 5.45 |
| Follow-up Hdwy | 2.245 | - | 3.345 |
| Pot Cap-1 Maneuver | 1457 | - | 901 |
| Stage 1 | - | - | 955 |
| Stage 2 | - | - | 983 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 1457 | - | 900 |
| 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 | SE | 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 | |

2022 No-Build Traffic Volumes
 3: NYS Route 52 & Townsend Street

Peak AM Hour
 03/25/2020

| |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|
| Lane Group | NBL | NBT | SBT | SBR | SEL | SER |
| Lane Configurations | |  |  | |  | |
| Traffic Volume (vph) | 21 | 529 | 486 | 19 | 26 | 22 |
| Future Volume (vph) | 21 | 529 | 486 | 19 | 26 | 22 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Grade (%) | | 1% | -1% | | -2% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.995 | | 0.938 | |
| Flt Protected | | 0.998 | | | 0.974 | |
| Satd. Flow (prot) | 0 | 1850 | 1863 | 0 | 1719 | 0 |
| Flt Permitted | | 0.998 | | | 0.974 | |
| Satd. Flow (perm) | 0 | 1850 | 1863 | 0 | 1719 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 302 | 299 | | 386 | |
| Travel Time (s) | | 6.9 | 6.8 | | 8.8 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph) | 22 | 551 | 506 | 20 | 27 | 23 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 573 | 526 | 0 | 50 | 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 | 1.01 | 1.01 | 0.99 | 0.99 | 0.99 | 0.99 |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 |
| Sign Control | | Free | Free | | Stop | |
| Intersection Summary | | | | | | |
| Area Type: | Other | | | | | |
| Control Type: | Unsignalized | | | | | |

2022 No-Build Traffic Volumes
 3: NYS Route 52 & Townsend Street

Peak AM Hour
 03/25/2020

Intersection

Int Delay, s/veh 0.9

| Movement | NBL | NBT | SBT | SBR | SEL | SER |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↑ | ↑ | | ↑ | |
| Traffic Vol, veh/h | 21 | 529 | 486 | 19 | 26 | 22 |
| Future Vol, veh/h | 21 | 529 | 486 | 19 | 26 | 22 |
| 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 | 0 | 0 | 0 |
| Grade, % | - | 1 | -1 | - | -2 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 551 | 506 | 20 | 27 | 23 |

















| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 526 | 0 | 0 |
| Stage 1 | - | - | 516 |
| Stage 2 | - | - | 595 |
| Critical Hdwy | 4.12 | - | 6.02 |
| Critical Hdwy Stg 1 | - | - | 5.02 |
| Critical Hdwy Stg 2 | - | - | 5.02 |
| Follow-up Hdwy | 2.218 | - | -3.518 |
| Pot Cap-1 Maneuver | 1041 | - | 262 |
| Stage 1 | - | - | 634 |
| Stage 2 | - | - | 589 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 1041 | - | 254 |
| Mov Cap-2 Maneuver | - | - | 254 |
| Stage 1 | - | - | 615 |
| Stage 2 | - | - | 589 |

| Approach | NB | SB | SE |
|----------------------|-----|----|------|
| HCM Control Delay, s | 8.3 | 0 | 17.4 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBL | NBTSELn1 | SBT | SBR |
|-----------------------|-------|----------|------|-----|
| Capacity (veh/h) | 1041 | - | 341 | - |
| HCM Lane V/C Ratio | 0.021 | -0.147 | - | - |
| HCM Control Delay (s) | 8.5 | 0 | 17.4 | - |
| HCM Lane LOS | A | A | C | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.5 | - |

2022 No-Build Traffic Volumes
1: NYS Route 52 & Delavan Avenue

Peak PM Hour
03/25/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| 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 | 529 | 3 | 7 | 618 | 27 |
| Future Volume (vph) | 42 | 1 | 42 | 5 | 1 | 12 | 33 | 529 | 3 | 7 | 618 | 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 | 575 | 3 | 8 | 672 | 29 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 93 | 0 | 0 | 19 | 0 | 0 | 614 | 0 | 0 | 709 | 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 | | | | | | | | | | | |

2022 No-Build Traffic Volumes
1: NYS Route 52 & Delavan Avenue

Peak PM Hour
03/25/2020

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 | 529 | 3 | 7 | 618 | 27 |
| Future Vol, veh/h | 42 | 1 | 42 | 5 | 1 | 12 | 33 | 529 | 3 | 7 | 618 | 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 | 575 | 3 | 8 | 672 | 29 |

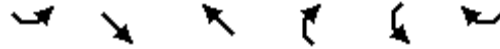
| Major/Minor | Minor2 | Minor1 | Major1 | Major2 |
|---------------------|---------|--------|--------|--------|
| Conflicting Flow | All1359 | 1353 | 687 | 1375 |
| Stage 1 | 703 | 703 | - | 649 |
| Stage 2 | 656 | 650 | - | 726 |
| Critical Hdwy | 6.75 | 6.15 | 6.05 | 6.92 |
| Critical Hdwy Stg 1 | 5.75 | 5.15 | - | 5.92 |
| Critical Hdwy Stg 2 | 5.75 | 5.15 | - | 5.92 |
| Follow-up Hdwy | 3.545 | 4.045 | 3.345 | 3.518 |
| Pot Cap-1 Maneuver | 144 | 172 | 459 | 132 |
| Stage 1 | 458 | 471 | - | 475 |
| Stage 2 | 483 | 495 | - | 433 |
| Platoon blocked, % | | | | |
| Mov Cap-1 Maneuver | 132 | 160 | 459 | 112 |
| Mov Cap-2 Maneuver | 132 | 160 | - | 112 |
| Stage 1 | 431 | 465 | - | 447 |
| Stage 2 | 442 | 465 | - | 384 |

| Approach | SE | NW | NE | SW |
|-----------------------|------|------|-----|-----|
| HCM Control Delay (s) | 36.5 | 21.2 | 0.5 | 0.1 |
| HCM LOS | E | C | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWL | NELn1 | SWL | SWT | SWR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 882 | - | - | 242 | 204 | 996 | - | - |
| HCM Lane V/C Ratio | 0.041 | - | - | 0.081 | 0.453 | 0.008 | - | - |
| HCM Control Delay (s) | 9.3 | 0 | - | 21.2 | 36.5 | 8.6 | 0 | - |
| HCM Lane LOS | A | A | - | C | E | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.3 | 2.2 | 0 | - | - |

2022 No-Build Traffic Volumes
 2: Delavan Avenue & Hastings Drive

Peak PM Hour
 03/25/2020



| 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 | 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 SE\$WLn1

| | | | | | |
|-----------------------|---|---|-------|---|-------|
| 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 |

2022 No-Build Traffic Volumes
 3: NYS Route 52 & Townsend Street

Peak PM Hour
 03/25/2020

| |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|
| Lane Group | NBL | NBT | SBT | SBR | SEL | SER |
| Lane Configurations | |  |  | |  | |
| Traffic Volume (vph) | 25 | 624 | 615 | 30 | 23 | 25 |
| Future Volume (vph) | 25 | 624 | 615 | 30 | 23 | 25 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Grade (%) | | 1% | -1% | | -2% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.994 | | 0.930 | |
| Flt Protected | | 0.998 | | | 0.977 | |
| Satd. Flow (prot) | 0 | 1850 | 1861 | 0 | 1709 | 0 |
| Flt Permitted | | 0.998 | | | 0.977 | |
| Satd. Flow (perm) | 0 | 1850 | 1861 | 0 | 1709 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 443 | 381 | | 638 | |
| Travel Time (s) | | 10.1 | 8.7 | | 14.5 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph) | 26 | 650 | 641 | 31 | 24 | 26 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 676 | 672 | 0 | 50 | 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 | 1.01 | 1.01 | 0.99 | 0.99 | 0.99 | 0.99 |
| 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 0.9

| Movement | NBL | NBT | SBT | SBR | SEL | SER |
|--------------------------|--------|------|--------|------|--------|------|
| Lane Configurations | | ↕ | ↕ | | ↕ | |
| Traffic Vol, veh/h | 25 | 624 | 615 | 30 | 23 | 25 |
| Future Vol, veh/h | 25 | 624 | 615 | 30 | 23 | 25 |
| 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, % | - | 1 | -1 | - | -2 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 26 | 650 | 641 | 31 | 24 | 26 |

















| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 672 | 0 | 0 |
| Stage 1 | - | - | 657 |
| Stage 2 | - | - | 702 |
| Critical Hdwy | 4.12 | - | 6.02 |
| Critical Hdwy Stg 1 | - | - | 5.02 |
| Critical Hdwy Stg 2 | - | - | 5.02 |
| Follow-up Hdwy | 2.218 | - | -3.518 |
| Pot Cap-1 Maneuver | 19 | - | 191 |
| Stage 1 | - | - | 555 |
| Stage 2 | - | - | 531 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 19 | - | 183 |
| Mov Cap-2 Maneuver | - | - | 183 |
| Stage 1 | - | - | 531 |
| Stage 2 | - | - | 531 |

| Approach | NB | SB | SE |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.3 | 0 | 21.3 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBL | NBTSELn1 | SBT | SBR |
|-----------------------|-------|----------|------|-----|
| Capacity (veh/h) | 919 | - | 270 | - |
| HCM Lane V/C Ratio | 0.028 | -0.185 | - | - |
| HCM Control Delay (s) | 9 | 0 | 21.3 | - |
| HCM Lane LOS | A | A | C | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.7 | - |

2022 Build Traffic Volumes (Townsend Street Access)
 1: NYS Route 52 & Delavan Avenue

Peak AM Hour
 03/25/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| 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 | 470 | 6 | 3 | 389 | 49 |
| Future Volume (vph) | 24 | 1 | 21 | 1 | 0 | 3 | 48 | 470 | 6 | 3 | 389 | 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 |
| Flt | | 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 | 522 | 7 | 3 | 432 | 54 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 51 | 0 | 0 | 4 | 0 | 0 | 582 | 0 | 0 | 489 | 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 | | | | | | | | | | | |

2022 Build Traffic Volumes (Townsend Street Access)
 1: NYS Route 52 & Delavan Avenue

Peak AM Hour
 03/25/2020

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 | 470 | 6 | 3 | 389 | 49 |
| Future Vol, veh/h | 24 | 1 | 21 | 1 | 0 | 3 | 48 | 470 | 6 | 3 | 389 | 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 | 522 | 7 | 3 | 432 | 54 |

| Major/Minor | Minor2 | Minor1 | | Major1 | | Major2 | | | | | | |
|---------------------|---------|--------|-------|--------|-------|--------|-------|---|---|-------|---|---|
| Conflicting Flow | All1098 | 1100 | 459 | 1109 | 1124 | 526 | 486 | 0 | 0 | 529 | 0 | 0 |
| Stage 1 | 465 | 465 | - | 632 | 632 | - | - | - | - | - | - | - |
| Stage 2 | 633 | 635 | - | 477 | 492 | - | - | - | - | - | - | - |
| 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 Maneuve | 212 | 237 | 611 | 199 | 219 | 560 | 1062 | - | - | 1038 | - | - |
| Stage 1 | 602 | 588 | - | 485 | 491 | - | - | - | - | - | - | - |
| Stage 2 | 497 | 502 | - | 584 | 563 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuve | 199 | 219 | 611 | 180 | 203 | 560 | 1062 | - | - | 1038 | - | - |
| Mov Cap-2 Maneuve | 199 | 219 | - | 180 | 203 | - | - | - | - | - | - | - |
| Stage 1 | 559 | 586 | - | 451 | 456 | - | - | - | - | - | - | - |
| Stage 2 | 459 | 466 | - | 558 | 561 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|-----------------------|------|------|-----|-----|
| HCM Control Delay (s) | 20.2 | 14.9 | 0.8 | 0.1 |
| HCM LOS | C | B | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWL | NELn1 | SWL | SWT | SWR |
|-----------------------|------|-----|-----|------|-------|-------|-----|-----|
| Capacity (veh/h) | 1062 | - | - | 367 | 288 | 1038 | - | - |
| HCM Lane V/C Ratio | 0.05 | - | - | 0.12 | 0.177 | 0.003 | - | - |
| HCM Control Delay (s) | 8.6 | 0 | - | 14.9 | 20.2 | 8.5 | 0 | - |
| HCM Lane LOS | A | A | - | B | C | A | A | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0 | 0.6 | 0 | - | - |

2022 Build Traffic Volumes (Townsend Street Access)
 2: Delavan Avenue & Hastings Drive

Peak AM Hour
 03/25/2020



| 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 SE\$WLn1

| | | | | | |
|-----------------------|---|---|-------|---|-------|
| 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 |

2022 Build Traffic Volumes (Townsend Street Access)
 3: NYS Route 52 & Townsend Street

Peak AM Hour
 03/25/2020

| |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|
| Lane Group | NBL | NBT | SBT | SBR | SEL | SER |
| Lane Configurations | |  |  | |  | |
| Traffic Volume (vph) | 24 | 529 | 486 | 23 | 36 | 30 |
| Future Volume (vph) | 24 | 529 | 486 | 23 | 36 | 30 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Grade (%) | | 1% | -1% | | -2% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.994 | | 0.939 | |
| Flt Protected | | 0.998 | | | 0.973 | |
| Satd. Flow (prot) | 0 | 1850 | 1861 | 0 | 1719 | 0 |
| Flt Permitted | | 0.998 | | | 0.973 | |
| Satd. Flow (perm) | 0 | 1850 | 1861 | 0 | 1719 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 302 | 299 | | 386 | |
| Travel Time (s) | | 6.9 | 6.8 | | 8.8 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph) | 25 | 551 | 506 | 24 | 38 | 31 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 576 | 530 | 0 | 69 | 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 | 1.01 | 1.01 | 0.99 | 0.99 | 0.99 | 0.99 |
| 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 | NBL | NBT | SBT | SBR | SEL | SER |
|--------------------------|--------|------|--------|------|--------|------|
| Lane Configurations | | ↑ | ↑ | | ↑ | |
| Traffic Vol, veh/h | 24 | 529 | 486 | 23 | 36 | 30 |
| Future Vol, veh/h | 24 | 529 | 486 | 23 | 36 | 30 |
| 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, % | - | 1 | -1 | - | -2 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 25 | 551 | 506 | 24 | 38 | 31 |

















| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 530 | 0 | 0 |
| Stage 1 | - | - | 518 |
| Stage 2 | - | - | 601 |
| Critical Hdwy | 4.12 | - | 6.02 |
| Critical Hdwy Stg 1 | - | - | 5.02 |
| Critical Hdwy Stg 2 | - | - | 5.02 |
| Follow-up Hdwy | 2.218 | - | 3.318 |
| Pot Cap-1 Maneuver | 1037 | - | 259 |
| Stage 1 | - | - | 633 |
| Stage 2 | - | - | 585 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 1037 | - | 250 |
| Mov Cap-2 Maneuver | - | - | 250 |
| Stage 1 | - | - | 611 |
| Stage 2 | - | - | 585 |

| Approach | NB | SB | SE |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.4 | 0 | 18.5 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBL | NBTSELn1 | SBT | SBR |
|-----------------------|-------|----------|------|-----|
| Capacity (veh/h) | 1037 | - | 336 | - |
| HCM Lane V/C Ratio | 0.024 | -0.205 | - | - |
| HCM Control Delay (s) | 8.6 | 0 | 18.5 | - |
| HCM Lane LOS | A | A | C | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.8 | - |

2022 Build Traffic Volumes (Townsend Street Access)
 1: NYS Route 52 & Delavan Avenue

Peak PM Hour
 03/25/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| 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 | 536 | 3 | 7 | 623 | 27 |
| Future Volume (vph) | 42 | 1 | 42 | 5 | 1 | 12 | 33 | 536 | 3 | 7 | 623 | 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 | | | 0.995 | |
| Flt Protected | | 0.976 | | | 0.987 | | | 0.997 | | | 0.999 | |
| Satd. Flow (prot) | 0 | 1664 | 0 | 0 | 1901 | 0 | 0 | 1852 | 0 | 0 | 1877 | 0 |
| Flt Permitted | | 0.976 | | | 0.987 | | | 0.997 | | | 0.999 | |
| Satd. Flow (perm) | 0 | 1664 | 0 | 0 | 1901 | 0 | 0 | 1852 | 0 | 0 | 1877 | 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 | 583 | 3 | 8 | 677 | 29 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 93 | 0 | 0 | 19 | 0 | 0 | 622 | 0 | 0 | 714 | 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 | | | | | | | | | | | |

2022 Build Traffic Volumes (Townsend Street Access)
 1: NYS Route 52 & Delavan Avenue

Peak PM Hour
 03/25/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3 | | | | | | | | | | | |
| 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 | 536 | 3 | 7 | 623 | 27 |
| Future Vol, veh/h | 42 | 1 | 42 | 5 | 1 | 12 | 33 | 536 | 3 | 7 | 623 | 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 | 583 | 3 | 8 | 677 | 29 |

| Major/Minor | Minor2 | Minor1 | | Major1 | | Major2 | | | | | | |
|---------------------|---------|--------|-------|--------|-------|--------|-------|---|---|-------|---|---|
| Conflicting Flow | All1372 | 1366 | 692 | 1388 | 1379 | 585 | 706 | 0 | 0 | 586 | 0 | 0 |
| Stage 1 | 708 | 708 | - | 657 | 657 | - | - | - | - | - | - | - |
| Stage 2 | 664 | 658 | - | 731 | 722 | - | - | - | - | - | - | - |
| 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 | 456 | 130 | 156 | 519 | 878 | - | - | 989 | - | - |
| Stage 1 | 455 | 469 | - | 471 | 479 | - | - | - | - | - | - | - |
| Stage 2 | 479 | 491 | - | 430 | 449 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 129 | 157 | 456 | 110 | 145 | 519 | 878 | - | - | 989 | - | - |
| Mov Cap-2 Maneuver | 129 | 157 | - | 110 | 145 | - | - | - | - | - | - | - |
| Stage 1 | 427 | 463 | - | 442 | 450 | - | - | - | - | - | - | - |
| Stage 2 | 437 | 461 | - | 381 | 443 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|-----------------------|------|------|-----|-----|
| HCM Control Delay (s) | 37.6 | 21.5 | 0.5 | 0.1 |
| HCM LOS | E | C | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWL | NELn1 | SWL | SWT | SWR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 878 | - | - | 238 | 200 | 989 | - | - |
| HCM Lane V/C Ratio | 0.041 | - | - | 0.082 | 0.462 | 0.008 | - | - |
| HCM Control Delay (s) | 9.3 | 0 | - | 21.5 | 37.6 | 8.7 | 0 | - |
| HCM Lane LOS | A | A | - | C | E | A | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.3 | 2.2 | 0 | - | - |

2022 Build Traffic Volumes (Townsend Street Access)
 2: Delavan Avenue & Hastings Drive

Peak PM Hour
 03/25/2020



| 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 |
| Stage 1 | - | - | 44 |
| Stage 2 | - | - | 28 |
| Critical Hdwy | 4.15 | - | 6.45 |
| Critical Hdwy Stg 1 | - | - | 5.45 |
| Critical Hdwy Stg 2 | - | - | 5.45 |
| Follow-up Hdwy | 2.245 | - | 3.345 |
| Pot Cap-1 Maneuver | 1512 | - | 925 |
| Stage 1 | - | - | 971 |
| Stage 2 | - | - | 987 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 1512 | - | 924 |
| 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 | SE | 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 | |

2022 Build Traffic Volumes (Townsend Street Access)
 3: NYS Route 52 & Townsend Street

Peak PM Hour
 03/25/2020

| |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|
| Lane Group | NBL | NBT | SBT | SBR | SEL | SER |
| Lane Configurations | |  |  | |  | |
| Traffic Volume (vph) | 33 | 624 | 615 | 40 | 30 | 31 |
| Future Volume (vph) | 33 | 624 | 615 | 40 | 30 | 31 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Grade (%) | | 1% | -1% | | -2% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.992 | | 0.931 | |
| Flt Protected | | 0.998 | | | 0.976 | |
| Satd. Flow (prot) | 0 | 1850 | 1857 | 0 | 1710 | 0 |
| Flt Permitted | | 0.998 | | | 0.976 | |
| Satd. Flow (perm) | 0 | 1850 | 1857 | 0 | 1710 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 443 | 381 | | 638 | |
| Travel Time (s) | | 10.1 | 8.7 | | 14.5 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph) | 34 | 650 | 641 | 42 | 31 | 32 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 684 | 683 | 0 | 63 | 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 | 1.01 | 1.01 | 0.99 | 0.99 | 0.99 | 0.99 |
| 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 | NBL | NBT | SBT | SBR | SEL | SER |
|--------------------------|--------|------|--------|------|--------|------|
| Lane Configurations | | ↕ | ↕ | | ↕ | |
| Traffic Vol, veh/h | 33 | 624 | 615 | 40 | 30 | 31 |
| Future Vol, veh/h | 33 | 624 | 615 | 40 | 30 | 31 |
| 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, % | - | 1 | -1 | - | -2 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 34 | 650 | 641 | 42 | 31 | 32 |

















| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------------|
| Conflicting Flow All | 683 | 0 | 0 1380 662 |
| Stage 1 | - | - | - 662 - |
| Stage 2 | - | - | - 718 - |
| Critical Hdwy | 4.12 | - | - 6.02 6.02 |
| Critical Hdwy Stg 1 | - | - | - 5.02 - |
| Critical Hdwy Stg 2 | - | - | - 5.02 - |
| Follow-up Hdwy | 2.218 | - | -3.518 3.318 |
| Pot Cap-1 Maneuver | 10 | - | - 185 479 |
| Stage 1 | - | - | - 552 - |
| Stage 2 | - | - | - 523 - |
| Platoon blocked, % | | - | - |
| Mov Cap-1 Maneuver | 10 | - | - 174 479 |
| Mov Cap-2 Maneuver | | - | - 174 - |
| Stage 1 | - | - | - 520 - |
| Stage 2 | - | - | - 523 - |

| Approach | NB | SB | SE |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.5 | 0 | 23.5 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBL | NBTSELn1 | SBT | SBR |
|-----------------------|-------|----------|------|-----|
| Capacity (veh/h) | 910 | - | 257 | - |
| HCM Lane V/C Ratio | 0.038 | -0.247 | - | - |
| HCM Control Delay (s) | 9.1 | 0 | 23.5 | - |
| HCM Lane LOS | A | A | C | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.9 | - |

2022 Build Traffic Volumes (Hastings Drive Access)
 1: NYS Route 52 & Delavan Avenue

Peak AM Hour
 03/25/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| 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 | 467 | 6 | 3 | 381 | 53 |
| Future Volume (vph) | 34 | 1 | 29 | 1 | 0 | 3 | 51 | 467 | 6 | 3 | 381 | 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 |
| Flt | | 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) | 38 | 1 | 32 | 1 | 0 | 3 | 57 | 519 | 7 | 3 | 423 | 59 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 71 | 0 | 0 | 4 | 0 | 0 | 583 | 0 | 0 | 485 | 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 | | | | | | | | | | | |

2022 Build Traffic Volumes (Hastings Drive Access)
 1: NYS Route 52 & Delavan Avenue

Peak AM Hour
 03/25/2020

Intersection

Int Delay, s/veh 1.9

| 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 | 467 | 6 | 3 | 381 | 53 |
| Future Vol, veh/h | 34 | 1 | 29 | 1 | 0 | 3 | 51 | 467 | 6 | 3 | 381 | 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 | 519 | 7 | 3 | 423 | 59 |

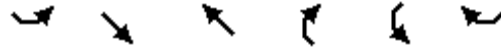
| Major/Minor | Minor2 | Minor1 | | Major1 | | Major2 | | | | | | |
|---------------------|---------|--------|-------|--------|-------|--------|-------|---|---|-------|---|---|
| Conflicting Flow | All1097 | 1099 | 453 | 1112 | 1125 | 523 | 482 | 0 | 0 | 526 | 0 | 0 |
| Stage 1 | 459 | 459 | - | 637 | 637 | - | - | - | - | - | - | - |
| Stage 2 | 638 | 640 | - | 475 | 488 | - | - | - | - | - | - | - |
| 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 Maneuve | 212 | 237 | 616 | 198 | 218 | 562 | 1065 | - | - | 1041 | - | - |
| Stage 1 | 606 | 591 | - | 482 | 488 | - | - | - | - | - | - | - |
| Stage 2 | 494 | 500 | - | 586 | 565 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuve | 198 | 218 | 616 | 176 | 201 | 562 | 1065 | - | - | 1041 | - | - |
| Mov Cap-2 Maneuve | 198 | 218 | - | 176 | 201 | - | - | - | - | - | - | - |
| Stage 1 | 560 | 589 | - | 445 | 451 | - | - | - | - | - | - | - |
| Stage 2 | 454 | 462 | - | 552 | 563 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|-----------------------|------|----|-----|-----|
| HCM Control Delay (s) | 21.6 | 15 | 0.8 | 0.1 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWL | NELn1 | SWL | SWT | SWR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1065 | - | - | 363 | 287 | 1041 | - | - |
| HCM Lane V/C Ratio | 0.053 | - | - | 0.012 | 0.248 | 0.003 | - | - |
| HCM Control Delay (s) | 8.6 | 0 | - | 15 | 21.6 | 8.5 | 0 | - |
| HCM Lane LOS | A | A | - | C | C | A | A | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0 | 1 | 0 | - | - |

2022 Build Traffic Volumes (Hastings Drive Access)
 2: Delavan Avenue & Hastings Drive

Peak AM Hour
 03/25/2020



| 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 SE\$WLn1

| | | | | | |
|-----------------------|---|---|-------|---|-------|
| 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 |

2022 Build Traffic Volumes (Hastings Drive Access)
 3: NYS Route 52 & Townsend Street

Peak AM Hour
 03/25/2020

| |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|
| Lane Group | NBL | NBT | SBT | SBR | SEL | SER |
| Lane Configurations | |  |  | |  | |
| Traffic Volume (vph) | 21 | 539 | 490 | 19 | 26 | 22 |
| Future Volume (vph) | 21 | 539 | 490 | 19 | 26 | 22 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Grade (%) | | 1% | -1% | | -2% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.995 | | 0.938 | |
| Flt Protected | | 0.998 | | | 0.974 | |
| Satd. Flow (prot) | 0 | 1850 | 1863 | 0 | 1719 | 0 |
| Flt Permitted | | 0.998 | | | 0.974 | |
| Satd. Flow (perm) | 0 | 1850 | 1863 | 0 | 1719 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 302 | 299 | | 386 | |
| Travel Time (s) | | 6.9 | 6.8 | | 8.8 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph) | 22 | 561 | 510 | 20 | 27 | 23 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 583 | 530 | 0 | 50 | 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 | 1.01 | 1.01 | 0.99 | 0.99 | 0.99 | 0.99 |
| 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 0.9

| Movement | NBL | NBT | SBT | SBR | SEL | SER |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↑ | ↑ | | ↑ | |
| Traffic Vol, veh/h | 21 | 539 | 490 | 19 | 26 | 22 |
| Future Vol, veh/h | 21 | 539 | 490 | 19 | 26 | 22 |
| 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, % | - | 1 | -1 | - | -2 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 561 | 510 | 20 | 27 | 23 |

















| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 530 | 0 | 0 |
| Stage 1 | - | - | 520 |
| Stage 2 | - | - | 605 |
| Critical Hdwy | 4.12 | - | 6.02 |
| Critical Hdwy Stg 1 | - | - | 5.02 |
| Critical Hdwy Stg 2 | - | - | 5.02 |
| Follow-up Hdwy | 2.218 | - | -3.518 |
| Pot Cap-1 Maneuver | 1037 | - | 257 |
| Stage 1 | - | - | 632 |
| Stage 2 | - | - | 583 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 1037 | - | 249 |
| Mov Cap-2 Maneuver | - | - | 249 |
| Stage 1 | - | - | 612 |
| Stage 2 | - | - | 583 |

| Approach | NB | SB | SE |
|----------------------|-----|----|------|
| HCM Control Delay, s | 8.3 | 0 | 17.6 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBL | NBTSELn1 | SBT | SBR |
|-----------------------|-------|----------|------|-----|
| Capacity (veh/h) | 1037 | - | 336 | - |
| HCM Lane V/C Ratio | 0.021 | -0.149 | - | - |
| HCM Control Delay (s) | 8.5 | 0 | 17.6 | - |
| HCM Lane LOS | A | A | C | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.5 | - |

2022 Build Traffic Volumes (Hastings Drive Access)
 1: NYS Route 52 & Delavan Avenue

Peak PM Hour
 03/25/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| 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 | 529 | 3 | 7 | 618 | 36 |
| Future Volume (vph) | 49 | 1 | 48 | 5 | 1 | 12 | 41 | 529 | 3 | 7 | 618 | 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 | 1850 | 0 | 0 | 1873 | 0 |
| Flt Permitted | | 0.976 | | | 0.987 | | | 0.996 | | | 0.999 | |
| Satd. Flow (perm) | 0 | 1666 | 0 | 0 | 1901 | 0 | 0 | 1850 | 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 | 575 | 3 | 8 | 672 | 39 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 106 | 0 | 0 | 19 | 0 | 0 | 623 | 0 | 0 | 719 | 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 | | | | | | | | | | | |

2022 Build Traffic Volumes (Hastings Drive Access)
 1: NYS Route 52 & Delavan Avenue

Peak PM Hour
 03/25/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.8 | | | | | | | | | | | |
| 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 | 529 | 3 | 7 | 618 | 36 |
| Future Vol, veh/h | 49 | 1 | 48 | 5 | 1 | 12 | 41 | 529 | 3 | 7 | 618 | 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 | 575 | 3 | 8 | 672 | 39 |

| Major/Minor | Minor2 | Minor1 | | Major1 | | | Major2 | | | | | |
|---------------------|---------|--------|-------|--------|-------|-------|--------|---|---|-------|---|---|
| Conflicting Flow | All1382 | 1376 | 692 | 1401 | 1394 | 577 | 711 | 0 | 0 | 578 | 0 | 0 |
| Stage 1 | 708 | 708 | - | 667 | 667 | - | - | - | - | - | - | - |
| Stage 2 | 674 | 668 | - | 734 | 727 | - | - | - | - | - | - | - |
| 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 | 139 | 167 | 456 | 127 | 153 | 525 | 875 | - | - | 996 | - | - |
| Stage 1 | 455 | 469 | - | 465 | 474 | - | - | - | - | - | - | - |
| Stage 2 | 474 | 487 | - | 429 | 447 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 126 | 152 | 456 | 104 | 140 | 525 | 875 | - | - | 996 | - | - |
| Mov Cap-2 Maneuver | 126 | 152 | - | 104 | 140 | - | - | - | - | - | - | - |
| Stage 1 | 420 | 463 | - | 430 | 438 | - | - | - | - | - | - | - |
| Stage 2 | 426 | 450 | - | 374 | 441 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|-----------------------|------|----|-----|-----|
| HCM Control Delay (s) | 43.3 | 22 | 0.7 | 0.1 |
| HCM LOS | E | C | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWL | NELn1 | SWL | SWT | SWR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 875 | - | - | 231 | 196 | 996 | - | - |
| HCM Lane V/C Ratio | 0.051 | - | - | 0.085 | 0.543 | 0.008 | - | - |
| HCM Control Delay (s) | 9.3 | 0 | - | 22 | 43.3 | 8.6 | 0 | - |
| HCM Lane LOS | A | A | - | C | E | A | A | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.3 | 2.8 | 0 | - | - |

2022 Build Traffic Volumes (Hastings Drive Access)
 2: Delavan Avenue & Hastings Drive

Peak PM Hour
 03/25/2020



| Lane Group | SEL | SET | NWT | NWR | SWL | SWR |
|-----------------------------|--------------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 1 | 20 | 13 | 58 | 72 | 1 |
| Future Volume (vph) | 1 | 20 | 13 | 58 | 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 | | | 0.890 | | 0.999 | |
| Flt Protected | | 0.998 | | | 0.953 | |
| Satd. Flow (prot) | 0 | 1642 | 1562 | 0 | 1723 | 0 |
| Flt Permitted | | 0.998 | | | 0.953 | |
| Satd. Flow (perm) | 0 | 1642 | 1562 | 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 | 75 | 94 | 1 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 27 | 92 | 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 | 58 | 72 | 1 |
| Future Vol, veh/h | 1 | 20 | 13 | 58 | 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 | 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 | 75 | 94 | 1 |

Major/Minor Major1 Major2 Minor2

| | | | | | | |
|----------------------|-------|---|---|---|-------|-------|
| Conflicting Flow All | 92 | 0 | - | 0 | 83 | 55 |
| Stage 1 | - | - | - | - | 55 | - |
| 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 | 1484 | - | - | - | 911 | 1003 |
| Stage 1 | - | - | - | - | 960 | - |
| Stage 2 | - | - | - | - | 987 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1484 | - | - | - | 910 | 1003 |
| Mov Cap-2 Maneuver | - | - | - | - | 910 | - |
| Stage 1 | - | - | - | - | 959 | - |
| Stage 2 | - | - | - | - | 987 | - |

Approach SE NW SW










| | | | |
|----------------------|-----|---|-----|
| HCM Control Delay, s | 9.4 | 0 | 9.4 |
| HCM LOS | | | A |

Minor Lane/Major Mvmt NWT NWR SEL SE\$WLn1

| | | | | | |
|-----------------------|---|---|-------|---|-------|
| Capacity (veh/h) | - | - | 1484 | - | 911 |
| 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 |

2022 Build Traffic Volumes (Hastings Drive Access)
 3: NYS Route 52 & Townsend Street

Peak PM Hour
 03/25/2020

| |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|
| Lane Group | NBL | NBT | SBT | SBR | SEL | SER |
| Lane Configurations | |  |  | |  | |
| Traffic Volume (vph) | 25 | 631 | 624 | 30 | 23 | 25 |
| Future Volume (vph) | 25 | 631 | 624 | 30 | 23 | 25 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Grade (%) | | 1% | -1% | | -2% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.994 | | 0.930 | |
| Flt Protected | | 0.998 | | | 0.977 | |
| Satd. Flow (prot) | 0 | 1850 | 1861 | 0 | 1709 | 0 |
| Flt Permitted | | 0.998 | | | 0.977 | |
| Satd. Flow (perm) | 0 | 1850 | 1861 | 0 | 1709 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 443 | 381 | | 638 | |
| Travel Time (s) | | 10.1 | 8.7 | | 14.5 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph) | 26 | 657 | 650 | 31 | 24 | 26 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 683 | 681 | 0 | 50 | 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 | 1.01 | 1.01 | 0.99 | 0.99 | 0.99 | 0.99 |
| 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 0.9

| Movement | NBL | NBT | SBT | SBR | SEL | SER |
|--------------------------|--------|------|--------|------|--------|------|
| Lane Configurations | | ↕ | ↕ | | ↕ | |
| Traffic Vol, veh/h | 25 | 631 | 624 | 30 | 23 | 25 |
| Future Vol, veh/h | 25 | 631 | 624 | 30 | 23 | 25 |
| 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, % | - | 1 | -1 | - | -2 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 26 | 657 | 650 | 31 | 24 | 26 |

| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 681 | 0 | 0 |
| Stage 1 | - | - | 666 |
| Stage 2 | - | - | 709 |
| Critical Hdwy | 4.12 | - | 6.02 |
| Critical Hdwy Stg 1 | - | - | 5.02 |
| Critical Hdwy Stg 2 | - | - | 5.02 |
| Follow-up Hdwy | 2.218 | - | -3.518 |
| Pot Cap-1 Maneuver | 12 | - | 187 |
| Stage 1 | - | - | 550 |
| Stage 2 | - | - | 528 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 12 | - | 179 |
| Mov Cap-2 Maneuver | - | - | 179 |
| Stage 1 | - | - | 525 |
| Stage 2 | - | - | 528 |

| Approach | NB | SB | SE |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.3 | 0 | 21.7 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBL | NBTSELn1 | SBT | SBR |
|-----------------------|-------|----------|------|-----|
| Capacity (veh/h) | 912 | - | 265 | - |
| HCM Lane V/C Ratio | 0.029 | -0.189 | - | - |
| HCM Control Delay (s) | 9.1 | 0 | 21.7 | - |
| HCM Lane LOS | A | A | C | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.7 | - |



BEACON VIEWS

APPENDIX E

ACCIDENT DATA

NYS DOT QRA ACCIDENT CONTRIBUTING FACTOR

Print Date 8/9/2019 Print Time 12:00:34PM

| <u>Query Number/Name</u> | <u>Query Type</u> | <u>Query SubType</u> | <u>Accident Date Range</u> |
|--------------------------|-------------------|----------------------|--|
| 48250 16319 | AttributeQuery | None | 1/1/2016 12:00:00AM To 12/31/2018 12:00:00AM |

| <u>Case Number</u> | <u>Case Year</u> | <u>Vehicle Sequence Number</u> | <u>Apparent Sequence Number</u> | <u>Apparent Factor</u> |
|--------------------|------------------|--------------------------------|---------------------------------|-------------------------------------|
| 36188119 | 2016 | 1 | 1 | REACTION TO OTHER UNINVOLVED VEHICL |
| 36188119 | 2016 | 1 | 2 | PASSING OR LANE USAGE IMPROPERLY |
| 36191132 | 2016 | 1 | 1 | NOT APPLICABLE |
| 36191132 | 2016 | 1 | 2 | NOT APPLICABLE |
| 36191132 | 2016 | 2 | 1 | FOLLOWING TOO CLOSELY |
| 36191132 | 2016 | 2 | 2 | NOT APPLICABLE |
| 36255944 | 2016 | 1 | 1 | ANIMAL'S ACTION |
| 36255944 | 2016 | 1 | 2 | NOT APPLICABLE |
| 36337513 | 2016 | 1 | 1 | FAILURE TO YIELD RIGHT OF WAY |
| 36337513 | 2016 | 1 | 2 | NOT APPLICABLE |
| 36337513 | 2016 | 2 | 1 | NOT APPLICABLE |
| 36337513 | 2016 | 2 | 2 | NOT APPLICABLE |
| 36397654 | 2016 | 1 | 1 | DRIVER INATTENTION |
| 36397654 | 2016 | 1 | 2 | NOT APPLICABLE |
| 36397654 | 2016 | 2 | 1 | DRIVER INATTENTION |
| 36397654 | 2016 | 2 | 2 | NOT APPLICABLE |
| 36479184 | 2016 | 1 | 1 | REACTION TO OTHER UNINVOLVED VEHICL |
| 36479184 | 2016 | 1 | 2 | NOT APPLICABLE |
| 36617073 | 2017 | 1 | 1 | GLARE |
| 36617073 | 2017 | 1 | 2 | UNSAFE SPEED |
| 36617073 | 2017 | 2 | 1 | NOT APPLICABLE |
| 36617073 | 2017 | 2 | 2 | NOT APPLICABLE |
| 36807232 | 2017 | 1 | 1 | BRAKES DEFECTIVE |
| 36807232 | 2017 | 1 | 2 | NOT APPLICABLE |
| 36824933 | 2017 | 1 | 1 | UNSAFE SPEED |

| <u>Query Number/Name</u> | <u>Query Type</u> | <u>Query SubType</u> | <u>Accident Date Range</u> |
|--------------------------|-------------------|----------------------|--|
| 48250 16319 | AttributeQuery | None | 1/1/2016 12:00:00AM To 12/31/2018 12:00:00AM |

| <u>Case Number</u> | <u>Case Year</u> | <u>Vehicle Sequence Number</u> | <u>Apparent Sequence Number</u> | <u>Apparent Factor</u> |
|--------------------|------------------|--------------------------------|---------------------------------|----------------------------------|
| 36824933 | 2017 | 1 | 2 | PASSING OR LANE USAGE IMPROPERLY |
| 37143228 | 2018 | 1 | 1 | FAILURE TO YIELD RIGHT OF WAY |
| 37143228 | 2018 | 1 | 2 | NOT APPLICABLE |
| 37143228 | 2018 | 2 | 1 | NOT APPLICABLE |
| 37143228 | 2018 | 2 | 2 | NOT APPLICABLE |
| 37255152 | 2018 | 1 | 1 | DRIVER INATTENTION |
| 37255152 | 2018 | 1 | 2 | NOT APPLICABLE |
| 37530301 | 2018 | 1 | 1 | OTHER (VEHICLE) |
| 37530301 | 2018 | 1 | 2 | NOT APPLICABLE |
| 37567406 | 2018 | 1 | 1 | ILLNESS |
| 37567406 | 2018 | 1 | 2 | NOT APPLICABLE |

NYS DOT QRA ACCIDENT SEVERITY SUMMARY

Print Date 8/9/2019 Print Time 11:59:55AM

| <u>Query Number/Name</u> | <u>Query Type</u> | <u>Query Sub Type</u> | <u>Accident Date Range</u> |
|------------------------------------|-------------------|-----------------------|--|
| <u>48250</u> 16319 | AttributeQuery | None | 1/1/2016 12:00:00AM To 12/31/2018 12:00:00AM |

| <u>Case Year</u> | Injury | Fatality | Property Damage | Non-Reportables | Totals |
|---------------------|--------|----------|-----------------|-----------------|--------|
| <u>2016</u> | 1 | 0 | 4 | 1 | 6 |
| <u>Case Year</u> | Injury | Fatality | Property Damage | Non-Reportables | Totals |
| <u>2017</u> | 1 | 0 | 2 | 0 | 3 |
| <u>Case Year</u> | Injury | Fatality | Property Damage | Non-Reportables | Totals |
| <u>2018</u> | 1 | 0 | 2 | 1 | 4 |
| <u>Grand Total:</u> | 3 | 0 | 8 | 2 | |

Region 8 County 2 PIL, SDL, and PII Report
 Ascending Route Sequence for HAL Year 2016

Route 52

Under 23 USC §409, this report and its analysis and data are privileged against being introduced into evidence, disclosed in pretrial discovery, or used for any other purpose in civil litigation. NYS DOT and the State of New York do not waive such privilege by disclosing this report under the NYS Freedom of Information Law (FOIL), or to USDOT and FHWA under 23 USC §148.

HAL Year: 2016
 Time Period: 01-JAN-2015 thru 31-DEC-2016
 PIL Accidents: Linear&Intersection
 PIL LOC: 99.9
 SDL Accidents: Linear&Intersection
 SDL LOC: 90.9
 PII LOC: 99.9
 HAL Created: 29-MAR-2017

| HAL Year | Route | Begins at Reference Marker | Ends at Reference Marker | Seg Int# | Hal Lgth | Type | Avg AADT | Exposure MVM or MEV | Highway/Int Char. | | | --- Number of Accidents --- | | | | | Total Accd | Accd Per Exposure | UCL | Reduct Index | Severe Weight Rank |
|----------|-------|----------------------------|--------------------------|----------|----------|------|----------|---------------------|-------------------|----------|------------|-----------------------------|-----|-----|-----|------------|------------|-------------------|------|--------------|--------------------|
| | | | | | | | | | Type (Clsf Cde) | Int Cntl | Int Config | Fat | Inj | Pdo | Int | Not At Int | | | | | |
| 2016 | 52 | 52 82042038 | 52 82042041 | .4 | SDL | | 15239 | 4.456 | 68 | | | 0 | 9 | 16 | 7 | 18 | 25 | 5.61 | 3.39 | 9.40 | 2.49 |
| 2016 | 52 | 52 82042040 | 52 82042044 | .5 | PIL | | 15239 | 5.57 | 68 | | | 0 | 13 | 44 | 25 | 32 | 57 | 10.23 | 5.86 | 37.50 | 5.35 |
| 2016 | 52 | 52 82042043 | 52 82042046 | .4 | SDL | | 15239 | 4.456 | 68 | | | 0 | 8 | 37 | 26 | 19 | 45 | 10.10 | 3.39 | 29.40 | 4.27 |
| 2016 | 52 | 52 82042045 | 52 82042047 | .3 | PIL | | 15239 | 3.342 | 68 | | | 0 | 9 | 32 | 21 | 20 | 41 | 12.27 | 6.51 | 29.30 | 6.75 |
| 2016 | 52 | 52 82042046 | 52 82042050 | .5 | SDL | | 16504 | 6.032 | 68 | | | 0 | 11 | 32 | 19 | 24 | 43 | 7.13 | 3.42 | 21.89 | 3.44 |
| 2016 | 52 | 52 82042060 | 52 82042066 | .7 | SDL | | 13591 | 6.955 | 68 | | | 0 | 13 | 29 | 5 | 37 | 42 | 6.04 | 3.43 | 17.66 | 2.34 |
| 2016 | 52 | 52 82042086 | 52 82042089 | .4 | SDL | | 9713 | 2.84 | 68 | | | 0 | 7 | 3 | 9 | 1 | 10 | 3.52 | 3.32 | 0.06 | 0.03 |
| 2016 | 52 | 52 82042092 | 52 82042096 | .5 | SDL | | 8819 | 3.223 | 68 | | | 0 | 4 | 7 | 8 | 3 | 11 | 3.41 | 3.34 | -0.28 | -0.06 |
| 2016 | 52 | 52 82042114 | 52 82042120 | .7 | SDL | | 12481 | 6.387 | 68 | | | 0 | 12 | 15 | 7 | 20 | 27 | 4.23 | 3.42 | 4.65 | 0.85 |
| 2016 | 52 | 52 82042162 | 52 82042166 | .5 | SDL | | 5314 | 1.942 | 70 | | | 0 | 2 | 6 | 1 | 7 | 8 | 4.12 | 4.05 | -0.37 | -0.06 |
| 2016 | 52 | 52 82042177 | 52 82042179 | .3 | SDL | | 5314 | 1.165 | 68 | | | 0 | 3 | 3 | 0 | 6 | 6 | 5.15 | 3.07 | 1.92 | 0.91 |
| 2016 | 52 | 52 82042186 | 52 82042190 | .5 | SDL | | 6076 | 2.221 | 68 | | | 0 | 5 | 4 | 7 | 2 | 9 | 4.05 | 3.27 | 1.23 | 0.39 |
| 2016 | 52 | 84I82021008 | 84I82021010 | .3 | PIL | | 68612 | 15.05 | 22 | | | 0 | 11 | 89 | 0 | 100 | 100 | 6.65 | 2.07 | 81.64 | 9.39 |
| 2016 | 52 | 84I82021011 | 84I82021012 | .2 | SDL | | 56017 | 8.19 | 14 | | | 0 | 2 | 11 | 0 | 13 | 13 | 1.59 | 1.12 | 3.34 | 0.74 |

SPECIFIED: MAXIMUM ANALYSIS LENGTH 3 REFERENCE MARKERS, STEP BY 1, ADJACENT PILS AND SDLS ARE LINKED. INTERSECTION ACCIDENTS ARE INCLUDED.

Region 8 County 2 PIL, SDL, and PII Report
 Ascending Route Sequence for HAL Year 2017

Route 52

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HAL Year: 2017
 Time Period: 01-JAN-2016 thru 31-DEC-2017
 PIL Accidents: Linear&Intersection
 PIL LOC: 99.9
 SDL Accidents: Linear&Intersection
 SDL LOC: 90.9
 PII LOC: 99.9
 HAL Created: 11-APR-2018

| HAL Year | Route | Begins at Reference Marker | Ends at Reference Marker | Seg Int# | Hal Lgth | Type | Avg AADT | Exposure MVM or MEV | Highway/Int Char. | | | --- Number of Accidents --- | | | | | Total Accd | Accd Per Exposure | UCL | Reduct Index | Severe Weight Rank | |
|----------|-------|----------------------------|--------------------------|----------|----------|------|----------|---------------------|-------------------|----------|------------|-----------------------------|-----|-----|-----|------------|------------|-------------------|-------|--------------|--------------------|-------|
| | | | | | | | | | Type (Clsf Cde) | Int Cntl | Int Config | Fat | Inj | Pdo | Int | Not At Int | | | | | | |
| 2017 | 52 | 52 82042039 | 52 82042042 | | .4 | SDL | 15151 | 4.43 | 68 | | | | 0 | 6 | 30 | 11 | 25 | 36 | 8.13 | 3.41 | 20.41 | 2.84 |
| 2017 | 52 | 52 82042041 | 52 82042044 | | .4 | PIL | 15151 | 4.43 | 68 | | | | 0 | 9 | 43 | 23 | 29 | 52 | 11.74 | 6.16 | 36.41 | 5.22 |
| 2017 | 52 | 52 82042043 | | 11 | 1.0 | PII | 16666 | 12.18 | 81 | 3 | 3 | | 0 | 1 | 13 | 14 | 0 | 14 | 1.15 | .51 | 11.81 | 3.55 |
| 2017 | 52 | 52 82042043 | 52 82042046 | | .4 | SDL | 15151 | 4.43 | 68 | | | | 0 | 8 | 32 | 23 | 17 | 40 | 9.03 | 3.41 | 24.41 | 3.94 |
| 2017 | 52 | 52 82042045 | 52 82042047 | | .3 | PIL | 15151 | 3.323 | 68 | | | | 0 | 7 | 28 | 18 | 17 | 35 | 10.53 | 6.55 | 23.30 | 5.01 |
| 2017 | 52 | 52 82042046 | 52 82042049 | | .4 | SDL | 16098 | 4.707 | 68 | | | | 0 | 7 | 27 | 15 | 19 | 34 | 7.22 | 3.41 | 17.43 | 2.88 |
| 2017 | 52 | 52 82042062 | 52 82042066 | | .5 | SDL | 15344 | 5.608 | 68 | | | | 0 | 8 | 29 | 0 | 37 | 37 | 6.60 | 3.43 | 17.26 | 2.37 |
| 2017 | 52 | 52 82042066 | 52 82042068 | | .3 | SDL | 11452 | 2.511 | 68 | | | | 0 | 3 | 6 | 7 | 2 | 9 | 3.58 | 3.32 | 0.16 | 0.05 |
| 2017 | 52 | 52 82042068 | 52 82042070 | | .3 | SDL | 11452 | 2.511 | 68 | | | | 0 | 4 | 7 | 7 | 4 | 11 | 4.38 | 3.32 | 2.16 | 0.78 |
| 2017 | 52 | 52 82042086 | 52 82042090 | | .5 | SDL | 10616 | 3.88 | 68 | | | | 0 | 8 | 7 | 14 | 1 | 15 | 3.87 | 3.39 | 1.34 | 0.41 |
| 2017 | 52 | 52 82042088 | | 87 | 1.0 | PII | 14292 | 10.45 | 88 | 1 | 2 | | 0 | 8 | 6 | 14 | 0 | 14 | 1.34 | 1.21 | 8.25 | 13.69 |
| 2017 | 52 | 52 82042092 | 52 82042096 | | .5 | SDL | 8669 | 3.169 | 68 | | | | 0 | 5 | 8 | 6 | 7 | 13 | 4.10 | 3.36 | 1.85 | 0.42 |
| 2017 | 52 | 52 82042100 | 52 82042101 | | .3 | SDL | 8669 | 1.901 | 68 | | | | 0 | 1 | 6 | 6 | 1 | 7 | 3.68 | 3.26 | 0.31 | 0.05 |
| 2017 | 52 | 52 82042114 | 52 82042119 | | .6 | SDL | 13399 | 5.877 | 68 | | | | 0 | 12 | 14 | 6 | 20 | 26 | 4.42 | 3.43 | 5.31 | 1.18 |
| 2017 | 52 | 52 82042141 | 52 82042144 | | .4 | SDL | 4292 | 1.255 | 68 | | | | 0 | 1 | 5 | 2 | 4 | 6 | 4.78 | 3.12 | 1.58 | 0.22 |
| 2017 | 52 | 52 82042177 | 52 82042179 | | .3 | SDL | 5421 | 1.189 | 68 | | | | 0 | 2 | 4 | 0 | 6 | 6 | 5.05 | 3.1 | 1.81 | 0.60 |
| 2017 | 52 | 52 82042179 | 52 82042181 | | .3 | SDL | 5421 | 1.189 | 68 | | | | 0 | 3 | 4 | 2 | 5 | 7 | 5.89 | 3.1 | 2.81 | 1.17 |
| 2017 | 52 | 84I82021008 | 84I82021008 | | .1 | SDL | 73181 | 5.35 | 22 | | | | 0 | 3 | 16 | 0 | 19 | 19 | 3.55 | 1.2 | 12.10 | 5.66 |

SPECIFIED: MAXIMUM ANALYSIS LENGTH 3 REFERENCE MARKERS, STEP BY 1, ADJACENT PILS AND SDLS ARE LINKED. INTERSECTION ACCIDENTS ARE INCLUDED.

Region 8 County 2 PIL, SDL, and PII Report
 Ascending Route Sequence for HAL Year 2017

Route 52

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| HAL Year | Route | Begins at Reference Marker | Ends at Reference Marker | Int# | Seg Lgth | Hal Typ | Avg AADT | Exposure MVM or MEV | Highway/Int Char. | | | --- Number of Accidents --- | | | | Total Accd | Accd Per Exposure | UCL | Reduct Index | Severe Weight Rank | |
|----------|-------|----------------------------|--------------------------|------|----------|---------|----------|---------------------|-------------------|----------|------------|-----------------------------|-----|-----|-----|------------|-------------------|------|--------------|--------------------|------------|
| | | | | | | | | | Type (Clsf Cde) | Int Cntl | Int Config | Fat | Inj | Pdo | Int | | | | | | Not At Int |
| 2017 | 52 | 84I82021011 | 84I82021012 | | .2 | SDL | 56017 | 8.19 | 14 | | | 0 | 2 | 15 | 3 | 14 | 17 | 2.08 | 1.11 | 7.42 | 1.39 |

SPECIFIED: MAXIMUM ANALYSIS LENGTH 3 REFERENCE MARKERS, STEP BY 1, ADJACENT PILS AND SDLS ARE LINKED. INTERSECTION ACCIDENTS ARE INCLUDED.

Region 8 County 2 PIL, SDL, and PII Report
 Ascending Route Sequence for HAL Year 2018

Route 52

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HAL Year 2018 Time Period 01-JAN-2017 thru 31-DEC-2018 PIL Accidents Linear&Intersection PIL LOC 99.9 SDL Accidents Linear&Intersection SDL LOC 90.9 PII LOC 99.9 HAL Created 05-APR-2019

Highway/Int Char.

--- Number of Accidents ---

| HAL Year | Route | Begins at Reference Marker | Ends at Reference Marker | Int# | Seg Lgth | Hal Type | Avg AADT | Exposure MVM or MEV | Type (Clsf Cde) | Int Cntl | Int Config | Fat | Inj | Pdo | Int | Not At Int | Total Accd | Accd Per Exposure | UCL | Reduct Index | Severe Weight Rank |
|----------|-------|----------------------------|--------------------------|------|----------|----------|----------|---------------------|-----------------|----------|------------|-----|-----|-----|-----|------------|------------|-------------------|------|--------------|--------------------|
| 2018 | 52 | 52 82042039 | 52 82042042 | | .4 | SDL | 15429 | 4.505 | 68 | | | 0 | 4 | 21 | 9 | 16 | 25 | 5.55 | 3.43 | 9.05 | 1.31 |
| 2018 | 52 | 52 82042041 | 52 82042044 | | .4 | PIL | 15429 | 4.505 | 68 | | | 0 | 7 | 39 | 22 | 24 | 46 | 10.21 | 6.17 | 30.05 | 4.18 |
| 2018 | 52 | 52 82042043 | | 11 | 1.0 | PII | 16972 | 12.39 | 81 | 3 | 3 | 0 | 1 | 15 | 16 | 0 | 16 | 1.29 | .51 | 13.77 | 4.04 |
| 2018 | 52 | 52 82042043 | 52 82042049 | | .7 | SDL | 15806 | 8.077 | 68 | | | 0 | 9 | 50 | 31 | 28 | 59 | 7.30 | 3.48 | 30.41 | 2.42 |
| 2018 | 52 | 52 82042062 | 52 82042064 | | .3 | SDL | 16748 | 3.668 | 68 | | | 0 | 5 | 22 | 0 | 27 | 27 | 7.36 | 3.4 | 14.02 | 3.04 |
| 2018 | 52 | 52 82042063 | 52 82042065 | | .3 | PIL | 16748 | 3.668 | 68 | | | 0 | 6 | 29 | 0 | 35 | 35 | 9.54 | 6.44 | 22.02 | 4.49 |
| 2018 | 52 | 52 82042064 | 52 82042070 | | .7 | SDL | 12775 | 6.528 | 68 | | | 0 | 8 | 32 | 8 | 32 | 40 | 6.13 | 3.46 | 16.89 | 1.67 |
| 2018 | 52 | 52 82042074 | 52 82042076 | | .3 | SDL | 11186 | 2.45 | 68 | | | 0 | 3 | 7 | 8 | 2 | 10 | 4.08 | 3.34 | 1.33 | 0.43 |
| 2018 | 52 | 52 82042076 | 52 82042078 | | .3 | SDL | 11186 | 2.45 | 68 | | | 0 | 3 | 7 | 8 | 2 | 10 | 4.08 | 3.34 | 1.33 | 0.43 |
| 2018 | 52 | 52 82042086 | 52 82042090 | | .5 | SDL | 10679 | 3.898 | 68 | | | 0 | 7 | 9 | 16 | 0 | 16 | 4.10 | 3.41 | 2.20 | 0.60 |
| 2018 | 52 | 52 82042088 | | 87 | 1.0 | PII | 12397 | 9.05 | 88 | 1 | 2 | 0 | 7 | 9 | 16 | 0 | 16 | 1.77 | 1.24 | 11.11 | 14.78 |
| 2018 | 52 | 52 82042092 | 52 82042094 | | .3 | SDL | 8649 | 1.894 | 68 | | | 0 | 1 | 6 | 2 | 5 | 7 | 3.70 | 3.28 | 0.30 | 0.05 |
| 2018 | 52 | 52 82042096 | 52 82042098 | | .3 | SDL | 8649 | 1.894 | 68 | | | 0 | 1 | 6 | 5 | 2 | 7 | 3.70 | 3.28 | 0.30 | 0.05 |
| 2018 | 52 | 52 82042098 | 52 82042100 | | .3 | SDL | 8649 | 1.894 | 68 | | | 0 | 1 | 6 | 5 | 2 | 7 | 3.70 | 3.28 | 0.30 | 0.05 |
| 2018 | 52 | 52 82042100 | 52 82042102 | | .4 | SDL | 8649 | 2.526 | 68 | | | 0 | 1 | 8 | 7 | 2 | 9 | 3.56 | 3.34 | 0.06 | 0.01 |
| 2018 | 52 | 52 82042107 | 52 82042109 | | .3 | SDL | 10343 | 2.265 | 68 | | | 0 | 4 | 4 | 3 | 5 | 8 | 3.53 | 3.32 | -0.02 | -0.01 |
| 2018 | 52 | 52 82042114 | 52 82042120 | | .7 | SDL | 12597 | 6.437 | 68 | | | 0 | 9 | 20 | 3 | 26 | 29 | 4.51 | 3.46 | 6.21 | 0.89 |
| 2018 | 52 | 52 82042128 | 52 82042131 | | .4 | SDL | 6957 | 2.031 | 68 | | | 0 | 2 | 5 | 4 | 3 | 7 | 3.45 | 3.29 | -0.19 | -0.04 |

SPECIFIED: MAXIMUM ANALYSIS LENGTH 3 REFERENCE MARKERS, STEP BY 1, ADJACENT PILS AND SDLS ARE LINKED. INTERSECTION ACCIDENTS ARE INCLUDED.

Region 8 County 2 PIL, SDL, and PII Report
 Ascending Route Sequence for HAL Year 2018

Route 52

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| HAL Year | Route | Begins at Reference Marker | Ends at Reference Marker | Int# | Seg Lgth | Hal Typ | Avg AADT | Exposure MVM or MEV | Highway/Int Char. | | | --- Number of Accidents --- | | | | Total Accd | Accd Per Exposure | UCL | Reduct Index | Severe Weight Rank | |
|----------|-------|----------------------------|--------------------------|------|----------|---------|----------|---------------------|-------------------|----------|------------|-----------------------------|-----|-----|-----|------------|-------------------|------|--------------|--------------------|------------|
| | | | | | | | | | Type (Clsf Cde) | Int Cntl | Int Config | Fat | Inj | Pdo | Int | | | | | | Not At Int |
| 2018 | 52 | 52 82042141 | 52 82042145 | | .5 | SDL | 4500 | 1.643 | 68 | | | 0 | 2 | 8 | 2 | 8 | 10 | 6.09 | 3.24 | 4.18 | 0.58 |
| 2018 | 52 | 52 82042177 | 52 82042181 | | .5 | SDL | 5397 | 1.97 | 68 | | | 0 | 4 | 9 | 3 | 10 | 13 | 6.60 | 3.29 | 6.03 | 1.20 |
| 2018 | 52 | 52 82042181 | 52 82042183 | | .3 | SDL | 5397 | 1.182 | 68 | | | 0 | 2 | 4 | 3 | 3 | 6 | 5.08 | 3.12 | 1.82 | 0.65 |
| 2018 | 52 | 84182021005 | 84182021007 | | .3 | SDL | 75673 | 16.57 | 18 | | | 0 | 9 | 24 | 0 | 33 | 33 | 1.99 | 1.52 | 7.31 | 1.84 |
| 2018 | 52 | 84182021006 | 84182021008 | | .3 | PIL | 75410 | 16.52 | 18 | | | 0 | 13 | 34 | 0 | 47 | 47 | 2.85 | 2.47 | 21.40 | 5.46 |
| 2018 | 52 | 84182021011 | 84182021012 | | .2 | SDL | 50242 | 7.335 | 14 | | | 0 | 5 | 21 | 4 | 22 | 26 | 3.54 | 1.17 | 16.90 | 4.76 |

SPECIFIED: MAXIMUM ANALYSIS LENGTH 3 REFERENCE MARKERS, STEP BY 1, ADJACENT PILS AND SDLS ARE LINKED. INTERSECTION ACCIDENTS ARE INCLUDED.

Accident Location Information System(ALIS)

Date: 8/9/2019
11:55:27 AM

Accident Verbal Description

16319_VDR

Date in this report covers the period - 1/1/2016-12/31/2018

Complete Accident data from NYSDMV is only available thru 2/28/2019 12:00:00 AM

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
AT INTERSECTION WITH DELAVAN AVE

4/28/2016 Thu 00:52 AM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Case: **2016-36188119**
Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: BEACON CITY PD Num of Veh: 1
Type Of Accident: COLL. W/LIGHT SUPPORT/UTILITY POLE Traffic Control: NO PASSING ZONE
Manner of Collision: OTHER Weather: CLEAR
Road Surface Condition: DRY Road Char.: CURVE AND GRADE Light Condition: DARK-ROAD LIGHTED
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3219 State of Registration: NY
Num of Occupants: 1 Driver's Age: 26 Sex: F Citation Issued: Y
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: PASSING OR LANE USAGE IMPROPERLY, REACTION TO OTHER UNINVOLVED VEHICL

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AV
4/28/2016 Thu 16:16 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: **2016-36191132**
Accident Class: PROPERTY DAMAGE Police Agency: BEACON CITY PD Num of Veh: 2
Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN
Manner of Collision: REAR END Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3582 State of Registration: NY
Num of Occupants: 2 Driver's Age: 78 Sex: F Citation Issued: N
Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: STARTING IN TRAFFIC
Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 4330 State of Registration: NY
Num of Occupants: 1 Driver's Age: 21 Sex: M Citation Issued: Y
Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: FOLLOWING TOO CLOSELY, NOT APPLICABLE

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
23 Meters West of DELAVAN AVE

6/14/2016 Tue 08:00 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: **2016-36255944**
Accident Class: PROPERTY DAMAGE Police Agency: BEACON CITY PD Num of Veh: 1

Type Of Accident: COLLISION WITH GUIDE RAIL
 Manner of Collision: OTHER
 Road Surface Condition: DRY
 Loc. of Ped/Bicycle: NOT APPLICABLE

Road Char.: CURVE AND LEVEL
 Action of Ped/Bicycle: NOT APPLICABLE

Traffic Control: NO PASSING ZONE
 Weather: CLEAR
 Light Condition: DAYLIGHT

Veh :1 CAR/VAN/PICKUP Registered Weight: 3351 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 59 Sex: M Citation Issued: N
 Direction of Travel: NORTH-EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: ANIMAL'S ACTION, NOT APPLICABLE

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
 AT INTERSECTION WITH DELAVAN AVE

8/2/2016 Tue 18:23 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2016-36337513**
 Accident Class: PROPERTY DAMAGE Police Agency: BEACON CITY PD Num of Veh: 2
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NO PASSING ZONE
 Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 2870 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 54 Sex: F Citation Issued: N
 Direction of Travel: SOUTH-WEST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: State of Registration: MA
 Num of Occupants: 1 Driver's Age: 60 Sex: F Citation Issued: N
 Direction of Travel: SOUTH-EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING LEFT TURN
 Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
 AT INTERSECTION WITH DELAVAN AVE

9/18/2016 Sun 10:50 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2016-36397654**
 Accident Class: PROPERTY DAMAGE Police Agency: BEACON CITY PD Num of Veh: 2
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN
 Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Weather: CLEAR
 Road Surface Condition: DRY Road Char.: CURVE AND LEVEL Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: 2852 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 20 Sex: F Citation Issued: N
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING LEFT TURN
 Apparent Factors: NOT APPLICABLE, DRIVER INATTENTION

Veh :1 CAR/VAN/PICKUP Registered Weight: 2687 State of Registration: NY
 Num of Occupants: 3 Driver's Age: 67 Sex: M Citation Issued: N
 Direction of Travel: NORTH-EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING LEFT TURN
 Apparent Factors: DRIVER INATTENTION, NOT APPLICABLE

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
 AT INTERSECTION WITH DELAVAN AVE

11/13/2016 Sun 12:58 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2016-36479184
 Accident Class: NON-REPORTABLE Police Agency: BEACON CITY PD Num of Veh: 1
 Type Of Accident: COLLISION WITH OTHER FIXED OBJECT Traffic Control: NO PASSING ZONE
 Manner of Collision: OTHER Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: State of Registration: NY
 Num of Occupants: 1 Driver's Age: 75 Sex: M Citation Issued: N
 Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: REACTION TO OTHER UNINVOLVED VEHICL, NOT APPLICABLE

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
 15 Meters East of DELAVAN AVE

2/23/2017 Thu 16:03 PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: A Case: 2017-36617073
 Accident Class: INJURY Police Agency: BEACON CITY PD Num of Veh: 1
 Type Of Accident: COLLISION WITH BICYCLIST Traffic Control: NO PASSING ZONE
 Manner of Collision: OTHER Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
 Loc. of Ped/Bicycle: PED/BICYCLIST NOT AT INTERSECTION Action of Ped/Bicycle: ALONG HIGHWAY WITH TRAFFIC

Veh :1 CAR/VAN/PICKUP Registered Weight: 0 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 76 Sex: M Citation Issued: N
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING LEFT TURN
 Apparent Factors: GLARE, UNSAFE SPEED

Veh :2 BICYCLE Registered Weight: State of Registration: -3
 Num of Occupants: 1 Driver's Age: 53 Sex: M Citation Issued: N
 Direction of Travel: NORTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
 18 Meters East of DELAVAN AVE

6/24/2017 Sat 19:48 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2017-36807232

Accident Class: PROPERTY DAMAGE
 Type Of Accident: COLL. W/LIGHT SUPPORT/UTILITY POLE
 Manner of Collision: OTHER
 Road Surface Condition: DRY
 Loc. of Ped/Bicycle: NOT APPLICABLE

Police Agency: BEACON CITY PD
 Traffic Control: NO PASSING ZONE
 Weather: CLEAR
 Light Condition: DUSK

Road Char.: STRAIGHT AND LEVEL
 Action of Ped/Bicycle: NOT APPLICABLE

Num of Veh: 1

Veh :1 CAR/VAN/PICKUP Registered Weight: 4085 State of Registration: NY
 Num of Occupants: 3 Driver's Age: 47 Sex: F Citation Issued: N
 Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: BRAKES DEFECTIVE, NOT APPLICABLE

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
 AT INTERSECTION WITH DELAVAN AVE

7/21/2017 Fri 21:27 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2017-36824933
 Accident Class: PROPERTY DAMAGE Police Agency: BEACON CITY PD Traffic Control: NO PASSING ZONE
 Type Of Accident: COLL. W/LIGHT SUPPORT/UTILITY POLE Weather: CLOUDY
 Manner of Collision: OTHER Light Condition: DARK-ROAD LIGHTED
 Road Surface Condition: DRY Road Char.: CURVE AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE
 Loc. of Ped/Bicycle: NOT APPLICABLE

Num of Veh: 1

Veh :1 CAR/VAN/PICKUP Registered Weight: 3041 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 19 Sex: M Citation Issued: Y
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: PASSING OR LANE USAGE IMPROPERLY, UNSAFE SPEED

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
 AT INTERSECTION WITH DELAVAN AVE

2/9/2018 Fri 18:02 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2018-37143228
 Accident Class: PROPERTY DAMAGE Police Agency: BEACON CITY PD Traffic Control: STOP SIGN
 Type Of Accident: COLLISION WITH MOTOR VEHICLE Weather: SNOW
 Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Light Condition: DARK-ROAD LIGHTED
 Road Surface Condition: WET Road Char.: STRAIGHT AND LEVEL Action of Ped/Bicycle: NOT APPLICABLE
 Loc. of Ped/Bicycle: NOT APPLICABLE

Num of Veh: 2

Veh :1 CAR/VAN/PICKUP Registered Weight: 3279 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 61 Sex: F Citation Issued: N
 Direction of Travel: EAST Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: MAKING LEFT TURN
 Apparent Factors: FAILURE TO YIELD RIGHT OF WAY, NOT APPLICABLE

Veh :2 CAR/VAN/PICKUP Registered Weight: State of Registration: NY
 Num of Occupants: 1 Driver's Age: 26 Sex: M Citation Issued: N
 Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: NOT APPLICABLE, NOT APPLICABLE

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
AT INTERSECTION WITH DELAVAN AVE

4/26/2018 Thu 06:30 AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2018-37255152**
Accident Class: PROPERTY DAMAGE Police Agency: BEACON CITY PD Num of Veh: 1
Type Of Accident: COLLISION WITH OTHER Traffic Control: NO PASSING ZONE
Manner of Collision: OTHER Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT/ GRADE Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 2549 State of Registration: NY
Num of Occupants: 1 Driver's Age: 51 Sex: F Citation Issued: N
Direction of Travel: WEST Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: NOT APPLICABLE, DRIVER INATTENTION

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
15 Meters East of DELAVAN AVE

10/14/2018 Sun 21:50 PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: **Case: 2018-37530301**
Accident Class: NON-REPORTABLE Police Agency: BEACON CITY PD Num of Veh: 1
Type Of Accident: COLL. W/LIGHT SUPPORT/UTILITY POLE Traffic Control: NO PASSING ZONE
Manner of Collision: OTHER Weather: CLEAR
Road Surface Condition: DRY Road Char.: CURVE AND LEVEL Light Condition: DARK-ROAD LIGHTED
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: State of Registration: NY
Num of Occupants: 1 Driver's Age: 60 Sex: M Citation Issued: N
Direction of Travel: SOUTH-WEST Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: NOT APPLICABLE, OTHER (VEHICLE)

County: Dutchess Muni: Beacon(C) Ref. Marker: Street: FISHKILL AVE
AT INTERSECTION WITH DELAVAN AVE

11/4/2018 Sun 16:37 PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: A **Case: 2018-37567406**
Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: BEACON CITY PD Num of Veh: 1
Type Of Accident: COLL. W/LIGHT SUPPORT/UTILITY POLE Traffic Control: NO PASSING ZONE
Manner of Collision: OTHER Weather: CLEAR
Road Surface Condition: DRY Road Char.: CURVE AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh :1 CAR/VAN/PICKUP Registered Weight: 3316 State of Registration: NY
Num of Occupants: 1 Driver's Age: 64 Sex: M Citation Issued: N
Direction of Travel: SOUTH Public Property Damage: OTHER School Bus Involved: OTHER
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: ILLNESS, NOT APPLICABLE

To: John Gunn, Chair, and the City of Beacon Planning Board

Date: May 8, 2020

Re: **Beacon Views Townhouses Site Plan and Subdivision**

I have reviewed the following documents:

- April 28, 2020 cover letter from Insite Engineering;
- October 21, 2019 sign-off letter from NYS Parks, Recreation and Historic Preservation;
- April 27, 2020 response letter from Maser Consulting to the City traffic consultant's comments;
- March 14, 2020 Wetland Evaluation and Impact Report by Ecological Solutions;
- April 22, 2020 School Impact Analysis by AKRF;
- April 24, 2020 Preliminary Plat by Insite Engineering;
- 11-sheet Site Plan set by Insite Engineering, dated April 28, 2020; and
- 3-sheet architectural set by Aryeh Siegel, dated April 28, 2020.

Proposal

The applicant is proposing to subdivide and develop an 8.55-acre site with 40 for-sale townhouse units. The parcel is in the RD-5 zoning district. The applicant is requesting a conservation subdivision under Section 223-12 J. This allows the Board to modify lot sizes, setbacks, streets, and other requirements in order to help preserve natural features in the site. A moratorium has been adopted by the City Council, so no approvals can be granted for this proposal until the moratorium is lifted.

Comments and Recommendations

1. For the Sheet SP-1 Layout and Landscape Plan:
 - a. In the Zone Requirements table, the minimum side yard should be 17.5 feet or half the height of the permitted building in the RD-5 district.
 - b. The proposed landscaping should be identified by species and coordinated with the Plant List.
 - c. The trail to the passive recreation area should be connected by a crosswalk and walkway between townhomes 6 and 7 to the sidewalk along the main access street.
 - d. If possible, the sidewalk extending into the 25 Townsend subdivision should be on the northwestern side of the street and separated from the curb line by a landscape strip.
2. For the Sheet LP-1 Lighting Plan:
 - a. Any exterior lighting on the buildings should also be identified by location and specifications.
 - b. The exterior lighting should comply with the recently adopted amendments to Section 223-14 B, including a Color Rendering Index in the range of 80-100.
 - c. A note on the plan should state that type, location, and shading of all lighting shall prevent the spillover of light onto any adjacent residential property.

3. The plans should include turning diagrams for a fire truck and be referred to the Fire Department.
4. The plans should note how the trash is going to be handled.
5. For Sheet A-3, the Architectural Review Subcommittee recommended that brick should be used for the first level all around the buildings. However, the elevations and renderings show vinyl siding for the first level of the buildings on the rear sides.
6. The northern edges of the wetland are proposed to be filled for the street right-of-way and an access driveway, so the project will need permits from the Army Corps of Engineers and NYSDEC. The Wetland Evaluation and Impact Report should specifically address the requirements in Section 223-16 A. The Report lists 13 functions and values to be used for assessment purposes, but it should provide an assessment using these categories for this particular wetland. The Report and plans should also identify the square footage of wetland to be disturbed or filled and the mapped location and planting plan for the equivalent mitigation area.
7. The School Impact Analysis conclusion of no significant adverse impacts seems justified, although the Beacon City School District may have comments. If the full Instructional Budget is used to calculate the cost per student, without considering the 40% of the total budget covered by State aid, the estimated 8 to 13 students would result in a net annual surplus to the School District of \$88,192 for 8 students or a net annual loss of \$5,518 for 13 students.

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
Jeffrey Contelmo, P.E., Project Engineer



May 8, 2020

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

RE: Site Plan and Traffic Review #2 for **Beacon Views Townhomes**, Conklin Street, City of Beacon, NY; CM Project #119-056(4)

Dear Chairman Gunn:

Creighton Manning (CM) is in receipt of the documents listed below in response to our November 8, 2019, letter regarding the Beacon Views Townhomes, now consisting of 40 residential townhomes.

- Comment response letter prepared by Maser Consulting, PA, dated April 27, 2020
- Traffic Impact Study prepared by Maser Consulting, PA, revised March 26, 2020
- Layout and Landscape Plan prepared by Insite Engineering, Surveying and Landscape Architecture, PC, revised April 28, 2020

CM is satisfied with Maser's responses to comments 1, 2, 3, 4, and 7. We note that comments 3 and 4 will be fulfilled as part of the final site plan.

With regard to comment 5, at least 200 feet of intersection sight distance is shown to be provided at each of the driveways along the proposed access roadway except for one sight line that measures 160 feet. CM recommends that the applicant investigate measures to increase the sight line so that a minimum of 200 feet is provided.

With regard to comment 6, CM acknowledges that the Cover Sheet, CS-1, depicts the proposed roadway extension accessing the proposed cul-de-sac for 25 Townsend Street. CM recommends that the applicant address the potential need for and provide greater detail of the appropriate traffic control within and in advance of the cul-de-sac area to guide drivers. Possible traffic control measures that could benefit the operation and safety of the cul-de-sac include, but are not limited to:

- Painted or textured central island inside of cul-de-sac, or other markings, to promote traffic calming
- Stop control on the Beacon Views access roadway approach
- Advance signage alerting drivers that the roadway does not provide connectivity to other roadway networks
- Curbside parking restrictions within the cul-de-sac

If you have any questions about the above comments, please do not hesitate to contact our office at (914) 800-9201.

Respectfully,
Creighton Manning Engineering, LLP

A handwritten signature in blue ink, appearing to read "Frank A. Filiciotto", is written over the typed name.

Frank A. Filiciotto, PE

\\CME-FILE01\Company\Projects\2019\119-056 Beacon Traffic Reviews\Working\Correspondence\Beacon Views Townhomes_Review 2.docx

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 Lane, P.E., L.S.
Arthur R. Tully, P.E.

May 11, 2020

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 Beacon Views, located adjacent to the 25 Townsend project and The Highland Meadows Senior Housing parcel:

- Response correspondence from INSITE Engineering & Surveying, dated April 28, 2020.
- Report titled "Preliminary Water & Wastewater Engineering Report for Beacon Views", dated April 27, 2020, as prepared by INSITE Engineering & Surveying.
- Report titled "Wetland Evaluation and Impact Report – Beacon Views Site", dated March 14, 2020, as prepared by Ecological Solutions, LLC.
- Response correspondence from Maser Consulting, dated April 27, 2020, in response to Creighton Manning comments of November 8, 2019.
- Report titled "Traffic Impact Study – Beacon Views", with the latest revision date of March 26, 2020, as prepared by Maser Consulting.
- Report titled "Preliminary Stormwater Pollution Prevention Plan prepared for Beacon Views", dated April 28, 2020, as prepared by INSITE Engineering and Surveying.
- Plan titled "Preliminary Plat prepare for the Beacon Views", dated April 24, 2020, as prepared by INSITE Engineering and Surveying.
- Plan set titled "Beacon Views", with the latest revision date of April 28, 2020 and consisting of Sheets 1 of 11 through 11, as prepared by INSITE Engineering and Surveying.

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

General Comments:

1. The application is dependent upon the road proposed to be constructed as part the 25 Townsend Subdivision. Without this, the present proposal is not viable. What is the status of the 25 Townsend project, and when is the road proposed to be constructed? If the 25 Townsend project does not move forwards, what are the applicant's intentions with regards to providing access to the project site?

2. The engineering plans should be expanded to show all proposed improvements offsite as required by the agreement between the subject parcel and that of the Highlands Meadows Senior Housing parcel. This would include all sidewalks, lighting, landscaping, and any other site improvements as required by the easement agreement.
3. The current plans show an area of wetland mitigation to be on the subject parcel as well as on the Highland Meadows parcel. Documentation should be provided to the Planning Board Attorney showing that the applicant has approval to build a portion of the wetland mitigation on the neighboring parcel.
4. Profiles sheets shall be included in the plan set for the proposed water, sewer and drainage utilities proposed as part of the project.

Water & Sewer Report Comments:

1. The introduction, 2nd paragraph, shall be revised to note that this water line runs between the City of Beacon and the "Town" of Fishkill, not the Village of Fishkill.
2. Section 3.1 should be revised to reflect the "Town" of Fishkill, not the Village of Fishkill. Section 3.2 shall also be corrected accordingly.
3. The applicant's consultant will need to perform testing on the existing hydrants located along the existing water main that runs through the subject parcel and along Conklin Street to acquire the existing fire flows and pressures (static & residual) available. This information shall be provided in the report, along with a map showing what hydrants were used for flows and pressure reading.
4. The applicant's consultant shall revise the report to include calculations for expected fire flows and pressures at proposed project hydrants.
5. The 12" water line that currently runs through the project parcel is part of a 2001 agreement between the Town of Fishkill and the City of Beacon for the Rombout Water District. Section 15 of this agreement is titled "Third-Party Use of Purchasers' Transmission Line". Paragraph (b) of this section reads "The Transferred Line will pass through or adjacent to City properties which may in the future connect to the City's water supply system through the Transferred Line. Purchasers shall be entitled to recover a portion of their capital expenditure on the construction of the Transferred Line from properties connecting to that line. *No Applicant for connection shall be permitted to connect to the Transferred Line by the City of Beacon unless the applicant has paid a one time capital cost reduction fee (the "Connection Fee") to Purchasers...*" The applicant and their consultants will need to meet with the Town of Fishkill regarding this requirement prior to further advancement of the engineering plans for the water system. The applicant shall provide documentation from the Town of Fishkill noting their allowance for the project to make connection to the existing 12" water line.

6. With regards to the connection of the project sanitary sewer to the City's wastewater collection system, the project will need to have the sewer conveyance system modeled between the connection manhole on Conklin Street to the Beacon Wastewater Treatment Facility to ensure the system can handle the additional flows as proposed from the project, as previously noted in our September 2019 review correspondence. The City of Beacon currently uses HDR Engineer for modeling of their sanitary sewer collection and conveyance system. Based upon recent modeling completed for the 511 Fishkill Avenue project, sewer improvements are required along Fishkill Avenue to allow for the additional flows from that project so that the system is not impacted negatively. The modeling that was previously completed will need to be updated at this time to determine if there will be any impacts on the sewer system from this proposed project.

Wetlands Evaluation & Impacts Report Comments:

1. The report should be updated to reflect the actual acreage of wetlands that are to be disturbed by the proposed project and provide a plan to show the location and size of each of the disturbances.
2. The report shall be updated to reflect the impacts on the ecology on the site, especially those listed as "threatened or endangered".
3. The report should be updated to discuss any proposed mitigation that is proposed for the project. A plan should be included to show the location of the proposed mitigation, along with all the details as to how the mitigation will be performed.

Preliminary Subdivision Plat Comments:

1. Plat shall show all metes and bounds for all existing and proposed parcel boundary lines.
2. Plat shall show all proposed easements, along with the metes and bounds for those easements. Descriptions shall be prepared and provided to the Planning Board Attorney and City Engineer for review.
3. The plan shall clarify as to whether the wetlands is Federal or State wetlands.
4. The plan should be revised to reflect the significant existing retaining wall located along the driveway for the last residence located off Conklin Street. Topography should be checked and revised accordingly to accurately reflect this area in relationship to the retaining wall.
5. The Now & Formerly should be provided for the last residence located on Conklin Street, located adjacent to the project parcel. We also recommend that the names of the neighboring parcels along Conklin Street also be checked, as they do not appear to correspond with tax parcel data from Dutchess County.

Existing Conditions Plan (Sheet 2 of 11):

1. The plan should be updated to show the significant retaining wall located along the driveway for the Blumenthal residence located on Conklin Street, adjacent to the subject parcel.
2. The plan should be updated to note the wetlands shown are Federal and provide a note as to when they were delineated and by whom.

Layout & Landscape Plan (Sheet 3 of 11):

1. The sight distance measurements should be updated to reflect the actual sight distances that will be achievable.
2. The proposed plantings on the site should be labeled as to what they are in relationship to the planting schedule on the plan.
3. The "Sign Data Table" should be updated to include "Stop" signs.
4. The plan should be updated to show the location of all signage as outlined in the "Sign Data Table".
5. Based upon the lot lines shown for each of the parcels for the town houses, it appears that the rear boundary line running behind units 1 through 13 runs within the common access drive to be accessed by all residents. Either an easement will need to be provided between this proposed boundary line and the end of the curb islands, or the rear lot lines adjusted, to allow for passage of project residents over this area.

Grading & Utilities Plan (Sheet 4 of 11):

1. The plan should be updated to reflect the wetland mitigation area as shown on the "Layout & Landscape" plan. Plan should show all proposed grading that may be associated with this proposed area and anything else as related to the construction of this area.
2. Proposed drainage swale lines shown on the plan shall be graded out and spot elevations provided along their lengths.
3. Grading for the proposed walking path heading to the north behind unit 14 through 20 should be provided on the plans. It also appears that current proposed grading between units 20 and 21 will need to be revised for the walking path.
4. The units on the plan should be numbered as on the "Layout & Landscape" plan.
5. The water line running along the front of units 35 through 40 should be provided at the end of this line to allow for blowoff of the line since this is a dead-end line.

6. The location of all valves on the main water line shall be shown on the plan.
7. The plan should clearly note that area of wetland disturbance at each location where wetlands are to be disturbed.
8. The plan shall be revised to show the significant retaining wall located along the driveway for the Blumenthal residence.
9. Additional details shall be provided with regards to the construction of the sewer line out to the existing sanitary sewer manhole in Conklin Street, as this will have a significant impact on the existing retaining wall along the Blumenthal driveway and will also impact access for 2 or 3 of the residents in their ability to have access to their residence. Information shall be provided clearly showing/noting how the residents will have unobstructed access to their respective residences during construction of the sewer line.
10. The plans should be submitted to Emergency Services to allow for their review of site access and layout of hydrants, or any additional locations where they may require hydrant on the site.
11. Top and bottom elevations shall be provided on proposed retaining walls.
12. Outlet protection should be provided at ES 8, ES 21, ES 23 and ES 29.

Details Plan (Sheet 7 of 11):

1. The "Right of Way Asphalt Detail" shall be updated to reflect a 3.5" binder course and the subbase to be 12" thick.
2. The light-pole base shall provide the diameter and overall length of the light pole.
3. All sidewalks within the City's proposed right-of-way shall be constructed of 4,000 psi concrete, shall be fiber reinforced and shall be sealed with a concrete sealer to protect against de-icing agents.
4. The size of the wire mesh proposed within the sidewalks shall be noted on the plan.

SWPPP Comments:

1. The chosen study point seems to be an arbitrary line that was picked and does not account for all areas of proposed construction (i.e. sewer line going out to Conklin Street) and should be revised accordingly.
2. The overall catchment to the study point should be revised to remove the portion of the catchment shown in the Northern area that does not drain in the direction (South) of the proposed project.

3. The overall catchment should be revised to include the areas of Conklin St and De Soto Ave that drain to "ES 24", improvements are shown in this area but are shown after the proposed study point.
4. The overall catchment should be revised to include the areas of the former St. Francis Hospital that will drain onto the proposed access road and then into the wet pond.
5. Post Dev catchment 1.1S & 1.2S should be revised to account for potential stormwater that will drain onto the site from the proposed access road to the approved subdivision for 25 Townsend Street.
6. Delineate the line where the topography shown changes from field data to an alternate data source.
7. Each Pre and Post sub-catchment should be explained. (i.e. what is being constructed in this area, how will stormwater be collected, how will stormwater be treated, amount of impervious cover, etc.)
8. Post-Dev catchment 1.1S should have the time of concentration revised to be the hydraulically most distant point.
9. Post-Dev catchment 1.0S should have time of concentration revised, does not match linework shown on Post-Dev map.
10. All swale grading should be shown.
11. Reaches should be added to the outlet of the proposed wet pond and underground infiltration to include the time it would take to traverse across the wetland to the proposed study point.
12. Reaches should be shown and labeled on the post-dev map.
13. Figure 4 shows a deep test result for D-2 as 2"-8"+ but then states ground water at 18", please clarify
14. Infiltration testing will be required to be performed prior to acceptance of the SWPPP. This required testing shall be witnessed by the City's Engineer, and applicant's consultant shall contact City's Engineer at least 1-week in advance to schedule joint site testing.
15. The New York State Stormwater Design Manual states that P-2 Wet Ponds should have a minimum contributing area of 25 acres, the pond design currently has a contributing area of approximately 3.5 acres.
16. The chosen Hydro Dynamic separator does not meet the NYSDEC requirements of 80% TSS removal and 40% phosphorus removal.
17. Provide CPv volume calculation.

18. It is stated that "the proposed I-4 subsurface infiltration system has been designed to fully infiltrate the stormwater runoff from the 1-year, 24-hour design storm event" but the information provided in appendix C shows that Pond 1.2P (subsurface infiltration) has an outflow of 0.03 cfs or 0.082 Ac-Ft (3,572 Cu.Ft.) in the 1 year 24-hour storm event.
19. Include pre and post 1-Year storm peak flows within table 2.4.1.
20. Provide Construction Sequence within the SWPPP
21. Provide erosion control measures for Phase 3 of the project as some disturbance will be require for walking path & passive recreation area installation.
22. Using the NYSDEC EAF mapper it indicated that the site is located in an archeological sensitive area and has threatened or endangered animals, specifically the Indiana Bat. This should be mentioned within the SWPPP and a copy of the short EAF should be provided within the SWPPP.
23. As the NYSDOT correspondence of October 21, 2019 is requesting a copy of the drainage study for the project, we would recommend that the SWPPP be expanded to show how flows from the project drain to the Fishkill Creek, and model all culvert crossings below the project site to ensure that they can handle any additional flows form the project site without negatively impacting the existing drainage system down stream of the site.

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
5/12/2020

Title:

416 Main Street

Subject:

Review application for Site Plan Approval, retail/residential, 416-420 Main Street, mixed-use commercial, office & residential development, submitted by 416 Main Street Beacon, LLC & 420 Main Street, LLC (D/B/A 420 Main St., LLC)

Background:

ATTACHMENTS:

| Description | Type |
|--|--------------------|
| 416-420 Main Street Cover Letter | Cover Memo/Letter |
| 416-420 Main Street Engineer Project Narrative | Cover Memo/Letter |
| 416-420 Main Street Application for SUP | Application |
| 416-420 Main Street Entity Disclosure Form | Application |
| 416-420 Main Street Short EAF | EAF |
| 416-420 Main Street Subdivision Plat | Plans |
| 416-420 Main Street Sheet 1 Site Plan | Plans |
| 416-420 Main Street Sheet 2 Existing Condition Demolition Plan | Plans |
| 416-420 Main Street Sheet 3 Landscape and Lighting Plan | Plans |
| 416-420 Main Street Sheet 4 Floor Plans | Plans |
| 416-420 Main Street Sheet 5 Building Elevations and Views | Plans |
| 416-420 Main Street Sheet 6 Grading Plan | Plans |
| 416-420 Main Street Sheet 7 Erosion Control | Plans |
| 416-420 Main Street Sheet 8 Utility Profiles | Plans |
| 416-420 Main Street Sheet 9 Construction Details 1 | Plans |
| 416-420 Main Street Sheet 10 Construction Details 2 | Plans |
| 416-420 Main Street Traffic Study | Backup Material |
| 416-420 Building Elevations | Backup Material |
| Planner Review Letter | Consultant Comment |
| Traffic Engineer Review Letter | Consultant Comment |
| Engineer Review Letter | Consultant Comment |



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Taylor M. Palmer, Esq.
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April 28, 2020

VIA E-MAIL

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

Re: Application for Special Use Permit, Subdivision (Lot Line Change) & Site Plan Approvals
Office, Commercial and Residential Mixed-Use Development
Premises: 416-420 Main Street, Beacon, New York
Tax Parcel IDs: (6054-29-056780 & 6054-29-056774)

Dear Chairman Gunn and Members of the Planning Board:

On behalf of 416 Main Street Beacon, LLC and 420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC (collectively, the "Applicant"), the owners of the above-referenced Premises, we respectfully submit this letter and the referenced enclosures in support of an Application for a Special Use Permit Approval (the "SUP Application")¹ proposing to redevelop the Premises for a proposed zoning-compliant 16,848 sq. ft. mixed-use office, commercial and limited residential development, including a large green space area as the property transitions northeast to South Street. See Attached Site Plans & Renderings.

The Project consists of two (2) buildings, the first of which is a proposed 14,703 sq. ft. mixed-use building with frontages along Main Street and Schenck Avenue that will be comprised of a 4,616 sq. ft. ground floor retail space (1,675 sq. ft. of which consists of the existing Kitchen & Coffee space – formerly Ella's Bellas),² as well as 7,872 sq. ft. of commercial office space on the second and third floors and 2,215 sq. ft. of residential space containing two (2) apartment units on the stepped-back fourth floor. The proposed mixed-use building will include improvements on the presently vacant 416 Main Street parcel, as well as vertical improvements above the existing building located at 418-420 Main Street, which structure will be maintained. The Applicant also

¹ Note: The Application also involves the removal of the existing lot line (Subdivision Approval) and Site Plan review by the City of Beacon Planning Board. Additionally, in accordance with the City of Beacon Zoning Code Section 223-18(B)(1), an "[a]pplication for required special permits shall be made to the Planning Board as agent for the City Council..."

² Note: The Kitchen & Coffee commercial space will remain.



proposes to construct a 2,145 sq. ft. single family home, artist/live work space in the rear of the Premises, fronting on South Street.

PROJECT BACKGROUND:

The 416-420 Main Street Premises is unique property in the City of Beacon as it is “split-zoned” between two (2) of the City’s Commercial Zoning Districts, including the Central Main Street District (“CMS”) and the Business Off-Street Parking District (“PB”). The Premises is presently comprised of two (2) lots, which the Applicant proposes to consolidate into one (1) resultant lot.³ The proposed mixed-use building is located exclusively on the portion of the Premises zoned CMS, and the limited residential structure located in the rear of the Premises is on the portion of the Premises that is *presently* zoned PB.

As this Board may be aware, since 2019 the Applicant has been closely monitoring the City Council’s efforts to update the City’s Zoning Tables, as well as the City Council’s proposed zoning map amendments for properties that are presently classified in the PB, OB and LB Zoning Districts, which properties are anticipated to be rezoned into a new “Transitional (“T”)” Zoning District. Recognizing the importance of these zoning changes and the transition between Main Street and the surrounding mixed-use and residential neighborhoods that support Main Street, the Project was designed in furtherance of the City’s efforts to bring office and commercial to Main Street while respecting the community character of the surrounding neighborhood. Given the above, and as is more fully detailed in the zoning table in the enclosed Site Plans, the residential structure in the rear portion of the Premises has also been designed to be zoning-compliant under both PB and T zoning regulations. We would also note that the proposed zoning amendments referenced herein *would not* impact the proposed zoning-compliant mixed-use building located in the portion of the Premises that is zoned CMS.

Give the above, as a Beacon resident the Applicant desires to redevelop the Premises to increase the attractiveness of the property along Main Street and to support the vitality and sustainability of the Main Street corridor with mixed-uses. Accordingly, the development program for this mixed-used Project is designed to be consistent with the traditional character of Main Street in the City’s Historic District Overlay (“HDLO”) Zone.

PROCEDURAL INFORMATION:

In order for the Applicant to proceed before this Board in connection with the Site Development

³ **Note:** The Applicant proposes to own both of the proposed buildings on the resultant one (1) lot in a condominium ownership structure, which has been discussed and reviewed with the City Attorney in anticipation of this Application submission.

Plan,⁴ Subdivision (Lot Line Change) and Architectural Review Board Approvals, the Applicant also requires a Special Use Permit for the proposed fourth-story tower for this corner lot, together with the proposed fourth-story 15-ft. setback on both the Main Street and Schenck Avenue frontages for the (2) apartment units proposed in the mixed-use building. *See* Attached Site Plans & Renderings. We would also highlight that but for the proposed fourth-story improvements, the mixed-uses proposed for the Premises would otherwise be considered permitted uses. As noted above, the instant Application is also fully zoning-compliant, and does not require any variances from the Zoning Board of Appeals.

The Applicant respectfully requests to appear at the Planning Board's May 12th meeting in order to discuss the Project with this Board and in order to initiate the environmental review process pursuant to the State Environmental State Environmental Quality Review Act ("SEQRA"). The proposed Project is classified as an Unlisted Action pursuant to SEQRA, and an Environmental Assessment Form ("EAF") for the Project is enclosed herein as **Exhibit A**.

THE PROPOSED PROJECT SATISFIES THE SPECIAL USE PERMIT CRITERIA:

Pursuant to N.Y. Gen. City Law § 27-b and City of Beacon Zoning Code § 223-18 (the "Special Permit Provisions"), special uses shall be deemed to be principally permitted use in their respective districts, subject to the standards set forth in Zoning Code § 223-18.⁵

According to the New York Court of Appeals, New York's highest court, generally:

a special exception [permit/use] gives permission to use property in a way that is consistent with the zoning ordinance, although not necessarily allowed as of right. The significance of this distinction is that the 'inclusion of the permitted use in the ordinance is tantamount to a legislative finding that the permitted use is in harmony with the general zoning plan and will not adversely affect the neighborhood'...⁶

⁴ This Application for Site Plan Approval, including this narrative and the referenced enclosures, are submitted in accordance with the procedures for Site Development Plan Review detailed in Zoning Code Section 223-41.13(G).

⁵ Note: A copy of the fully executed Special Use Permit Application Form is enclosed as **Exhibit B**.

⁶ Retail Prop. Trust v. Bd. of Zoning Appeals of Town of Hempstead, 98 N.Y.2d 190, 195, 774 N.E.2d 727 (2002) (*citing* Matter of North Shore Steak House v. Board of Appeals of Inc. Vil. of Thomaston, 30 N.Y.2d 238, 243 (1972) [citations omitted]); *see also* Nathan v. Bd. of Appeals of Town of Hempstead, 125 A.D.3d 866, 5 N.Y.S.3d 127 (N.Y. App. Div. 2015) (holding that "[a]n applicant for a special exception permit need only show that it has complied with every legislatively imposed condition on the permitted use"); *see also* Juda Const., Ltd. v. Spencer, 21 A.D.3d 898, 900, 800 N.Y.S.2d 741, 743 (2005) (the Supreme Court, Appellate Division, Second Department held that "[a] use permitted by special exception use permit is a use that has been found by the local legislative body to be appropriate for the zoning district and 'in harmony

In considering the SUP Application, Zoning Code §223-18(B)(1) directs that the City Council shall consider the following standards and conditions:

- (a) The location and size of the use, the nature and intensity of the operations involved in or conducted in connection with it, the size of the site in relation to it and the location of the site with respect to streets giving access to it are such that it will be in harmony with the appropriate and orderly development of the district in which it is located.
- (b) The location, nature and height of buildings, walls and fences and the nature and extent of the landscaping on the site are such that the use will not hinder or discourage the appropriate development use of adjacent land and buildings.
- (c) Operations in connection with any special use will not be more objectionable to nearby properties by reason of noise, fumes, vibration or other characteristic than would be the operations of any permitted use, not requiring a special permit.
- (d) Parking areas will be of adequate size for the particular use and properly located and suitably screened from adjoining residential uses, and the entrance and exit drives shall be laid out so as to achieve maximum safety.

As this Board is aware, the CMS District is designed to increase the vitality, attractiveness, and marketability of Main Street, as recommended in the City of Beacon Comprehensive Plan Update adopted on April 3, 2017.⁷ There will be no adverse effects of noise, vibrations, odor, traffic, or impact on public services caused by the proposed Project and it is respectfully submitted that the proposed the commercial and office uses proposed in this Project further these goals.

Additionally, the Project is also built to be consistent with the character of the existing Beacon Hotel and the uses along the Main Street frontage that the Premises share. In addition to its design-compatibility with the historic character of adjacent and nearby buildings in the HDLO, the proposed mixed-use building is also designed the ensure that there are no substantial detrimental effects from shadows, parking or traffic, which is consistent with the findings prescribed in City of Beacon Zoning Code (the “Zoning Code”) Section 223-41.18. See attached Site Plans & Renderings & **Exhibit C** – Traffic & Parking Study. Indeed, the Applicant’s Traffic Consultant, Maser Consulting P.A., prepared a Traffic Impact Study & Parking Analysis (“Traffic & Parking Study”) for consideration during the SEQRA review process. The Traffic & Parking Study evaluated the proposed entry and exit points of the Premises and the potential traffic and parking impacts associated with the proposed Project. Ultimately, the TIS concludes that similar levels of service and delays will be experienced at the area intersections under the future No-Build and Build Conditions. See **Exhibit C** - Traffic & Parking Study at page 15. Additionally, the Traffic & Parking Study concludes that parking needs for the proposed development can be

with the general zoning plan and will not adversely affect the neighborhood” [citations omitted] and further held that “[t]he [special] permit must be granted if the application satisfies the criteria set forth in the zoning law (*citing* Matter of Pleasant Val. Home Constr. v. Van Wagner, 41 N.Y.2d 1028, 1029, 395 N.Y.S.2d 631, 363 N.E.2d 1376).

⁷ See ZONING CODE Section 223-41.16.

accommodated by the public parking in the vicinity of the Premises during both Weekday and Weekend peak parking periods. See **Exhibit C** - Traffic & Parking Study at page 15.

It is also important to note that even in these uncertain times, the Applicant proposes to further the City's efforts to bring office space to Main Street through the development of the proposed Project. At the same time, the location, size, nature, and intensity of the proposed Project is in harmony with the appropriate and orderly development of the CMS and PB Zoning Districts, and the Project even contemplates potential zoning amendments including the formation of the T Zoning District. As noted above, in addition to monitoring the City's efforts regarding the new T Zoning District, the Applicant has also reviewed the City Council's Work Sessions and Regular Meeting discussions regarding potential changes that would be applied to projects in the CMS Zoning District that propose fourth stories. Accordingly, the development program for the Project also incorporates public benefits, including green building designs, green space between the mixed-use building and the proposed residential building and the development of two (2) upper floors of commercial office space right on Main Street. See attached Site Plans & Renderings.

It is respectfully submitted that the proposed Project complies with these legislatively imposed criteria and will have no adverse impacts on the neighborhood as demonstrated herein.

CONCLUSION:

For the foregoing reasons, and as will be further discussed at this Board's May 12th regular meeting and the subsequent Public Hearings before the Board and the City Council on this Project, the Applicant respectfully submits that the proposed Project satisfies the purposes of the CMS and PB zoning districts by providing a mix of commercial, office and residential uses that will add handsome architectural features and add to the vibrancy of Main Street

In support of this Application, please find enclosed the following documents:⁸

- Exhibit A:** Short Environmental Assessment Form;
- Exhibit B:** Application for Special Use Permit Approval;
- Exhibit C:** Traffic Impact Study & Parking Analysis prepared by Maser Consulting P.A., dated April 28, 2020;
- Exhibit D:** Engineer Project Narrative, prepared by Hudson Land Design; and
- Exhibit E:** Entity Disclosure Form.

In further support of this Application, we respectfully submit copies of the site plans and renderings entitled "Site Plan Application – 416-420 Main Street", prepared by Aryeh Siegel, Architect, and Hudson Land Design Professional Engineering, P.C., dated April 28, 2020, numbered and titled as follows:

⁸ Note: Pursuant to our communications with the City of Beacon Building Department, only electronic submissions are requested at this time.

- Sheet 1 of 1 – Preliminary Subdivision Plat;
- Sheet 1 of 10 – Site Plan;
- Sheet 2 of 10 – Existing Conditions & Demolition Plan;
- Sheet 3 of 10 – Landscape Plan & Planting Schedule;
- Sheet 4 of 10 – Building Plans;
- Sheet 5 of 10 – Building Plans & Renderings;
- Sheet 6 of 10 – Grading & Utility Plan;
- Sheet 7 of 10 – Erosion and Sediment Control Details;
- Sheet 8 of 10 – Utility Profiles;
- Sheet 9 of 10 – Construction Details; and
- Sheet 10 of 10 – Construction Details

Additionally, we understand that the Applicant mailed e-check payable to the City of Beacon in the amount of \$5,243.75, representing the Application filing fee, as well as a second check payable to the City of Beacon in the amount of \$8,000, for the establishment of an escrow for professional fees.⁹

We look forward to appearing at this Board's regular meeting on Tuesday, May 12th in order to initially review the proposed Project and to initiate the environmental review process. 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.
Aryeh J. Seigel Architect
Michael A. Bodendorf, P.E. – Hudson Land Design Professional Engineering, P.C.

⁹ Note: An existing escrow is on file in the amount of \$1,500.



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

April 28, 2020

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

Re: 416-420 Main Street Subdivision, Site Plan and Special Use Permit
416-420 Main Street
Tax parcels: 6054-29-056780, ±0.18 ac. (416 Main Street)
6054-29-056774, ±0.07 ac. (418-420 Main Street)
City of Beacon, NY

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) has been retained by the Applicant to prepare engineering plans and supporting materials in support of the proposed development located at 416-420 Main Street. In short, The site, which is currently partially unoccupied, is proposed to consist of two buildings totaling 16,848 sq. ft. including 14,703 sq. ft. at the front building (fronting Main Street) and 2,145 sq. ft. at rear building (fronting South Street). The front building will consist of an addition to the existing building at 420 Main, and new building addition extending onto 416 Main Street. The front building will consist of a total of 4,616 sq. ft. of first floor retail space, which will include the existing 1,675 sq. ft. Kitchen & Coffee (formerly Ella's Bellas Café) that will remain, as well as 7,872 sq. ft. of commercial office space on the second and third floors and 2,215 sq. ft. of residential space containing two residential apartment units on the fourth floor. The rear building will consist of a 2,145 sq. ft. residential space that will contain either one (1) residential apartment under the PB zone or one (1) artist live/work unit under the forthcoming Transitional Zoning. The Site will provide limited parking facilities with one driveway connection to Schenck Avenue for two (2) off-street parking spaces that will be provided for use of the front building while a second driveway connection will be provided to South Street for use by the residential building to the rear of the property, which will also be provided two (2) off-street parking spaces. The two lots will be consolidated as part of the proposal.

Enclosed electronically for your continued review is the following:

- Short Form EAF (1 copy);
- Preliminary Subdivision Plat Sheet 1 of 1 (1 copy);
- Site Plan set consisting of 10 sheets (1 copy), and

Please note that HLD has prepared Sheets 6 through 10 of the site plan set, and Aryeh Siegel has prepared Sheets 1 through 5. We look forward to discussing this project at your next available planning board agenda. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,

A handwritten signature in black ink, appearing to read "Mr. Bodendorf". The signature is fluid and cursive, with a large, stylized "B" and "D".

Michael A. Bodendorf, P.E.
Principal

cc: 416 Main Street Beacon, LLC & 420 Main Street Beacon, LLC
Taylor Palmer, Esq.
Aryeh Siegel, AIA
Daniel G. Koehler, P.E. (HLD file)

APPLICATION FOR SPECIAL USE PERMIT

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

IDENTIFICATION OF APPLICANT

Name: 416 Main Street Beacon, LLC and 420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC
Address: 688 Broadway, New York, NY 10012

Signature: _____
Date: April 28, 2020
Phone: (347) 559-0880

(For Official Use Only)

Application & Fee Rec'd _____
Initial Review _____
PB Public Hearing _____
Sent to City Council _____
City Council Workshop _____
City Council Public Hearing _____
City Council Approve/Disapprove _____

Date Initials

IDENTIFICATION OF REPRESENTATIVE / DESIGN PROFESSIONAL

Name: Cuddy + Feder LLP
Address: 445 Hamilton Avenue, 14th Floor, White Plains, NY 10601

Phone: (914) 761-1300
Fax: (914) 761-5372
Email address: tpalmer@cuddyfeder.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: 416-420 Main Street, Beacon, NY 12508

Tax Map Designation: 130200-6054-29-056780-0000 and 130200-6054-29-056774-0000

Land Area: 0.245 Zoning District(s) CMS / PB (Note: PB Zoning Changing to Transitional)

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: Mixed-Use Commercial, Office & Residential Development

Gross Non-Residential Floor Space: Existing (Former Ellas Bella's Space) 1,675 sq. ft. Proposed _____

TOTAL: _____

Dwelling Units (by type): Existing 0 Proposed 3

TOTAL: 2 Apartments in Mixed-Use Building & 1 Unit in the Single-Family Live/Work Structure in the Rear of the Premises.

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.
- a. 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.
- a. 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.
- 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 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

| <i>* if required by Chairman</i> | 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)*

| <i>* if required by Chairman</i> | 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: 416 Main Street Beacon, LLC and 420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC

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

Thomas Lee

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

Applicant Address: 319 Lafayette #151, New York, NY 10012

Project Address: 416-420 Main Street, Beacon, NY 12508

Project Tax Grid # 130200-6054-29-056780-0000 and 130200-6054-29-056774-0000

Type of Application Special Permit and Subdivision (Lot Line Removal) for Mixed-Use Project

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, Thomas Lee, 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

416 Main Street Beacon, LLC and 420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC

By:


Signature of Owner (Thomas Lee)

Principal

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: 416 Main Street Beacon, LLC and 420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC

| 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. | | ✓ |

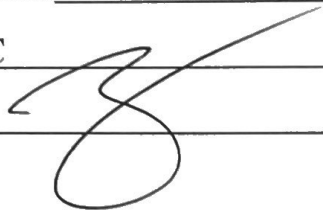
For all items marked "NO" above, please explain below why the required information has not been provided:

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

Applicant/Sponsor Name: 416 Main Street Beacon, LLC and 420 Main Street, LLC, D/B/A 420

Main St. Beacon, LLC

Signature: _____

A handwritten signature in black ink, consisting of a large, stylized 'B' or similar character, written over the signature line.

| |
|----------------------------|
| 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 |
| 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 416 Main Street Beacon, LLC 420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC | Telephone Contact Information 347-559-0880 |
| Principal Place of Business of Entity 319 Lafayette #151; New York, NY 10012 | Place and Date of incorporation NYS DOS September 18, 2019 (416 Main Street) NYS DOS October 23, 2019 (420 Main Street) |
| Method of Incorporation Foreign Limited Liability Company | Official place where the documents and papers of incorporation were filed NYS Department of State |

SECTION B. List all persons, officers, limited or general partners, directors, members, shareholders, managers, and any others with any interest, mortgage, encumbrance or other interest (recorded or unrecorded) in or with the above referenced Entity. List all persons to whom corporate stock has been pledged, mortgaged or encumbered and with whom any agreement has been made to pledge, mortgage or encumber said stock. Use a supplemental sheet to list additional persons.

| Name | Resident Address | Resident Telephone Number | Nature and Extent of Interest |
|------------|------------------------------------|---------------------------|-------------------------------|
| Thomas Lee | 688 Broadway New York, NY 10012 | 347-559-0880 | 100% - Principal |
| | | | |
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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. |
|--|--|------------------|------------------------------------|---|
| 416 Main Street Beacon, LLC | 319 Lafayette #151; New York, NY 10012 | 347-559-0880 | Deed | Dutchess County Clerk recorded on 9/17/19 as Document No. 02-2019-6077 |
| 420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC | 319 Lafayette #151; New York, NY 10012 | 347-559-0880 | Deed | Dutchess County Clerk recorded on 11/21/19 as Document No. 02-2019-50684 |
| | | | | |
| | | | | |

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 |
|--------------|-------------|
| | |
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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 |
|--|--|
| 420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC | 319 Lafayette #151 New York, NY 10012 |
| 416 Main Street Beacon, LLC | 319 Lafayette #151 New York, NY 10012 |
| McDemott Properties | 48 Foxboro Road Essex, CT 06426 |
| DTE Diversified LLC | 33 Henry Street Beacon, NY 12508 |
| EB I, LLC and Ella's Bellas Bakery, LLC | 418 Main Street Beacon, NY 12508 |

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.

N/A

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 420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC 416 Main Street Beacon, LLC | Telephone Contact Information 347-559-0880 |
| Principal Business Address 319 Lafayette #151, New York, NY 10012 319 Lafayette #151, New York, NY 10012 | Place and Date of Incorporation October 23, 2019 & Sept. 18, 2019 |

| | |
|--|--|
| Method of Incorporation Foreign LLC | Official place where the documents and papers of incorporation were filed NYS DOS |
|--|--|

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

| Name | Residence or business address | Telephone number |
|------------|------------------------------------|------------------|
| Thomas Lee | 688 Broadway New York, NY 10012 | 347-559-0880 |
| | | |
| | | |
| | | |
| | | |

3. Have any shares of the stock of the corporation or of any stockholder been pledged, mortgaged or encumbered?

YES

X

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.

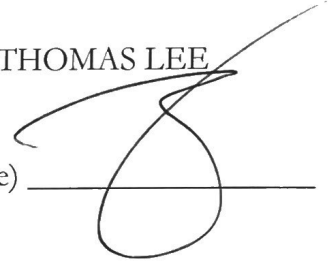
YES

X NO

I, THOMAS LEE being first duly sworn, according to law, deposes and says that I am (Title) Principal, an active and qualified member of the 416 Main Street Beacon, LLC and 420 Main Street, LLC, D/B/A 420 Main St. Beacon, 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) THOMAS LEE

(Signature) _____

A handwritten signature in black ink, appearing to be 'THOMAS LEE', written over a horizontal line. The signature is stylized with a large loop and a long horizontal stroke extending to the right.

Short Environmental Assessment Form

Part 1 - Project Information

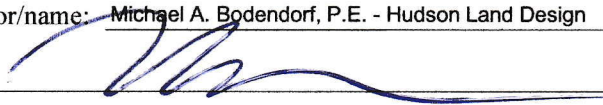
Instructions for Completing

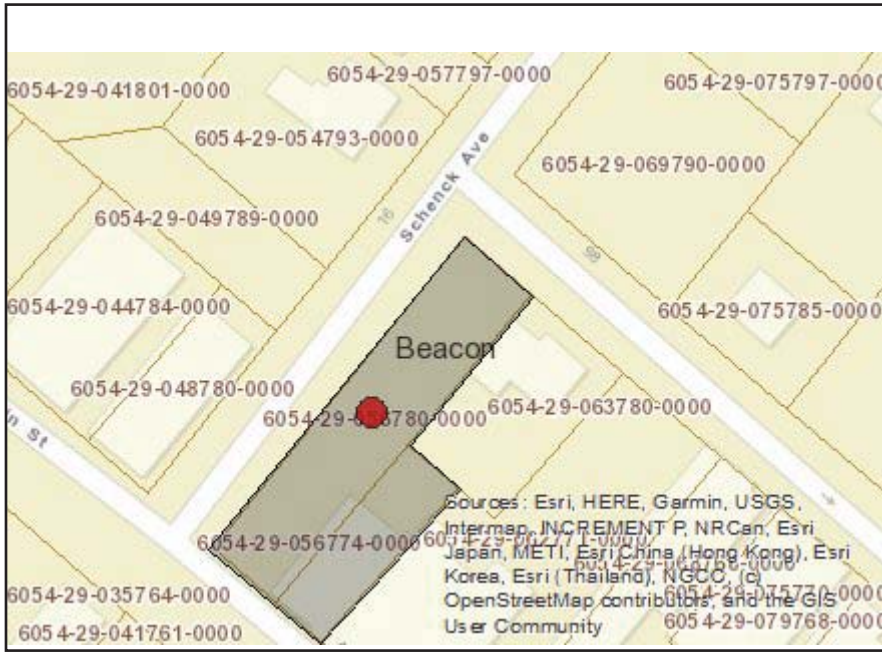
Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

| Part 1 – Project and Sponsor Information | | | |
|---|--|---------------------------|-------------|
| 416 Main Street Beacon, LLC & 420 Main Street, LLC D/B/A 420 Main St. Beacon, LLC | | | |
| Name of Action or Project: | | | |
| 416-420 Main Street Site Plan, Subdivision & Special Permit Applications | | | |
| Project Location (describe, and attach a location map): | | | |
| 416-420 Main Street Beacon, NY 12508 | | | |
| Brief Description of Proposed Action: | | | |
| The site, which is currently partially unoccupied, is proposed to consist of two buildings totaling 16,848 sq. ft. including 14,703 sq. ft. at the front building (fronting Main Street) and 2,145 sq. ft. at rear building (fronting South Street). The front building will consist of an addition to the existing building at 420 Main, and new building addition extending onto 416 Main Street. The front building will consist of a total of 4,616 sq. ft. of first floor retail space, which will include the existing 1,675 sq. ft. Kitchen & Coffee (formerly Ella's Bellas Café) that will remain, as well as 7,872 sq. ft. of commercial office space on the second and third floors and 2,215 sq. ft. of residential space containing two residential apartment units on the fourth floor. The rear building will consist of a 2,145 sq. ft. residential space that will contain either one (1) residential apartment under the PB zone or one (1) artist live/work unit under the forthcoming Transitional Zoning. The Site will provide limited parking facilities with one driveway connection to Schenck Avenue for two (2) off-street parking spaces that will be provided for use of the front building while a second driveway connection will be provided to South Street for use by the residential building to the rear of the property, which will also be provided two (2) off-street parking spaces. The two lots will be consolidated as part of the proposal. | | | |
| Name of Applicant or Sponsor: | | Telephone: 347-559-0880 | |
| Mr. Thomas Lee | | E-Mail: spamtom@gmail.com | |
| Address: | | | |
| 319 Lafayette #151 | | | |
| City/PO: | | State: | Zip Code: |
| New York | | NY | 10012 |
| 1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? | | | NO |
| 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. | | | YES |
| 2. Does the proposed action require a permit, approval or funding from any other government Agency? | | | NO |
| If Yes, list agency(s) name and permit or approval: City Council - Special Use Permit; Building Department - Building Permit; Dutchess County Dept. of Health - Plat | | | YES |
| 3. a. Total acreage of the site of the proposed action? | | | 0.245 acres |
| b. Total acreage to be physically disturbed? | | | 0.245 acres |
| c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? | | | 0.245 acres |
| 4. Check all land uses that occur on, are adjoining or near the proposed action: | | | |
| 5. <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban) | | | |
| <input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other(Specify): | | | |
| <input type="checkbox"/> Parkland | | | |

| 5. Is the proposed action, | NO | YES | N/A |
|--|---|---|--------------------------|
| a. A permitted use under the zoning regulations? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Consistent with the adopted comprehensive plan? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 6. Is the proposed action consistent with the predominant character of the existing built or natural landscape? | NO <input type="checkbox"/> | YES <input checked="" type="checkbox"/> | |
| 7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____ | NO <input checked="" type="checkbox"/> | YES <input type="checkbox"/> | |
| 8. a. Will the proposed action result in a substantial increase in traffic above present levels? b. Are public transportation services available at or near the site of the proposed action? c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action? | NO <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | YES <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> | |
| 9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ _____ | NO <input type="checkbox"/> | YES <input checked="" type="checkbox"/> | |
| 10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ _____ | NO <input type="checkbox"/> | YES <input checked="" type="checkbox"/> | |
| 11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ _____ | NO <input type="checkbox"/> | YES <input checked="" type="checkbox"/> | |
| 12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? CRIS identifies 416 & 418-420 Main St. as eligible for listing on the NYS Register of Historic Places. Beacon Upper Main Historic Dist. b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? | NO <input type="checkbox"/> <input type="checkbox"/> | YES <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> | |
| 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: _____ _____ _____ | NO <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> | YES <input type="checkbox"/> <input type="checkbox"/> | |

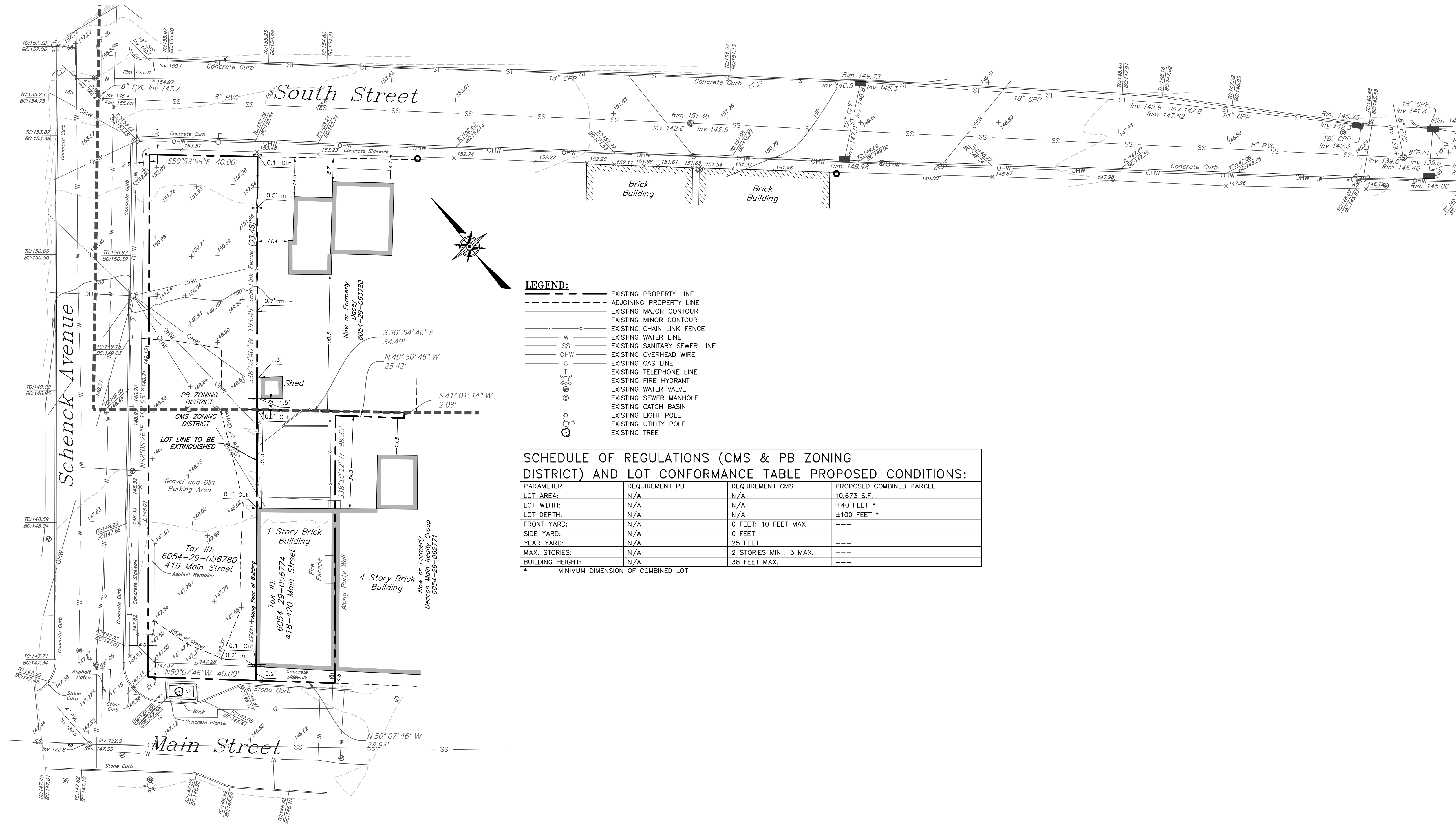
| | | |
|--|-------------------------------------|-------------------------------------|
| 14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: | | |
| <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input checked="" type="checkbox"/> Urban <input checked="" type="checkbox"/> 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 | NO | YES |
| | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 16. Is the project site located in the 100-year flood plan? | NO | YES |
| | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: Stormwater generated from new impervious surfaces will be collected by a proposed stormwater collection system and convey it to the existing stormwater collection system within South Street. Two new catch basins will be installed on South Street. | NO | YES |
| | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment: | NO | YES |
| | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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: | NO | YES |
| | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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: This question was auto filled by the NYSDEC EAF Mapper. Further research of the NYSDEC spill database turned up no results for the subject parcels or surrounding adjacent parcels. | NO | YES |
| | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor/name: <u>Michael A. Bodendorf, P.E. - Hudson Land Design</u> Date: <u>April 28, 2020</u> Signature: <u></u> Title: <u>Engineer for Applicant</u> | | |



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



| | |
|---|-------------|
| Part 1 / Question 7 [Critical Environmental Area] | No |
| Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites] | Yes |
| 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 |



LEGEND:

- EXISTING PROPERTY LINE
- - - ADJOINING PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- - - EXISTING CHAIN LINK FENCE
- W EXISTING WATER LINE
- SS EXISTING SANITARY SEWER LINE
- OHW EXISTING OVERHEAD WIRE
- G EXISTING GAS LINE
- T EXISTING TELEPHONE LINE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING SEWER MANHOLE
- EXISTING CATCH BASIN
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING TREE

SCHEDULE OF REGULATIONS (CMS & PB ZONING DISTRICT) AND LOT CONFORMANCE TABLE PROPOSED CONDITIONS:

| PARAMETER | REQUIREMENT PB | REQUIREMENT CMS | PROPOSED COMBINED PARCEL |
|------------------|----------------|------------------------|--------------------------|
| LOT AREA: | N/A | N/A | 10,673 S.F. |
| LOT WIDTH: | N/A | N/A | ±40 FEET * |
| LOT DEPTH: | N/A | N/A | ±100 FEET * |
| FRONT YARD: | N/A | 0 FEET; 10 FEET MAX | --- |
| SIDE YARD: | N/A | 0 FEET | --- |
| REAR YARD: | N/A | 25 FEET | --- |
| MAX. STORIES: | N/A | 2 STORIES MIN.; 3 MAX. | --- |
| BUILDING HEIGHT: | N/A | 38 FEET MAX. | --- |

* MINIMUM DIMENSION OF COMBINED LOT



SITE LOCATION MAP SCALE: 1" = 400'

MAP REFERENCES:

1. EXISTING FEATURES AS SHOWN ON THIS PLAN PROVIDED BY A SURVEY COMPLETED IN DECEMBER 22, 2019, BY TEC LAND SURVEYING P.C.

SURVEY NOTES:

1. COPYRIGHT TEC LAND SURVEYING. ALL RIGHTS RESERVED. REPRODUCTION OR COPYING OF THIS DOCUMENT MAY BE A VIOLATION OF COPYRIGHT LAW UNLESS PERMISSION OF THE AUTHOR AND / OR COPYRIGHT HOLDER IS OBTAINED.
2. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
3. ONLY BOUNDARY SURVEY MAPS WITH THE SURVEYOR'S EMBOSSED OR RED INKED SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE SURVEYOR'S ORIGINAL WORK AND OPINION. A COPY OF THIS DOCUMENT WITHOUT A PROPER APPLICATION OF THE SURVEYOR'S EMBOSSED OR RED INKED SEAL SHOULD BE ASSUMED TO BE AN UNAUTHORIZED COPY.
4. CERTIFICATIONS ON THIS BOUNDARY SURVEY MAP SIGNIFY THAT THE MAP WAS PREPARED IN ACCORDANCE WITH THE CURRENT EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, INC. THE CERTIFICATION IS LIMITED TO PERSONS FOR WHOM THE BOUNDARY SURVEY MAP IS PREPARED, TO THE TITLE COMPANY, TO THE GOVERNMENTAL AGENCY, AND TO THE LENDING INSTITUTION LISTED ON THIS BOUNDARY SURVEY MAP.
5. THE CERTIFICATIONS HEREIN ARE NOT TRANSFERABLE.
6. THE LOCATION OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS ARE NOT ALWAYS KNOWN AND OFTEN MUST BE ESTIMATED. IF ANY UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS EXIST OR ARE SHOWN, THE IMPROVEMENTS OR ENCROACHMENTS ARE NOT COVERED BY THIS CERTIFICATE.
7. SUBJECT TO THE FINDINGS OF A CURRENT TITLE SEARCH.
8. SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.
9. SUBJECT TO ANY RIGHT, TITLE OR INTEREST THE PUBLIC MAY HAVE FOR HIGHWAY USE.
10. BEARINGS AND NORTH SHOWN HEREON ARE REFERENCED TO NAD 83-NY EAST USING NYSNET RTN GPS.
11. CONTOUR INTERVAL IS ONE FOOT. ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD 88 USING NYSNET RTN GPS.

DEED REFERENCE

Doc. #02 2016 8895
DTE Diversified LLC
To
McDermott Properties
December 15, 2016

TAX PARCEL NUMBER

City of Beacon, Dutchess County, New York
6054-29-056774
6054-29-056780

Doc. #02 2014 5391
Fir Properties, Inc.
To
EB 1 LLC
September 10, 2014

AREA

6054-29-056744
2,947 Square Feet
0.068 Acres

6054-29-056780
7,726 Square Feet
0.177 Acre

DATE OF SURVEY

Field Completion: December 22, 2019

OWNERS

416 Main Street Beacon, LLC
420 Main Street, LLC D/B/A 420 Main Street Beacon, LLC

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20____, BY _____

THIS PLAN DOES NOT CONSTITUTE A REALTY SUBDIVISION AS DEFINED BY ARTICLE XI, TITLE II, SECTION 1115 OF THE PUBLIC HEALTH LAW OF THE STATE OF NEW YORK, AND ARTICLE XI OF THE DUTCHESS COUNTY SANITARY CODE. PERMISSION IS HEREBY GRANTED FOR THE FILING OF THIS MAP WITH THE CLERK OF DUTCHESS COUNTY. APPROVAL FOR ARRANGEMENTS FOR WATER SUPPLY AND/OR SEWAGE DISPOSAL IS NEITHER SOUGHT NOR GRANTED.

SIGNED THIS _____ DAY OF _____, 20____, BY _____

CHAIRMAN

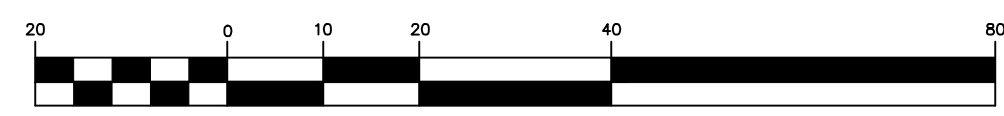
SECRETARY

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

PRELIMINARY SUBDIVISION PLAT

SCALE: 1"=20'

GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

DCDOH STANDARD NOTE:

FOR PERMISSION TO FILE
THIS PLAN DOES NOT CONSTITUTE A REALTY SUBDIVISION AS DEFINED BY ARTICLE XI, TITLE II, SECTION 1115 OF THE PUBLIC HEALTH LAW OF THE STATE OF NEW YORK, AND ARTICLE XI OF THE DUTCHESS COUNTY SANITARY CODE. PERMISSION IS HEREBY GRANTED FOR THE FILING OF THIS MAP WITH THE CLERK OF DUTCHESS COUNTY. APPROVAL FOR ARRANGEMENTS FOR WATER SUPPLY AND/OR SEWAGE DISPOSAL IS NEITHER SOUGHT NOR GRANTED.

AUTHORIZED REPRESENTATIVE OF THE COMMISSIONER OF HEALTH

DATE

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

OWNER'S CONSENT:

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

TOM LEE _____ DATE _____

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

PRELIMINARY SUBDIVISION PLAT

416 MAIN STREET

416-420 MAIN STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-29-056780 & 056774

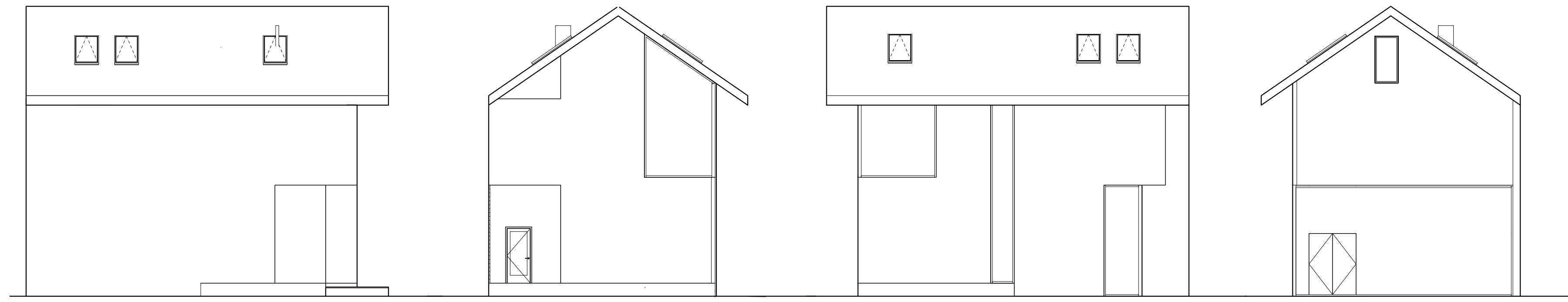
JOB #: 2020-005

DATE: 4/28/2020

SCALE: 1" = 20'

TITLE: SUB-1

SHEET: 1 OF 1



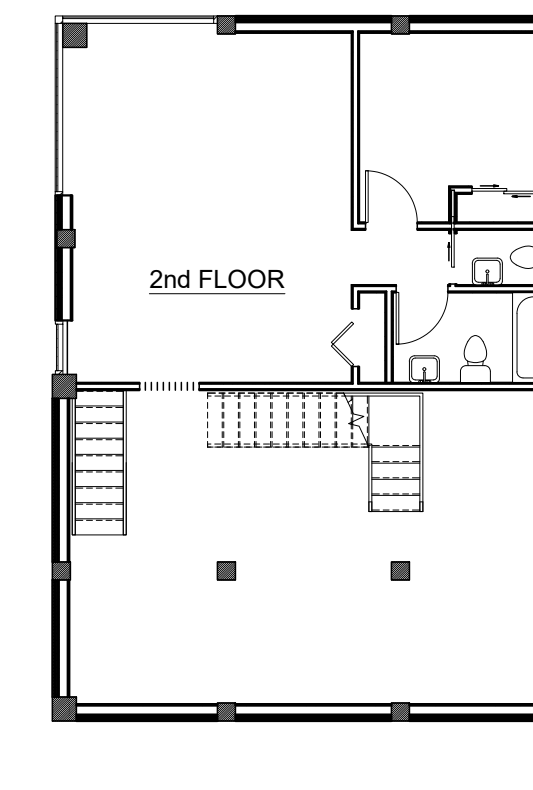
East

North

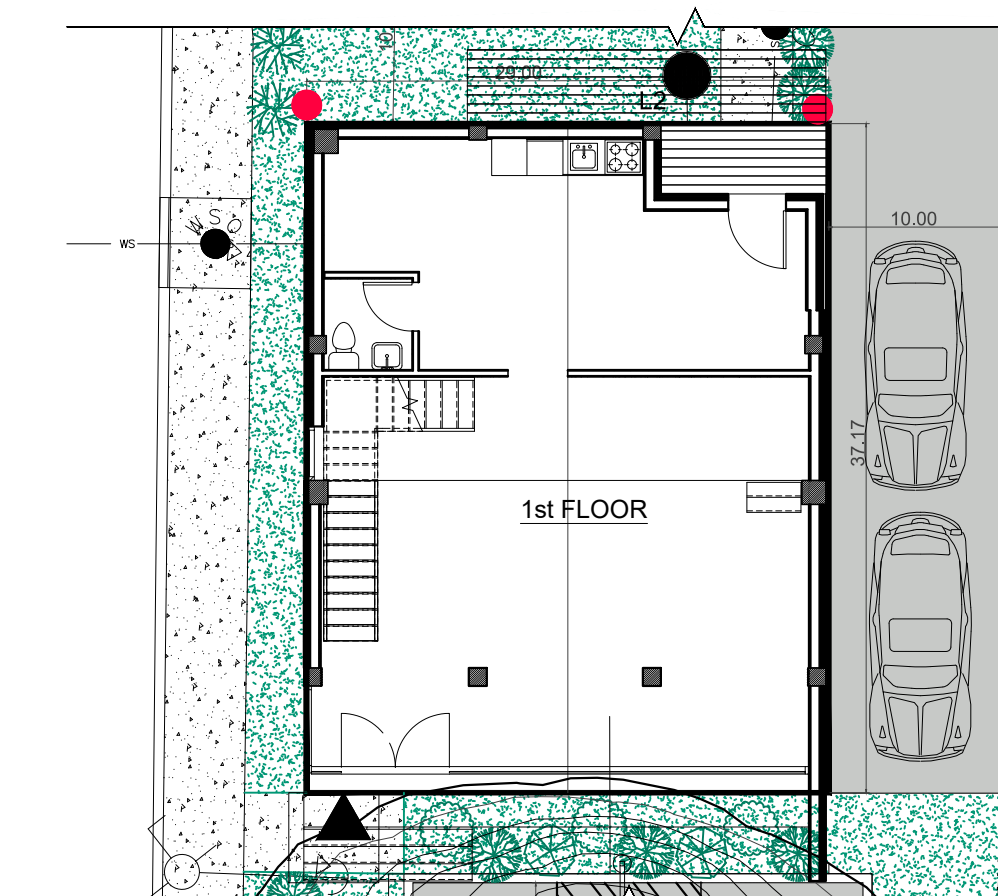
West

South

Live/Work Space Elevations

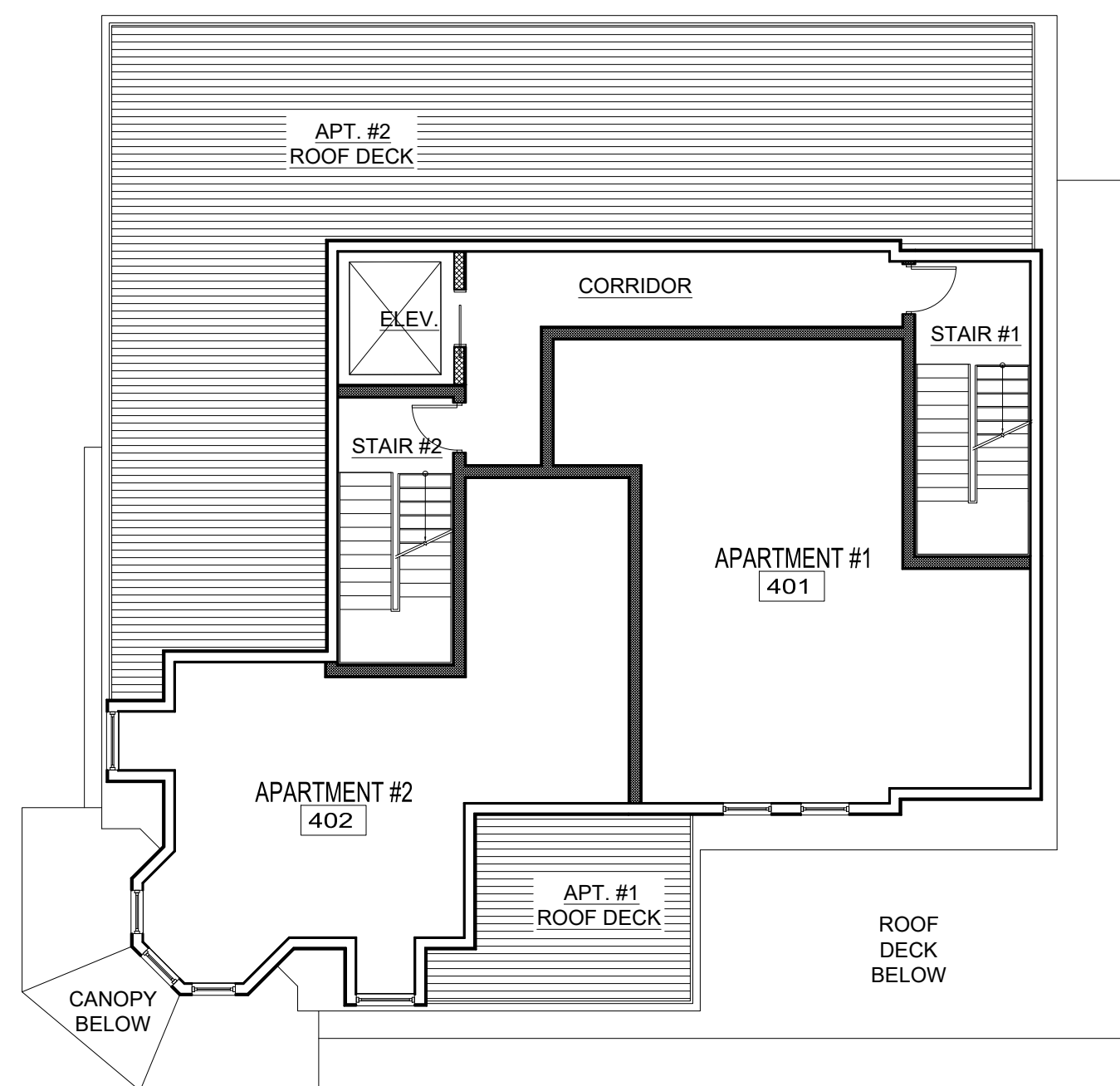


2nd Floor Plan

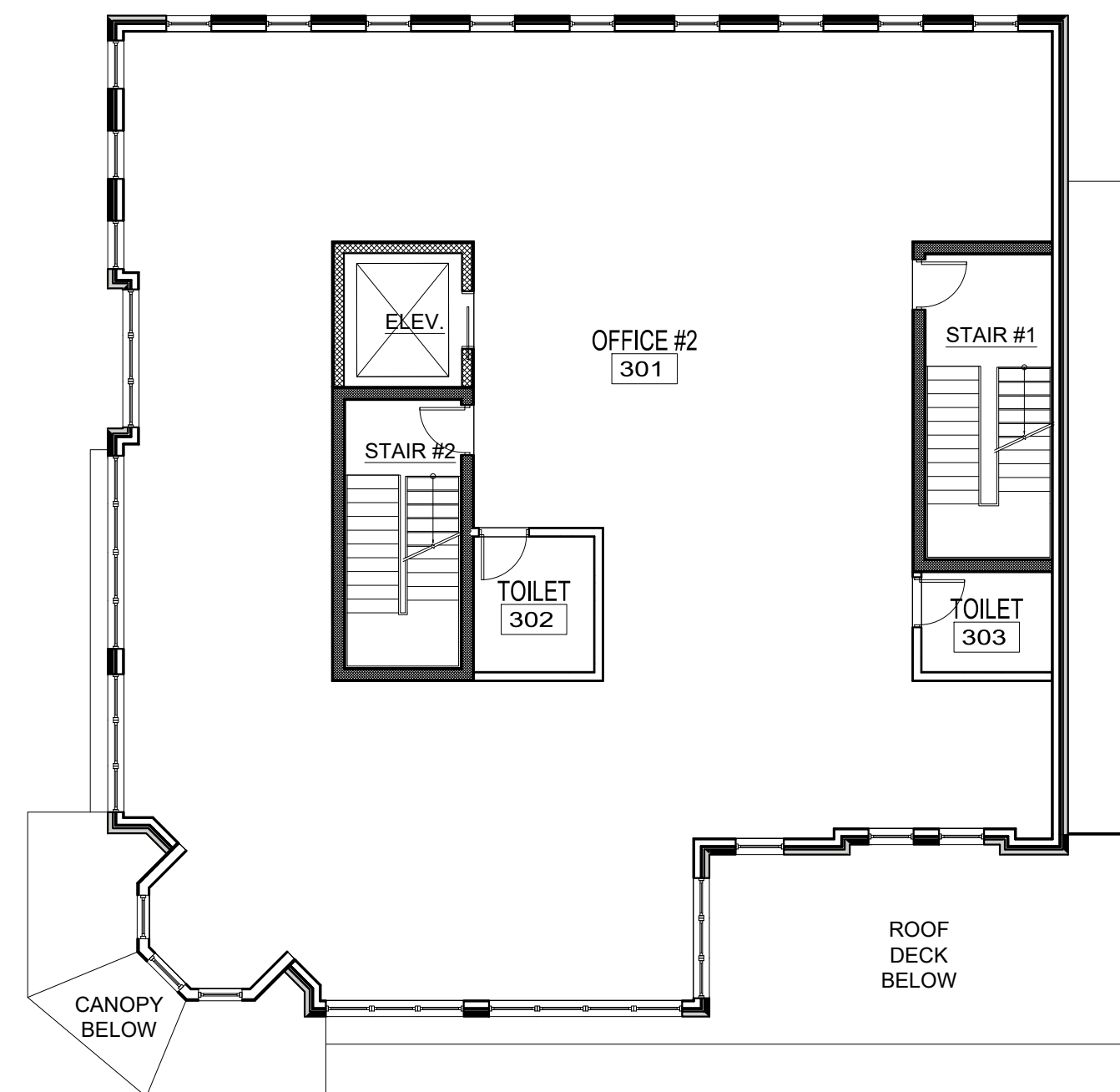


1st Floor Plan

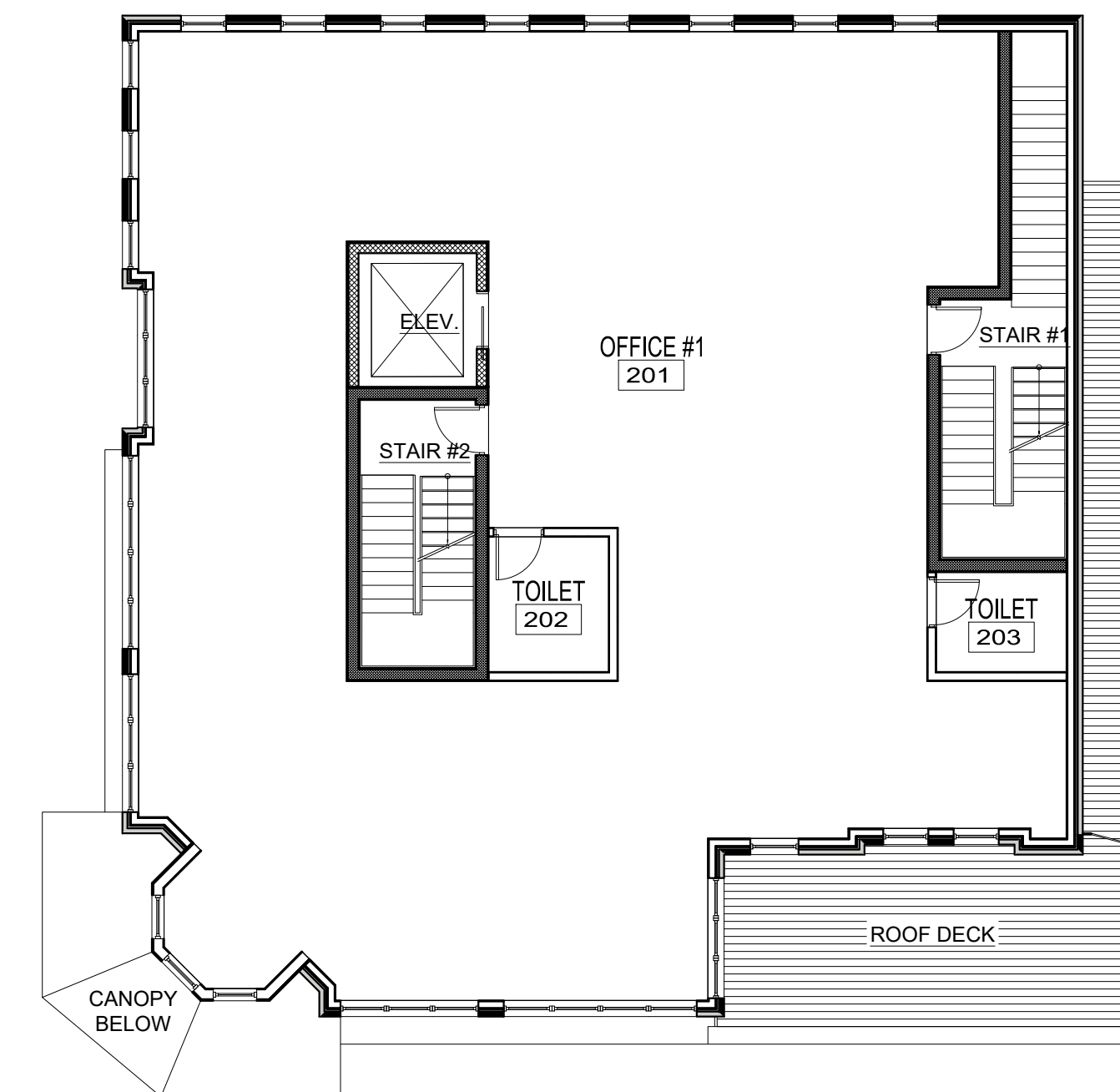
Live/Work Space Floor Plans



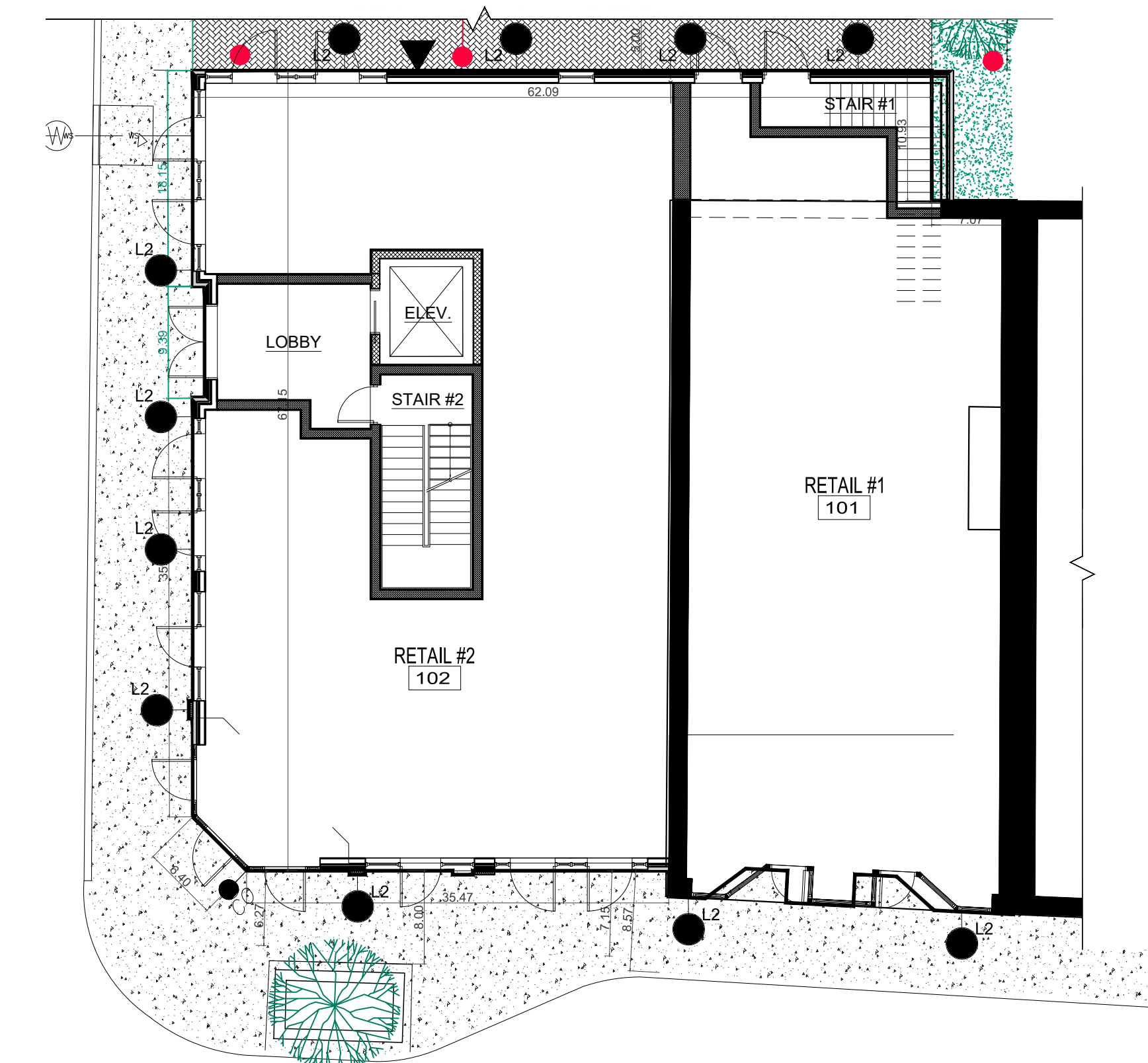
4th Floor Plan



3rd Floor Plan



2nd Floor Plan



1st Floor Plan

Main Building Floor Plans

Site Plan Application
Sheet 4 of 10 - Building Plans



Elevations: Front

Scale: 1/16" = 1'-0"



Elevations: Side

Scale: 1/16" = 1'-0"



Elevations: Rear

Scale: 1/16" = 1'-0"



View from Main Street

Scale: 1" = 20'



View from Corner

Scale: 1" = 20'

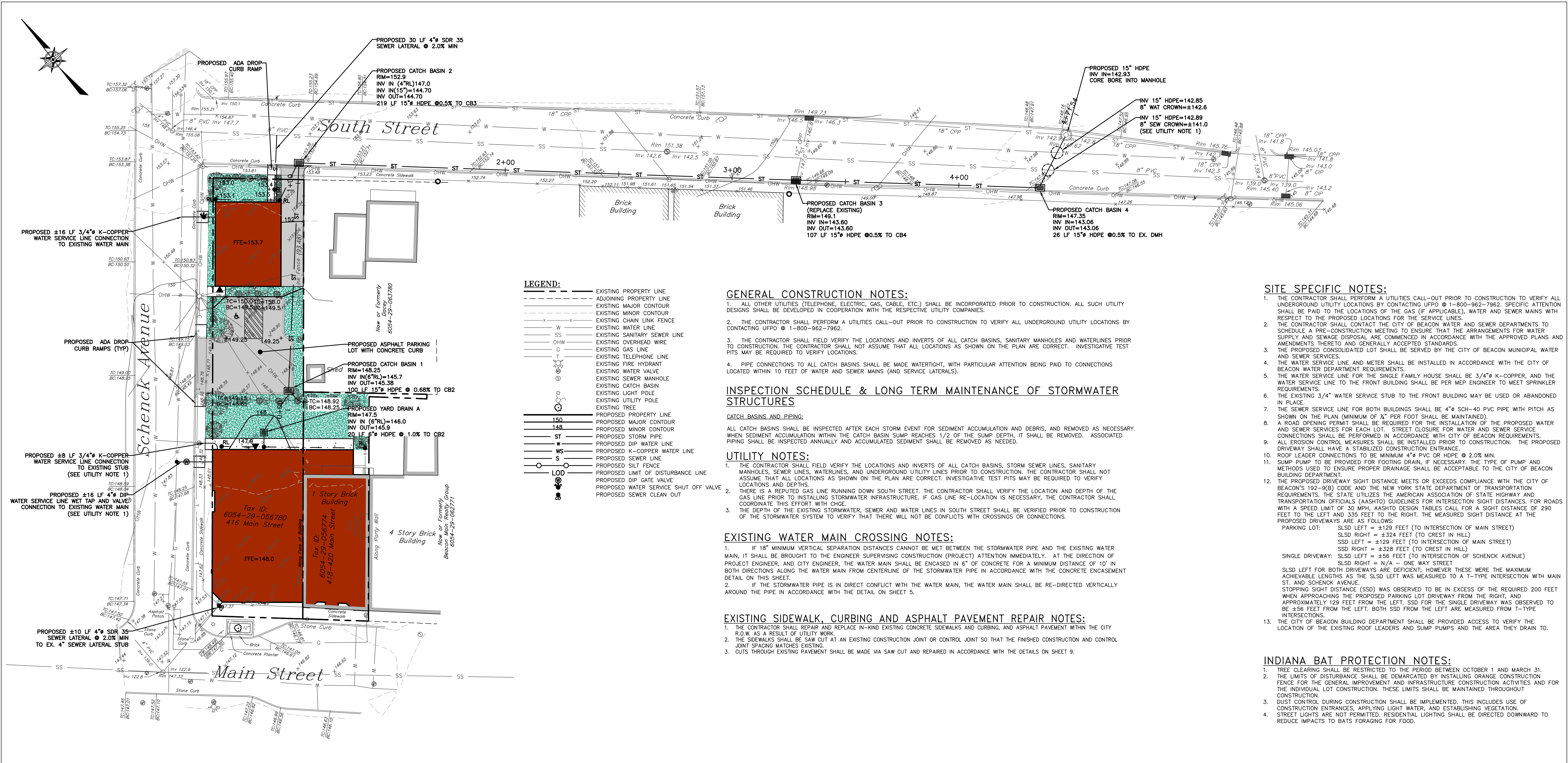


View from Main Street

Scale: 1" = 20'

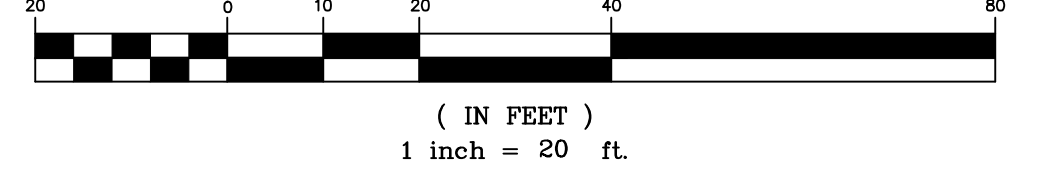
| REVISIONS: | | | |
|------------|------|-------------|----|
| NO. | DATE | DESCRIPTION | BY |
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| | | | |

Site Plan Application
Sheet 5 of 10 - Building Elevations & Renderings



GRADING AND UTILITY PLAN
SCALE: 1"=20'

GRAPHIC SCALE



- LEGEND:**
- EXISTING PROPERTY LINE
 - - - ADJOINING PROPERTY LINE
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - x x x EXISTING CHAIN LINK FENCE
 - W EXISTING WATER LINE
 - SS EXISTING SANITARY SEWER LINE
 - OHW EXISTING OVERHEAD WIRE
 - EXISTING GAS LINE
 - T EXISTING TELEPHONE LINE
 - G EXISTING FIRE HYDRANT
 - EXISTING WATER VALVE
 - EXISTING SEWER MANHOLE
 - EXISTING CATCH BASIN
 - EXISTING LIGHT POLE
 - EXISTING UTILITY POLE
 - EXISTING TREE
 - PROPOSED PROPERTY LINE
 - 150 PROPOSED MAJOR CONTOUR
 - 148 PROPOSED MINOR CONTOUR
 - PROPOSED STORM PIPE
 - PROPOSED DIP WATER LINE
 - WS PROPOSED K-COPPER WATER LINE
 - PROPOSED SEWER LINE
 - PROPOSED SILT FENCE
 - PROPOSED LIMIT OF DISTURBANCE LINE
 - PROPOSED DIP GATE VALVE
 - PROPOSED WATER SERVICE SHUT OFF VALVE
 - PROPOSED SEWER CLEAN OUT

GENERAL CONSTRUCTION NOTES:

- ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE INCORPORATED PRIOR TO CONSTRUCTION. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANIES.
- THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.
- THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS, SANITARY MANHOLES AND WATERLINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS.
- PIPE CONNECTIONS TO ALL CATCH BASINS SHALL BE MADE WATERTIGHT, WITH PARTICULAR ATTENTION BEING PAID TO CONNECTIONS LOCATED WITHIN 10 FEET OF WATER AND SEWER MAINS (AND SERVICE LATERALS).

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 REMOVED AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SLUMP REACHES 1/2 OF THE SLUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED.

UTILITY NOTES:

- THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS, STORM SEWER LINES, SANITARY MANHOLES, SEWER LINES, WATERLINES, AND UNDERGROUND UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS AND DEPTHS.
- THERE IS A REPUTED GAS LINE RUNNING DOWN SOUTH STREET. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF THE GAS LINE PRIOR TO INSTALLING STORMWATER INFRASTRUCTURE. IF GAS LINE RE-LOCATION IS NECESSARY, THE CONTRACTOR SHALL COORDINATE THIS EFFORT WITH CHGE.
- THE DEPTH OF THE EXISTING STORMWATER, SEWER AND WATER LINES IN SOUTH STREET SHALL BE VERIFIED PRIOR TO CONSTRUCTION OF THE STORMWATER SYSTEM TO VERIFY THAT THERE WILL NOT BE CONFLICTS WITH CROSSINGS OR CONNECTIONS.

EXISTING WATER MAIN CROSSING NOTES:

- IF 18" MINIMUM VERTICAL SEPARATION DISTANCES CANNOT BE MET BETWEEN THE STORMWATER PIPE AND THE EXISTING WATER MAIN, IT SHALL BE BROUGHT TO THE ENGINEER SUPERVISING CONSTRUCTION (PROJECT) ATTENTION IMMEDIATELY. AT THE DIRECTION OF PROJECT ENGINEER, AND CITY ENGINEER, THE WATER MAIN SHALL BE ENCASED IN 6" OF CONCRETE FOR A MINIMUM DISTANCE OF 10' IN BOTH DIRECTIONS ALONG THE WATER MAIN FROM CENTERLINE OF THE STORMWATER PIPE IN ACCORDANCE WITH THE CONCRETE ENCASEMENT DETAIL ON THIS SHEET.
- IF THE STORMWATER PIPE IS IN DIRECT CONFLICT WITH THE WATER MAIN, THE WATER MAIN SHALL BE RE-DIRECTED VERTICALLY AROUND THE PIPE IN ACCORDANCE WITH THE DETAIL ON SHEET 5.

EXISTING SIDEWALK, CURBING AND ASPHALT PAVEMENT REPAIR NOTES:

- THE CONTRACTOR SHALL REPAIR AND REPLACE IN-KIND EXISTING CONCRETE SIDEWALKS AND CURBING, AND ASPHALT PAVEMENT WITHIN THE CITY R.O.W. AS A RESULT OF UTILITY WORK.
- THE SIDEWALKS SHALL BE SAW CUT AT AN EXISTING CONSTRUCTION JOINT OR CONTROL JOINT SO THAT THE FINISHED CONSTRUCTION AND CONTROL JOINT SPACING MATCHES EXISTING.
- CUTS THROUGH EXISTING PAVEMENT SHALL BE MADE VIA SAW CUT AND REPAIRED IN ACCORDANCE WITH THE DETAILS ON SHEET 9.

SITE SPECIFIC NOTES:

- THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS (IF APPLICABLE), WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE LINES.
- THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
- THE PROPOSED CONSOLIDATED LOT SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES.
- THE WATER SERVICE LINE AND METER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
- THE WATER SERVICE LINE FOR THE SINGLE FAMILY HOUSE SHALL BE 3/4" K-COPPER, AND THE WATER SERVICE LINE TO THE FRONT BUILDING SHALL BE PER MEP ENGINEER TO MEET SPRINKLER REQUIREMENTS.
- THE EXISTING 3/4" WATER SERVICE STUB TO THE FRONT BUILDING MAY BE USED OR ABANDONED IN PLACE.
- THE SEWER SERVICE LINE FOR BOTH BUILDINGS SHALL BE 4" SCH-40 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN (MINIMUM OF 1/4" PER FOOT SHALL BE MAINTAINED).
- A ROAD OPENING PERMIT SHALL BE REQUIRED FOR THE INSTALLATION OF THE PROPOSED WATER AND SEWER SERVICES FOR EACH LOT. STREET CLOSURE FOR WATER AND SEWER SERVICE CONNECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS.
- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. THE PROPOSED DRIVEWAY SHALL HAVE A STABILIZED CONSTRUCTION ENTRANCE.
- ROOF LEADER CONNECTIONS TO BE MINIMUM 4" PVC OR HDPE @ 2.0% MIN.
- SUMP PUMP TO BE PROVIDED FOR FOOTING DRAIN, IF NECESSARY. THE TYPE OF PUMP AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT.
- THE PROPOSED DRIVEWAY SIGHT DISTANCE MEETS OR EXCEEDS COMPLIANCE WITH THE CITY OF BEACON'S 192-9(B) CODE AND THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS. THE STATE UTILIZES THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) GUIDELINES FOR INTERSECTION SIGHT DISTANCES. FOR ROADS WITH A SPEED LIMIT OF 30 MPH, AASHTO DESIGN TABLES CALL FOR A SIGHT DISTANCE OF 290 FEET TO THE LEFT AND 335 FEET TO THE RIGHT. THE MEASURED SIGHT DISTANCE AT THE PROPOSED DRIVEWAYS ARE AS FOLLOWS:
PARKING LOT: SLSL LEFT = ±129 FEET (TO INTERSECTION OF MAIN STREET)
SLSL RIGHT = ±324 FEET (TO CREST IN HILL)
SSD LEFT = ±129 FEET (TO INTERSECTION OF MAIN STREET)
SSD RIGHT = ±328 FEET (TO CREST IN HILL)
SINGLE DRIVEWAY: SLSL LEFT = ±56 FEET (TO INTERSECTION OF SCHENCK AVENUE)
SLSL RIGHT = N/A - ONE WAY STREET
SLSL LEFT FOR BOTH DRIVEWAYS ARE DEFICIENT; HOWEVER THESE WERE THE MAXIMUM ACHIEVABLE LENGTHS AS THE SLSL LEFT WAS MEASURED TO A T-TYPE INTERSECTION WITH MAIN ST. AND SCHENCK AVENUE.
STOPPING SIGHT DISTANCE (SSD) WAS OBSERVED TO BE IN EXCESS OF THE REQUIRED 200 FEET WHEN APPROACHING THE PROPOSED PARKING LOT DRIVEWAY FROM THE RIGHT, AND APPROXIMATELY 129 FEET FROM THE LEFT. SSD FOR THE SINGLE DRIVEWAY WAS OBSERVED TO BE ±56 FEET FROM THE LEFT. BOTH SSD FROM THE LEFT ARE MEASURED FROM T-TYPE INTERSECTIONS.
- THE CITY OF BEACON BUILDING DEPARTMENT SHALL BE PROVIDED ACCESS TO VERIFY THE LOCATION OF THE EXISTING ROOF LEADERS AND SUMP PUMPS AND THE AREA THEY DRAIN TO.

INDIANA BAT PROTECTION NOTES:

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

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

SIGNED THIS _____ DAY OF _____, 20____, BY _____
CHAIRMAN
SECRETARY

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

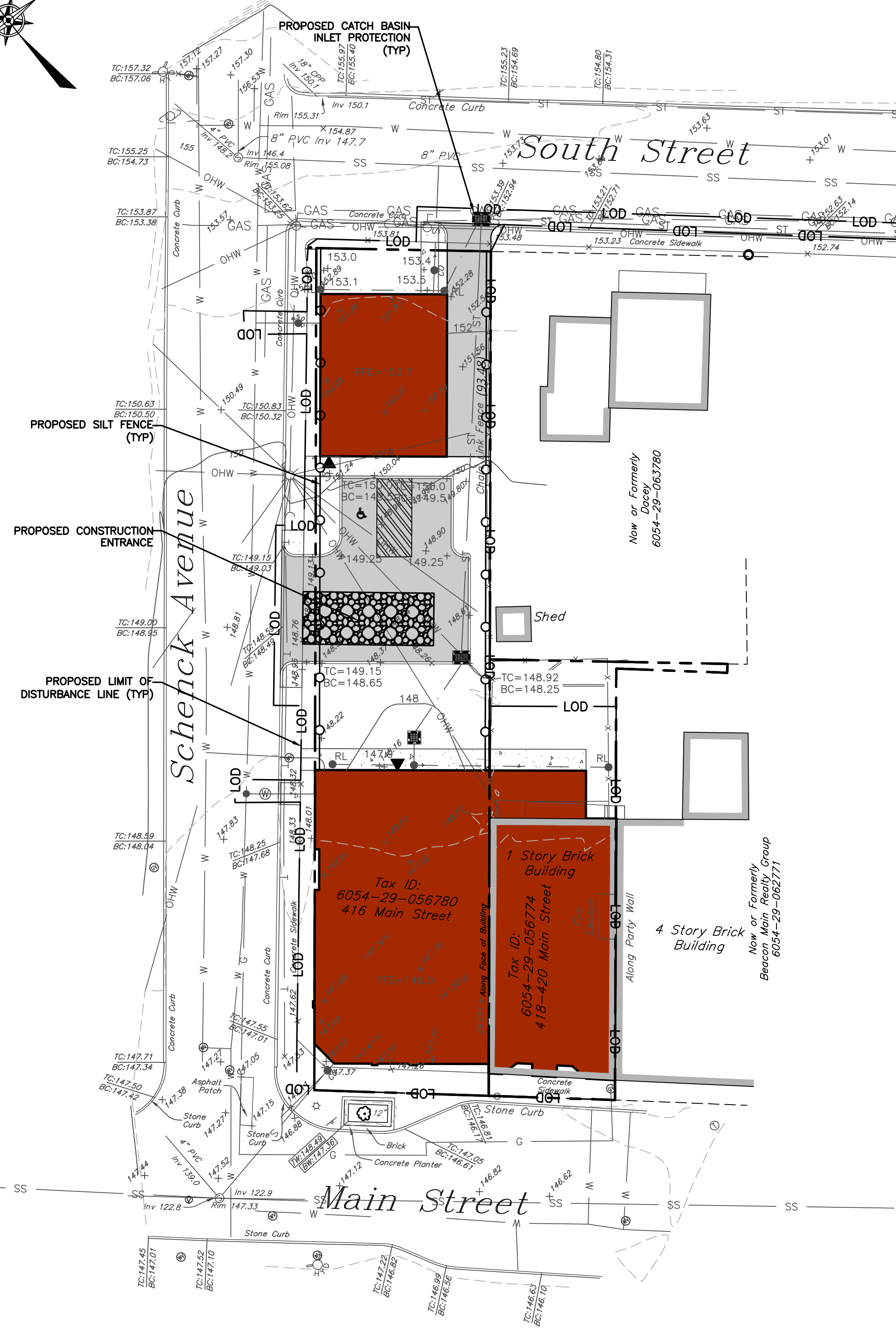
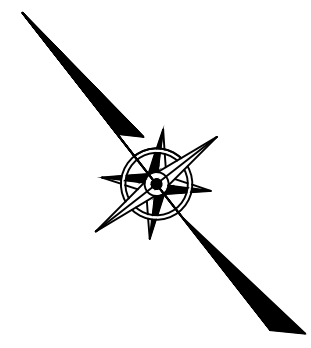
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HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
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GRADING PLAN
416 MAIN STREET
416-420 MAIN STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-29-056780 & 056774

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| JOB #: | 2020-005 |
| DATE: | 4/28/2020 |
| SCALE: | 1" = 20' |
| TITLE: | GR-1 |
| SHEET: | 6 OF 10 |



- LEGEND:**
- EXISTING PROPERTY LINE
 - - - ADJOINING PROPERTY LINE
 - - - EXISTING MAJOR CONTOUR
 - - - EXISTING MINOR CONTOUR
 - - - EXISTING CHAIN LINK FENCE
 - W EXISTING WATER LINE
 - SS EXISTING SANITARY SEWER LINE
 - OHW EXISTING OVERHEAD WIRE
 - G EXISTING GAS LINE
 - T EXISTING TELEPHONE LINE
 - ⊕ EXISTING FIRE HYDRANT
 - ⊕ EXISTING WATER VALVE
 - ⊕ EXISTING SEWER MANHOLE
 - ⊕ EXISTING CATCH BASIN
 - ⊕ EXISTING LIGHT POLE
 - ⊕ EXISTING UTILITY POLE
 - ⊕ EXISTING TREE
 - 150 PROPOSED PROPERTY LINE
 - 148 PROPOSED MAJOR CONTOUR
 - - - PROPOSED MINOR CONTOUR
 - W PROPOSED STORM PIPE
 - WS PROPOSED K-COPPER WATER LINE
 - S PROPOSED SEWER LINE
 - LOD PROPOSED SILT FENCE
 - LOD PROPOSED LIMIT OF DISTURBANCE LINE
 - LOD PROPOSED DIP GATE VALVE
 - LOD PROPOSED WATER SERVICE SHUT OFF VALVE
 - LOD PROPOSED SEWER CLEAN OUT

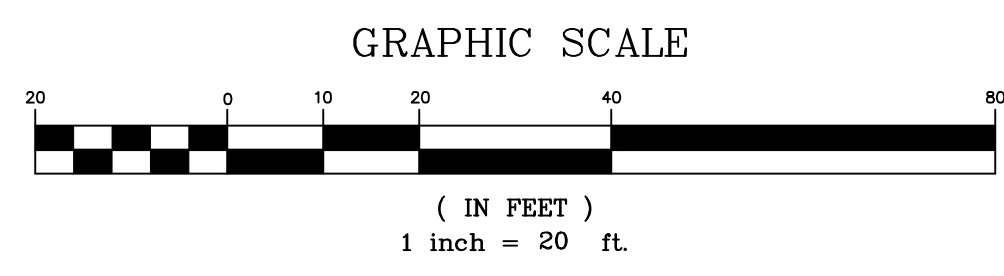
EROSION AND SEDIMENT CONTROL NOTES

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

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

- PERMANENT AND TEMPORARY VEGETATION:**
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.
- STABILIZED CONSTRUCTION ENTRANCE:**
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. REGRADE PAD AS NEEDED FOR RUNOFF CONTROL. WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF SITE BY VEHICLES. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE AS DIRECTED BY PROJECT ENGINEER.
- SILT FENCE:**
INSPECT FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.
- SOIL STOCKPILE:**
INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE SEDIMENT CONTROL BARRIER BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE SEDIMENT CONTROL BARRIER. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCKPILE. REMOVE THE SEDIMENT CONTROL BARRIER WHEN THE SOIL STOCKPILE HAS BEEN REMOVED.
- DUST CONTROL:**
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORK. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.
- DEWATERING PITS:**
(IF REQUIRED) - INSPECT DAILY DURING OPERATION FOR CLOGGING OR OVERFLOW. CLEAR INLET AND DISCHARGE PIPES OF OBSTRUCTIONS. IF A FILTER MATERIAL BECOMES CLOGGED WITH SEDIMENT, PIT SHALL BE DISMANTLED AND NEW PITS SHALL BE CONSTRUCTED AS NEEDED.
- CATCH BASINS:**
ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION AND DEBRIS, AND REMOVED AS NECESSARY. THE INLET PROTECTION SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.

EROSION AND SEDIMENT CONTROL PLAN
SCALE: 1"=20'

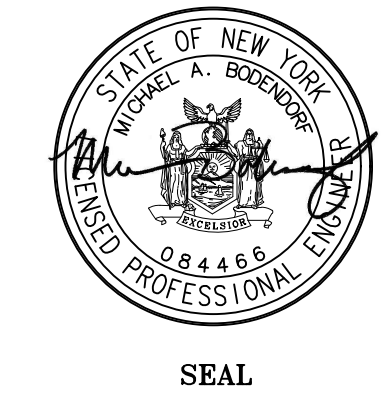


APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20____, BY _____
CHAIRMAN

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

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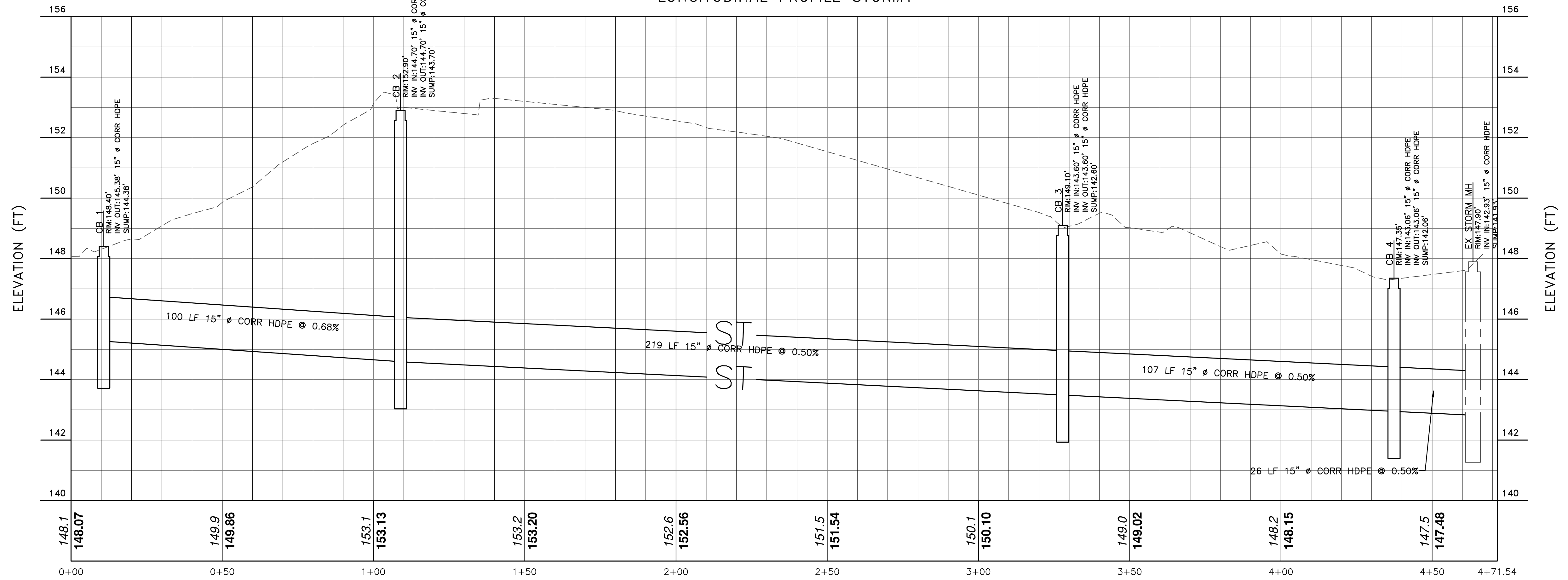


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EROSION AND SEDIMENT CONTROL PLAN
416 MAIN STREET
416-420 MAIN STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-29-056780 & 056774

JOB #: 2020-005
DATE: 4/28/2020
SCALE: 1" = 20'
TITLE: ESC-1
SHEET: 7 OF 10

LONGITUDINAL PROFILE STORM1



PROPOSED STORM PROFILE
SCALE: 1" = 20'

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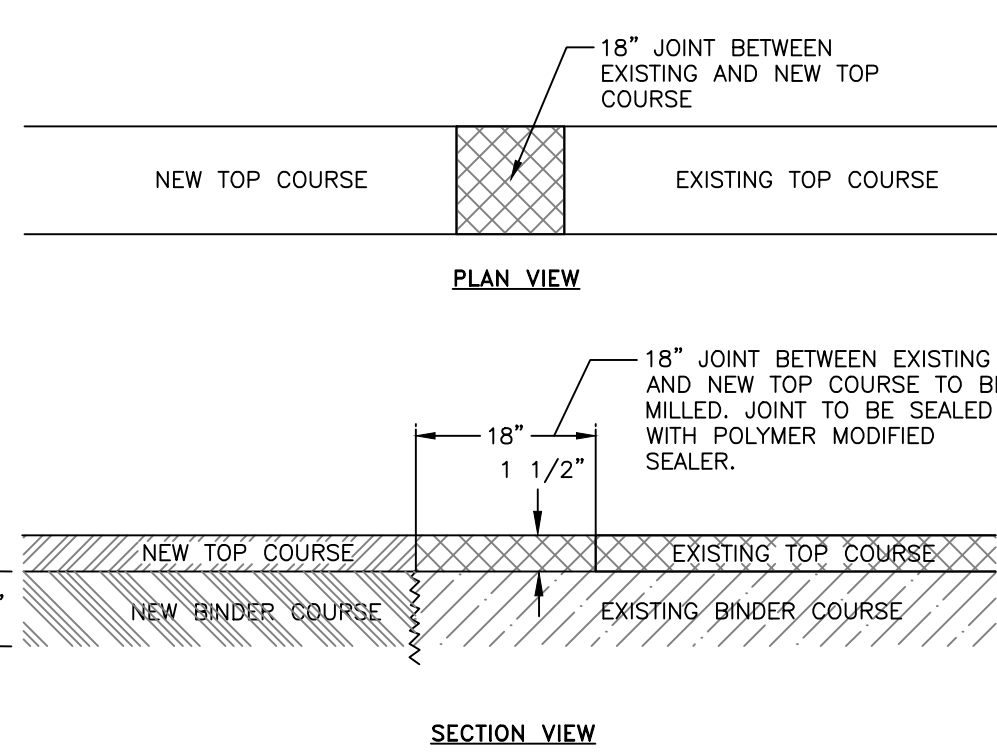


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LAND DESIGN
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UTILITY PROFILES
416 MAIN STREET
416-420 MAIN STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-20-056780 & 056774

JOB #: 2020:005
DATE: 4/28/2020
SCALE: 1" = 20'
TITLE: PR-1
SHEET: 8 OF 10

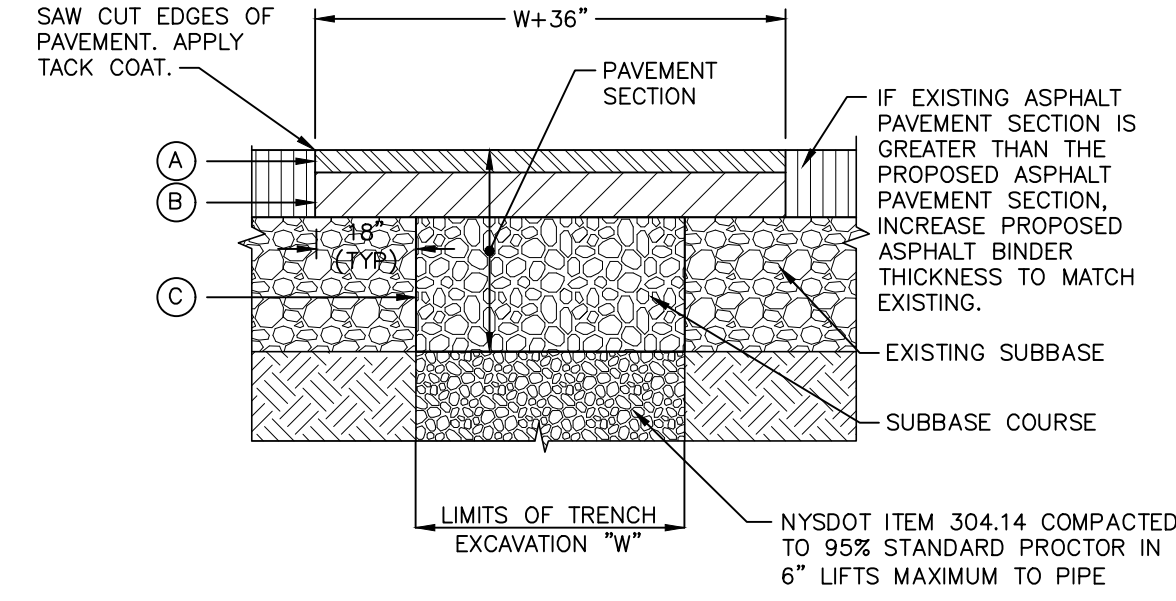
SITE DETAILS



NOTES:

- 3" BINDER COURSE AND 1 1/2" TOP COURSE TO BE USED FOR RESTORATION OF PAVEMENT WITHIN CITY ROADS.
- EXCAVATIONS ARE TO BE SAW CUT SMOOTH, ALL EDGES TACK COATED, AND ALL SEAMS SEALED WITH A HOT POLYMER MODIFIED CRACK SEALANT.
- IF EXISTING ASPHALT PAVEMENT DEPTH IS GREATER THAN THE PROPOSED ASPHALT PAVEMENT SECTION, INCREASE PROPOSED ASPHALT BINDER THICKNESS TO MATCH EXISTING.

MILLED KEYWAY DETAIL NOT TO SCALE



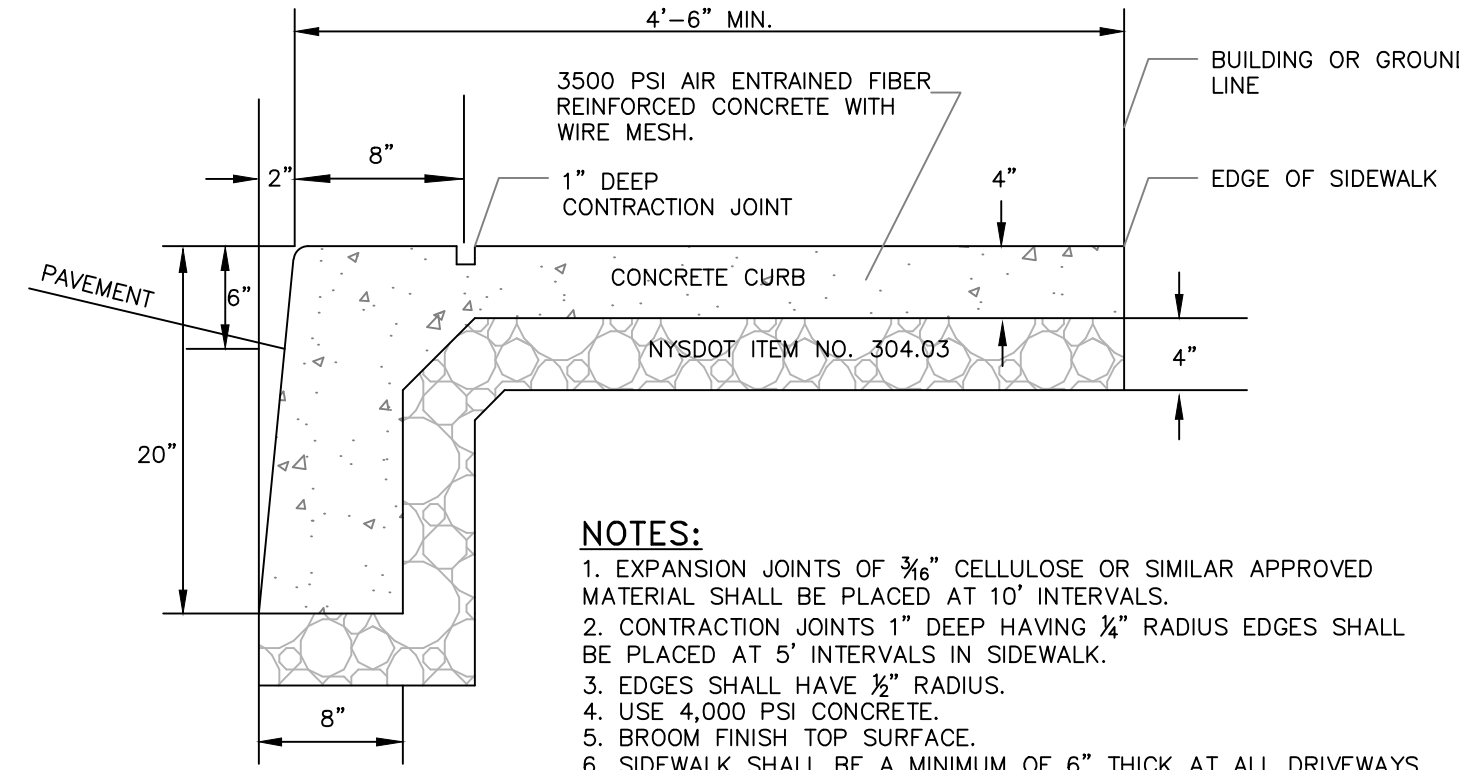
LEGEND

- (A) 1-1/2" ASPHALT CONCRETE TOP COURSE - NYS DOT TYPE 6F
- (B) 3" ASPHALT CONCRETE BINDER COURSE - NYS DOT TYPE 3
- (C) 10" GRANULAR SUBBASE COURSE - NYS DOT ITEM 304.14

NOTES:

- SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
- FURNISH, PLACE, AND COMPACT SUBBASE.
- TACK COAT IN ACCORDANCE WITH NYS DOT STANDARD SPEC.
- FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.

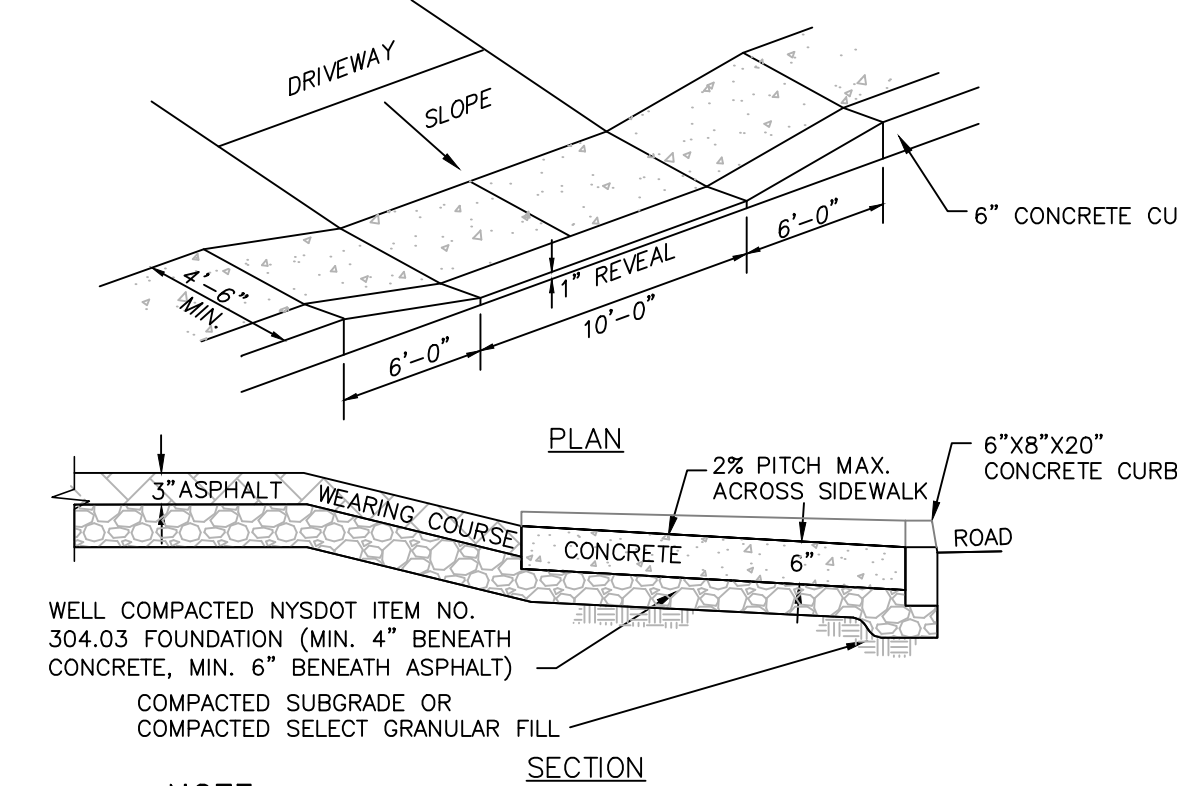
STREET PAVEMENT RESTORATION DETAIL NOT TO SCALE



NOTES:

- EXPANSION JOINTS OF 3/4" CELLULOSE OR SIMILAR APPROVED MATERIAL SHALL BE PLACED AT 10' INTERVALS.
- CONTRACTION JOINTS 1" DEEP HAVING 1/4" RADIUS EDGES SHALL BE PLACED AT 5' INTERVALS IN SIDEWALK.
- EDGES SHALL HAVE 3/8" RADIUS.
- USE 4,000 PSI CONCRETE.
- BROOM FINISH TOP SURFACE.
- SIDEWALK SHALL BE A MINIMUM OF 6" THICK AT ALL DRIVEWAYS AND HANDICAP RAMPS.
- MAXIMUM SLOPE OF 1 ON 12 TO BE USED WHERE SIDEWALK TERMINATES AT HANDICAP RAMPS.

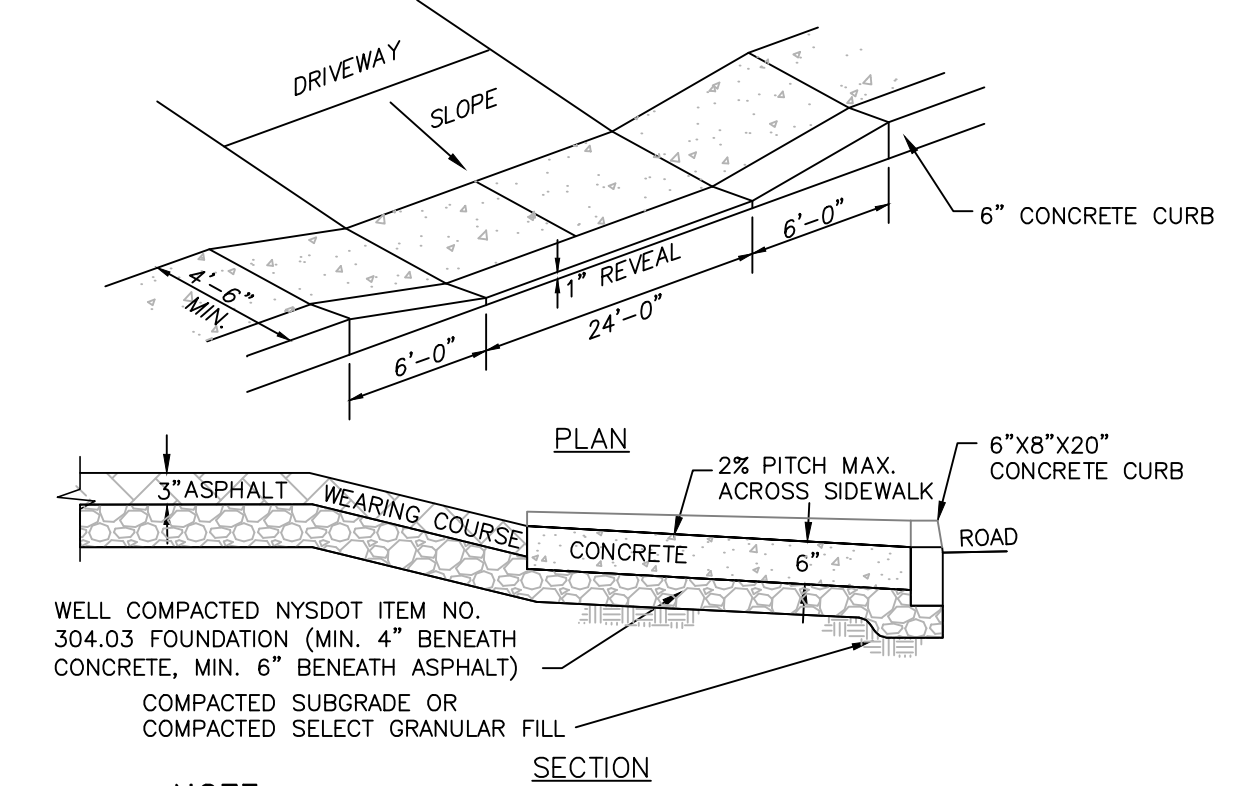
MONOLITHIC CURB AND SIDEWALK DETAIL NOT TO SCALE



NOTE:

- PRE-MOLDED EXPANSION JOINTS TO BE USED AT ALL JOINTS.
- DRIVEWAY SHALL BE PAVED AFTER THE CONCRETE APRON TO THE RIGHT-OF-WAY LINE (MINIMUM).
- SIDEWALK WIDTH SHALL MATCH EXISTING SIDEWALK, BUT NO LESS THAN 4'-6".

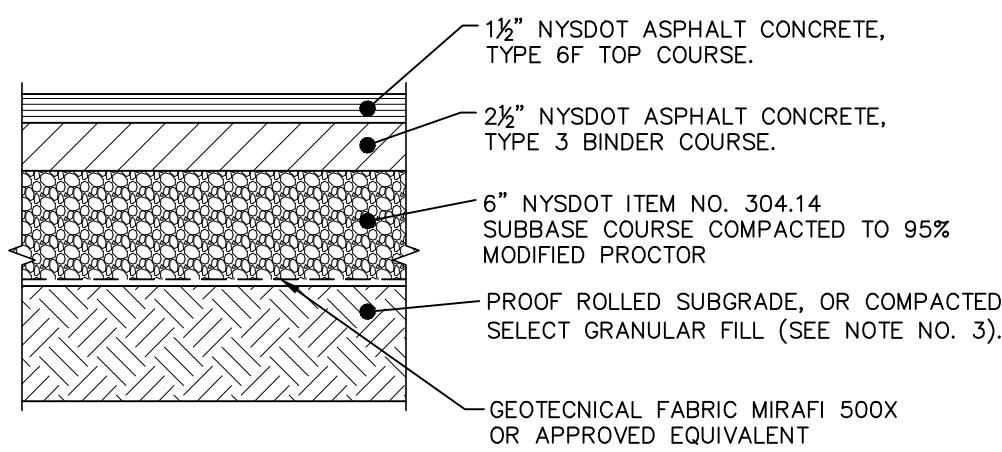
ONE WAY DRIVEWAY ENTRANCE DETAIL NOT TO SCALE



NOTE:

- PRE-MOLDED EXPANSION JOINTS TO BE USED AT ALL JOINTS.
- DRIVEWAY SHALL BE PAVED AFTER THE CONCRETE APRON TO THE RIGHT-OF-WAY LINE (MINIMUM).
- SIDEWALK WIDTH SHALL MATCH EXISTING SIDEWALK, BUT NO LESS THAN 4'-6".

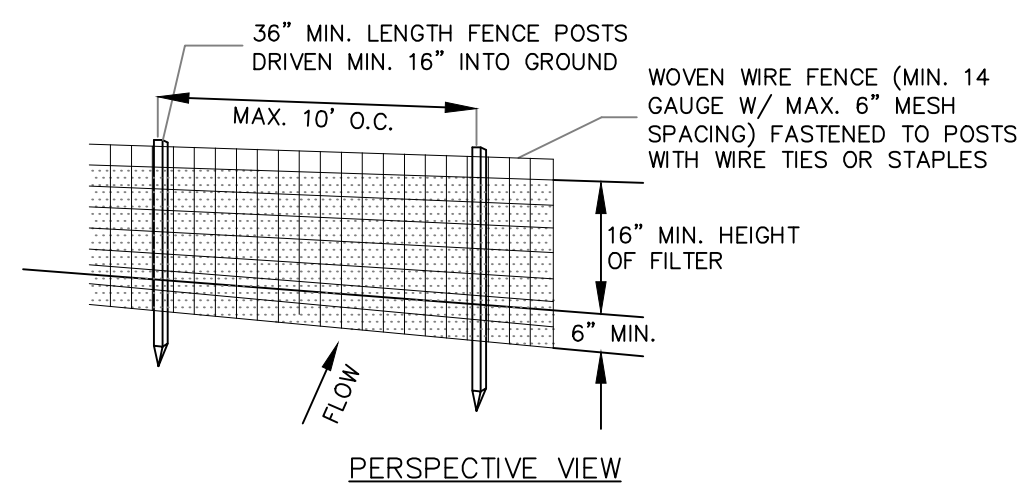
TWO WAY DRIVEWAY ENTRANCE DETAIL NOT TO SCALE



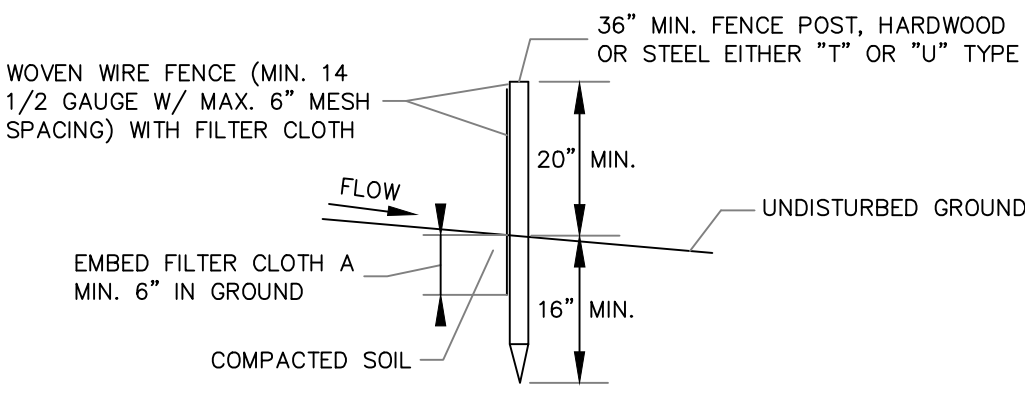
NOTES:

- MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYS DOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002.
- TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407-TACK COAT OF THE ABOVE REFERENCED NYS DOT STANDARD SPECIFICATIONS.
- WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYS DOT STANDARD SPECIFICATIONS.

PARKING AREA SECTION DETAIL NOT TO SCALE



PERSPECTIVE VIEW

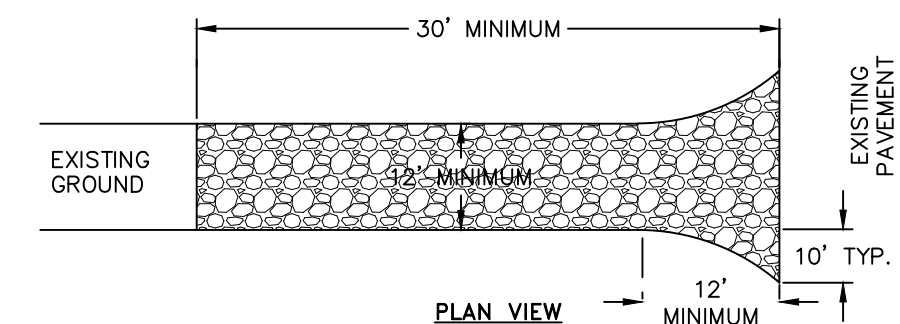


SECTION VIEW

NOTES:

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

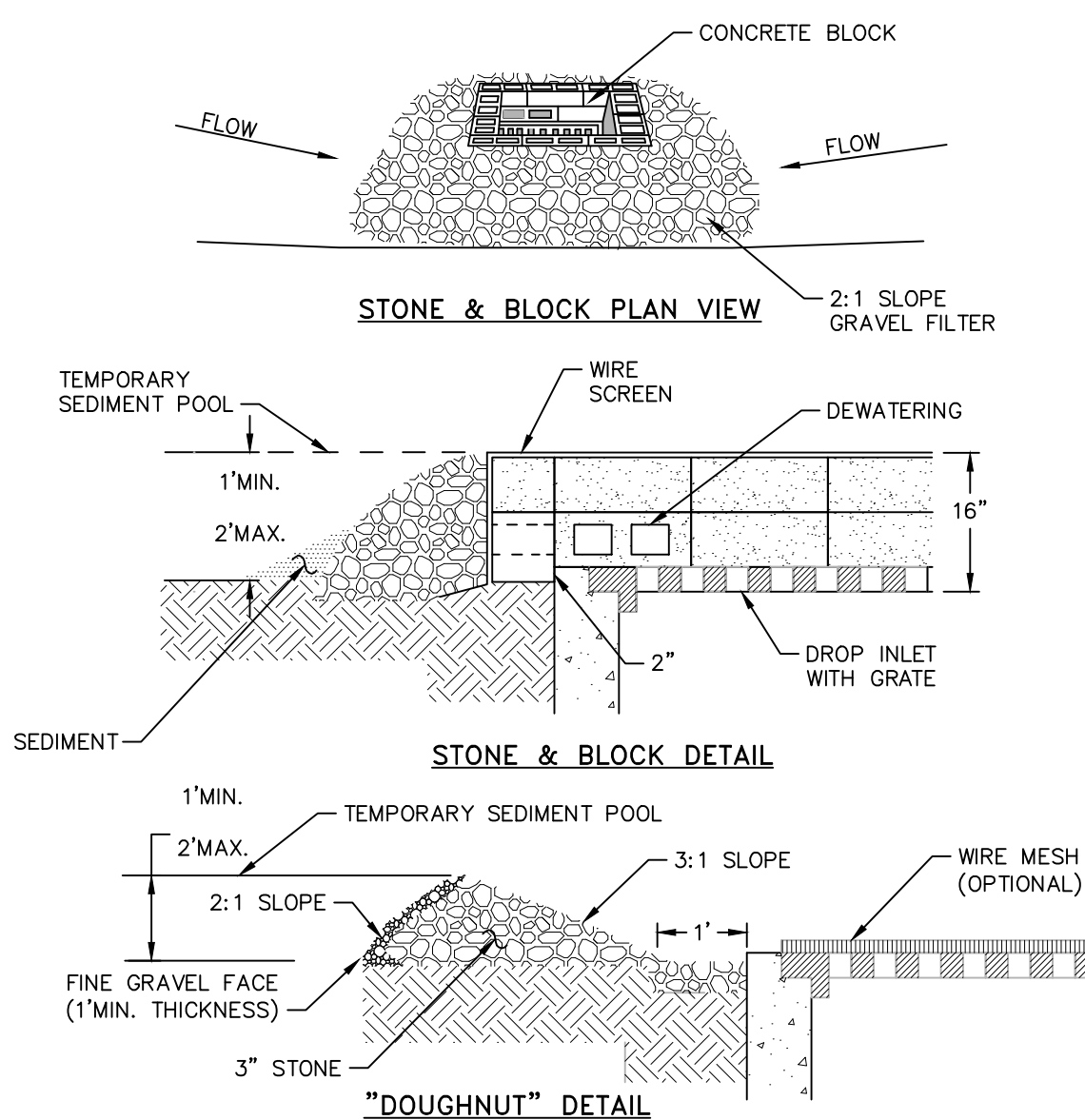
SILT FENCE DETAIL NOT TO SCALE



NOTES:

- STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - NOT LESS THAN 30 FEET FOR A SINGLE RESIDENCE LOT.
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
- GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

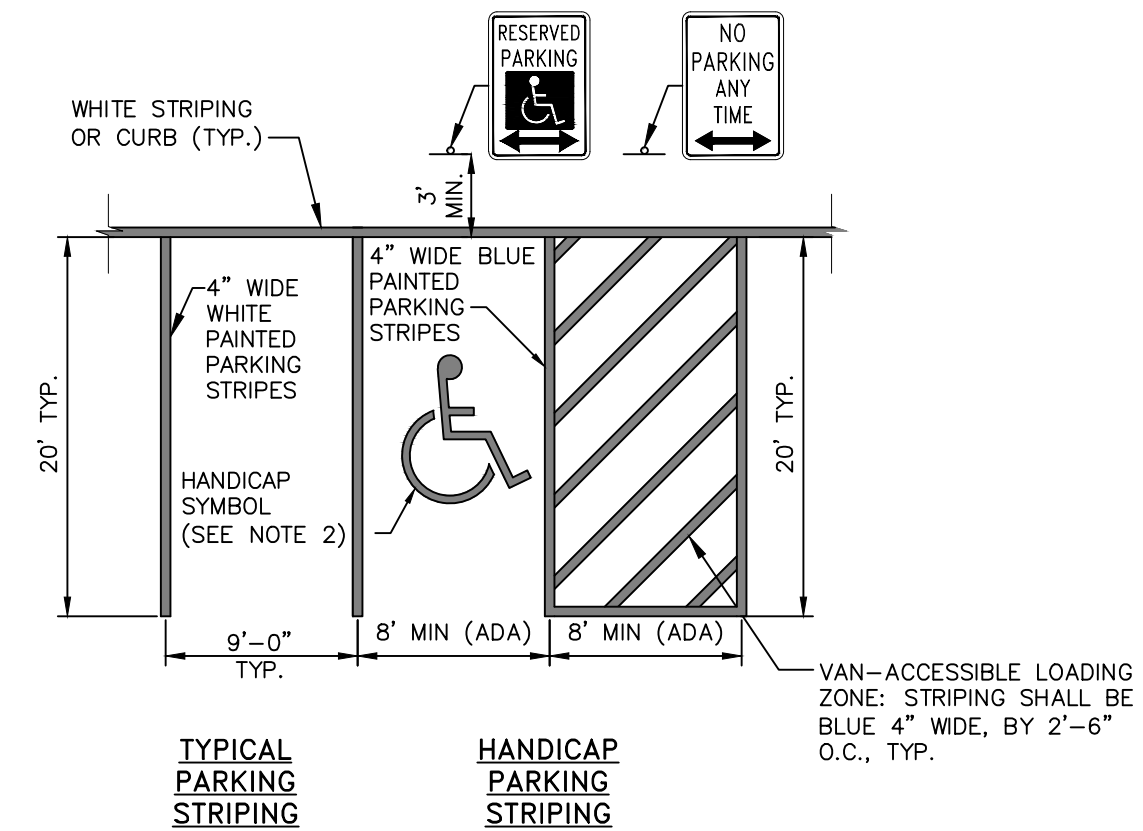
STABILIZED CONSTRUCTION ENTRANCE DETAIL NOT TO SCALE



NOTES:

- LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
- HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
- USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
- FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE

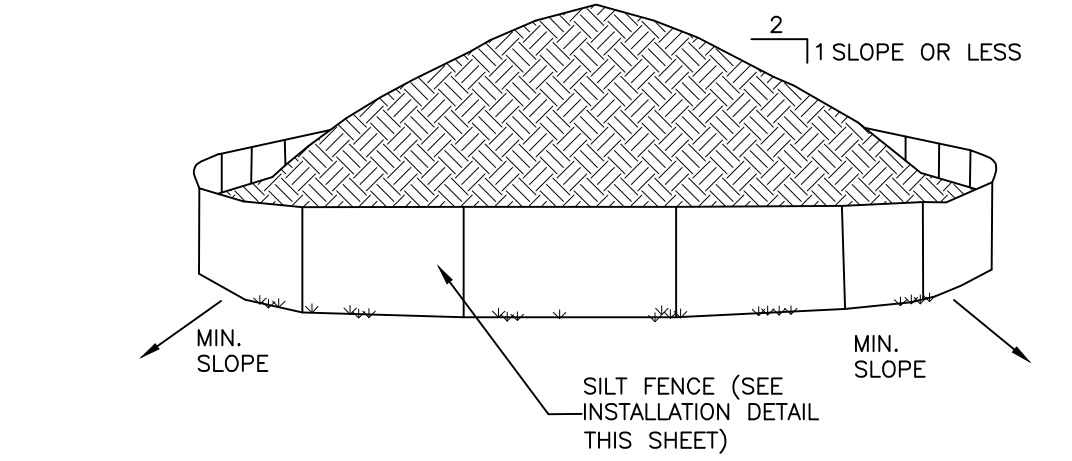
CATCH BASIN INLET PROTECTION DETAIL NOT TO SCALE



NOTES:

- ALL DIMENSIONS SUBJECT TO CURRENT MUNICIPALITY ZONING AND SITE REGULATIONS.
- PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE WITH NYS DOT AND ADA STANDARDS.
- IF PARKING ADJUTS A SIDEWALK, THEN THE REGULATORY SIGNS SHALL BE PLACED BEHIND THE SIDEWALK.

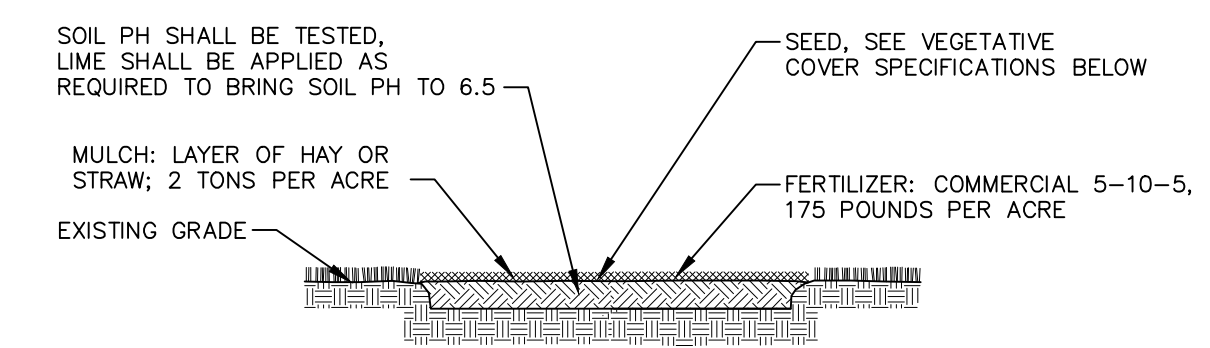
PARKING AND STRIPING DETAIL NOT TO SCALE



NOTES:

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

TEMPORARY SOIL STOCKPILE DETAIL NOT TO SCALE



NOTES:

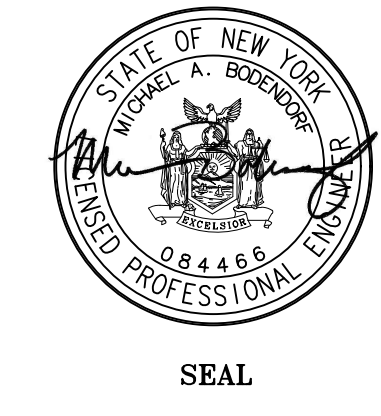
- TOPSOIL, SEED, MULCH, AND FERTILIZER DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 14 DAYS OR MORE.
- SEED MIXTURE FOR USE ON LAWNS IN SUNNY AREAS:

| | |
|-------------------------------|---------------------|
| 65% KENTUCKY BLUE GRASS BLEND | 114 POUNDS PER ACRE |
| 20% PERENNIAL RYEGRASS | 35 POUNDS PER ACRE |
| 15% FESCUE | 28 POUNDS PER ACRE |
| | 175 POUNDS PER ACRE |
- SEED MIXTURE FOR USE IN SHADY AREAS:

| | |
|--|---------------------|
| 80% BLEND OF SHADE TOLERANT KENTUCKY BLUEGRASS | 138 POUNDS PER ACRE |
| 20% FINE FESCUE | 37 POUNDS PER ACRE |
| | 175 POUNDS PER ACRE |
- SEED SHOULD BE APRIL 1ST AND MAY 15TH OR AUGUST 15TH AND OCTOBER 15TH. SEEDING MAY OCCUR BETWEEN MAY 15TH AND AUGUST 15TH IF ADEQUATE IRRIGATION IS PROVIDED.
- TOPSOIL SHALL HAVE AT LEAST 6% BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL AND NO GREATER THAN 20%. TOPSOIL SHALL HAVE NOT LESS THAN 20% FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15% CLAY.

TOPSOIL, SEED AND MULCH DETAIL NOT TO SCALE

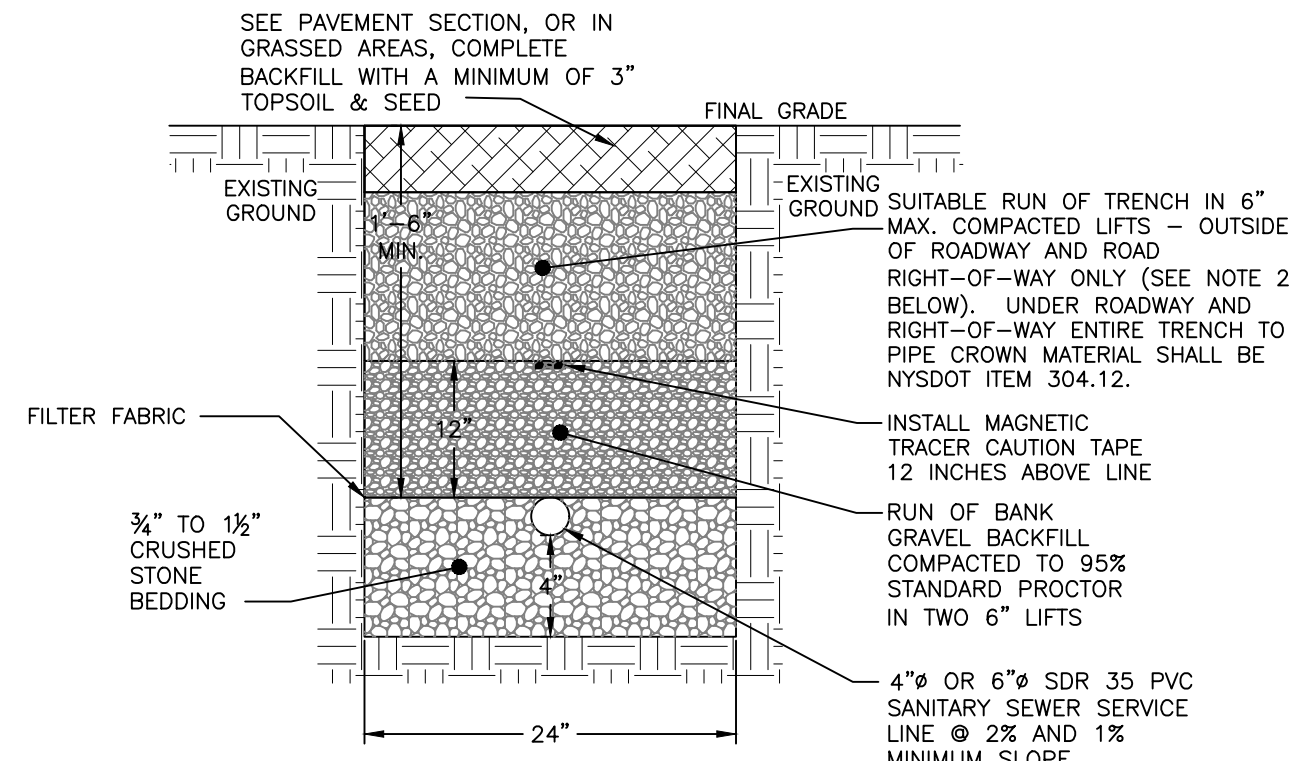
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| REVISIONS: | | | | | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
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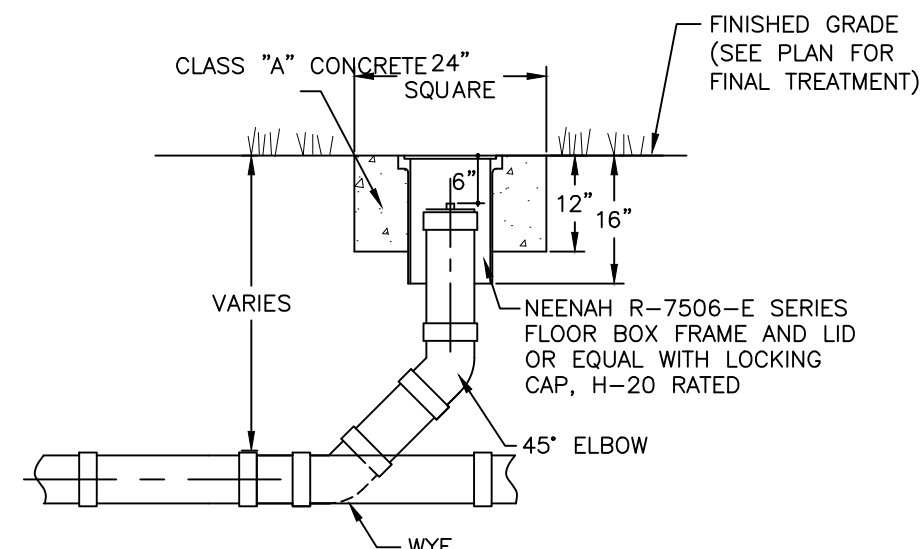
CONSTRUCTION DETAILS
 416 MAIN STREET
 416-420 MAIN STREET
 CITY OF BEACON
 DUTCHESS COUNTY, NEW YORK
 TAX ID: 6054-29-056780 & 056774

JOB #: 2020-005
 DATE: 4/28/2020
 SCALE: NTS
 TITLE: CD-1
 SHEET: 9 OF 10

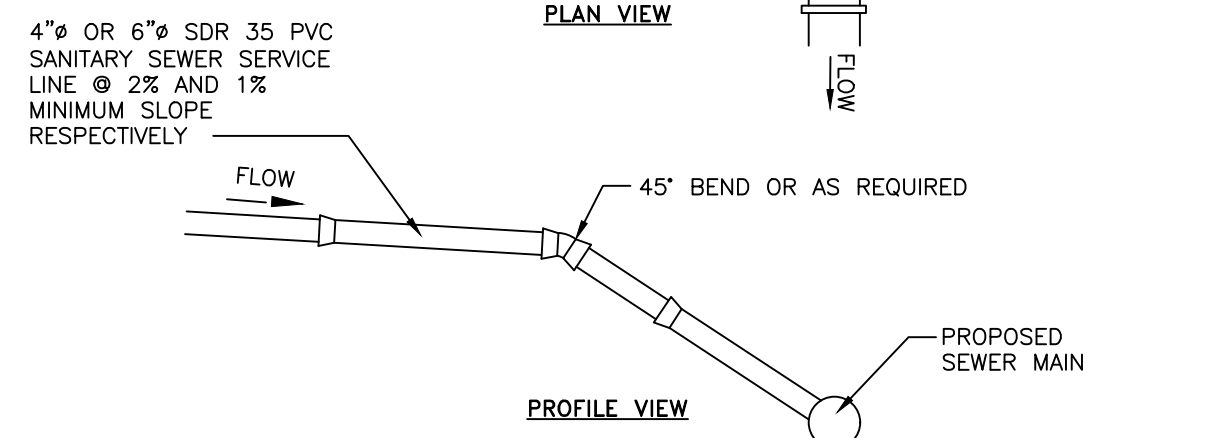


NOTES:
 1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
 2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED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

SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE

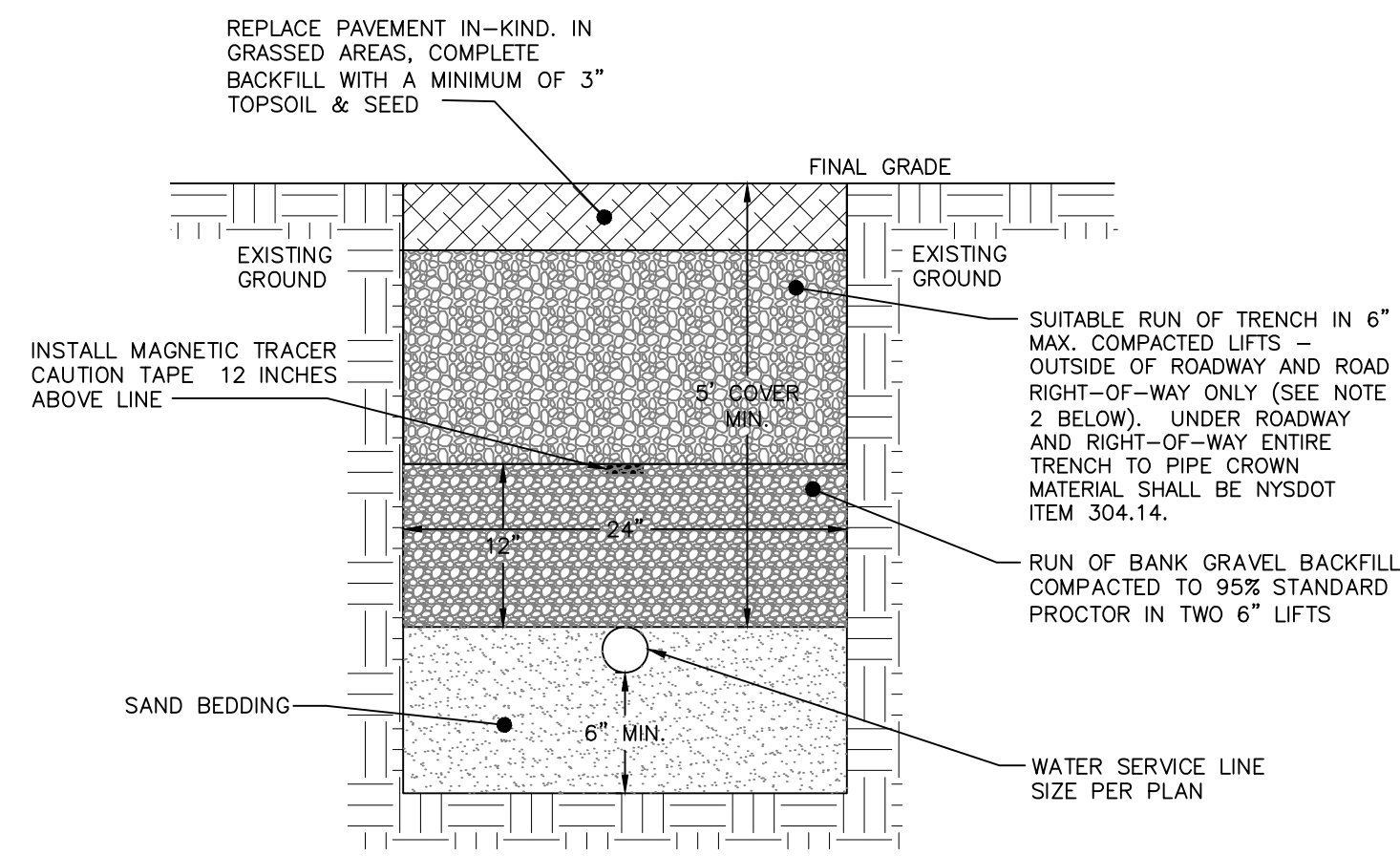


CLEANOUT DETAIL
NOT TO SCALE



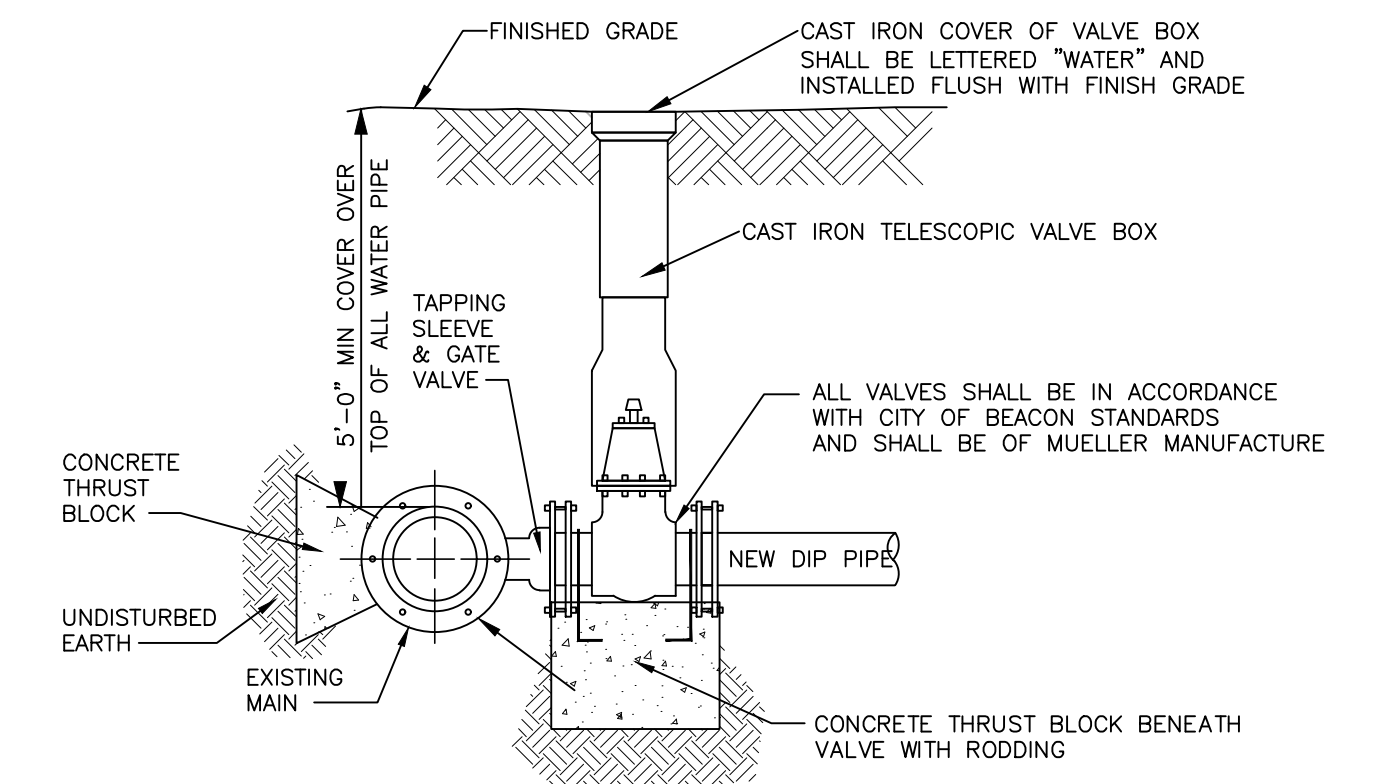
NOTES:
 1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
 2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED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

SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



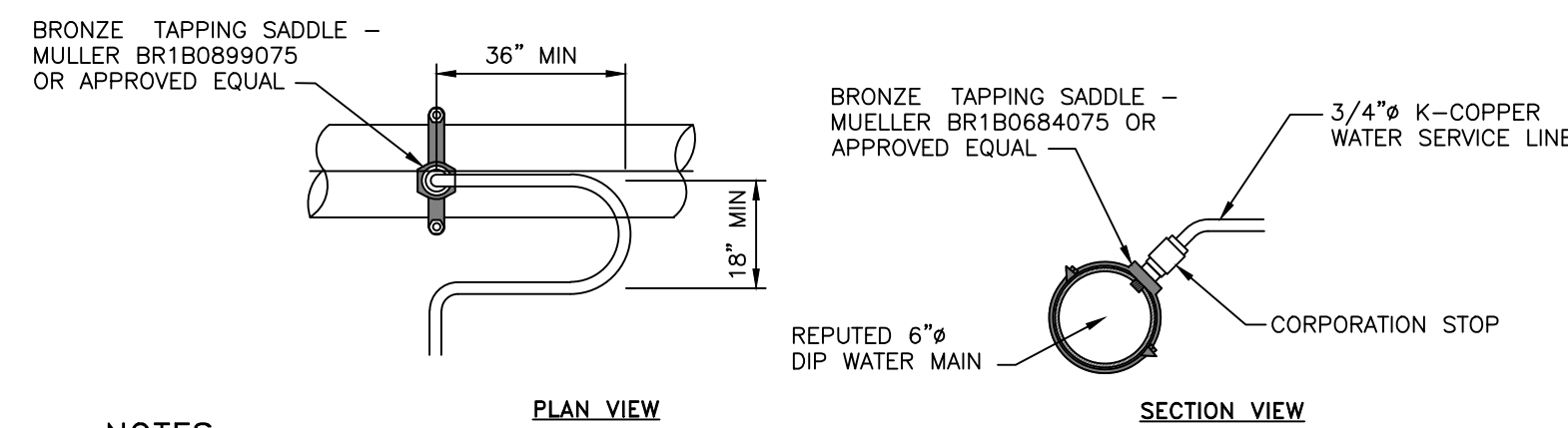
NOTES:
 1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
 2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLARGED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL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

WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



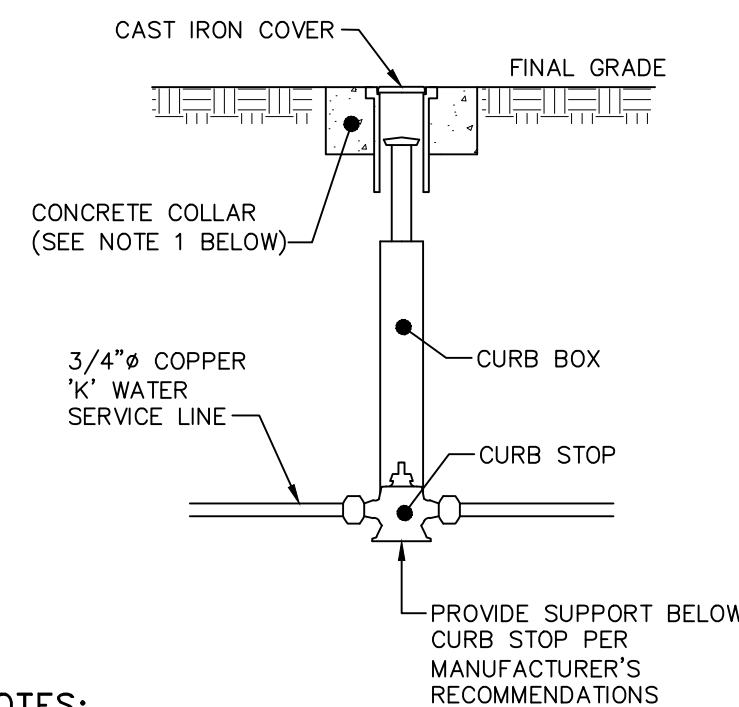
NOTES:
 1. TAPPING SLEEVE SHALL BE USED IF THE SECTION OF WATER MAIN IN THE VICINITY OF THE CONNECTION CANNOT BE SHUT DOWN AND ISOLATED.
 2. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2-INCH SQUARE-OPERATING NUT PAINTED RED.
 3. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
 4. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H-615, AND T-2630 RESPECTIVELY.

TAPPING SLEEVE DETAIL
NOT TO SCALE



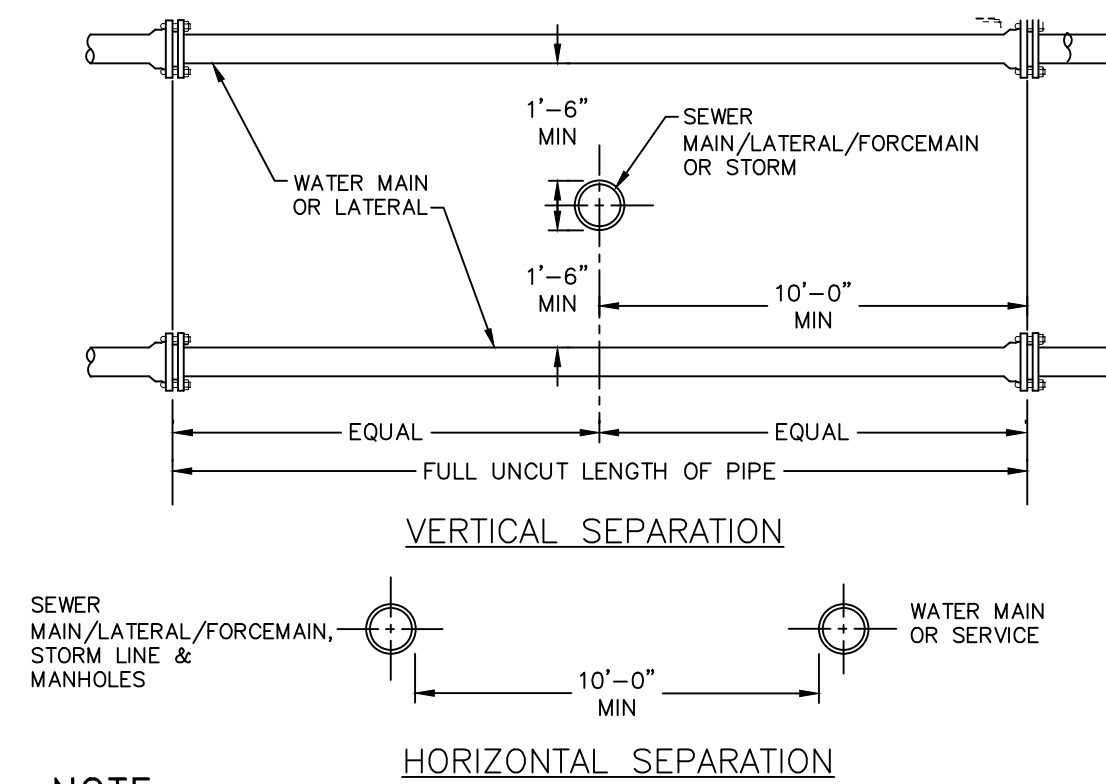
NOTES:
 1. A MINIMUM 5' COVER SHALL BE PROVIDED ON THE WATER SERVICE LINE (CONDITIONED ON ACTUAL 5' MIN. WATER MAIN DEPTH).
 2. CORPORATION STOP TO BE COMPRESSION TYPE BY MUELLER.
 3. WATER SERVICE LINE TO HAVE A 'GOOSENECK' NEAR CORPORATION STOP.
 4. CORPORATION STOP TO BE INSTALLED IN THE UPPER HALF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

WATER SERVICE CONNECTION DETAIL
NOT TO SCALE



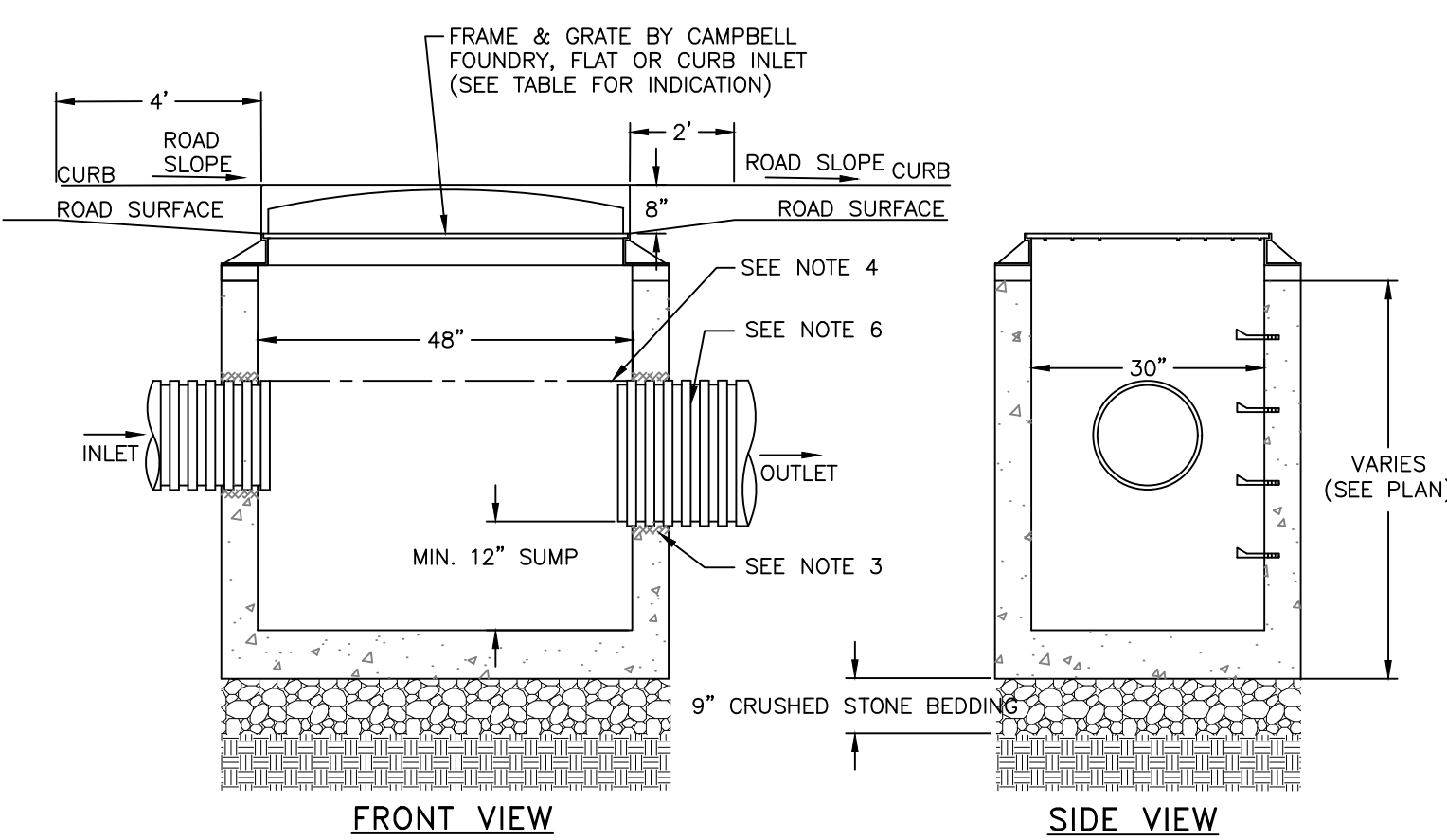
NOTES:
 1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.
 2. CURB STOP TO BE COMPRESSION TYPE BY MUELLER.
 3. AREA AROUND CURB BOX TO BE BACKFILLED WITH GRAVELLY MATERIAL.

WATER SHUT-OFF VALVE DETAIL
NOT TO SCALE



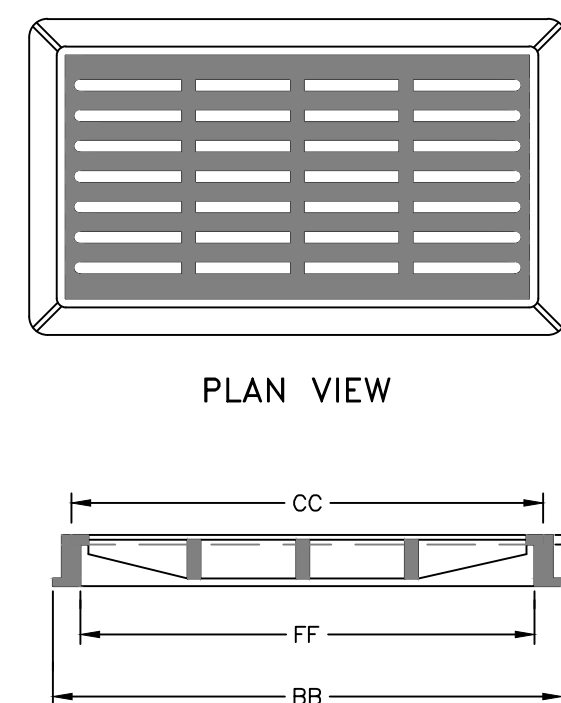
NOTE:
 1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

WATER LINE SEPARATION DETAIL
NOT TO SCALE



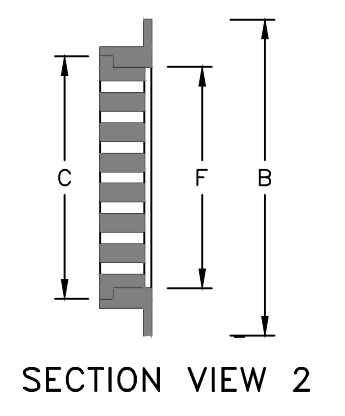
NOTES:
 1. PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
 2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGED AROUND.
 3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE 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



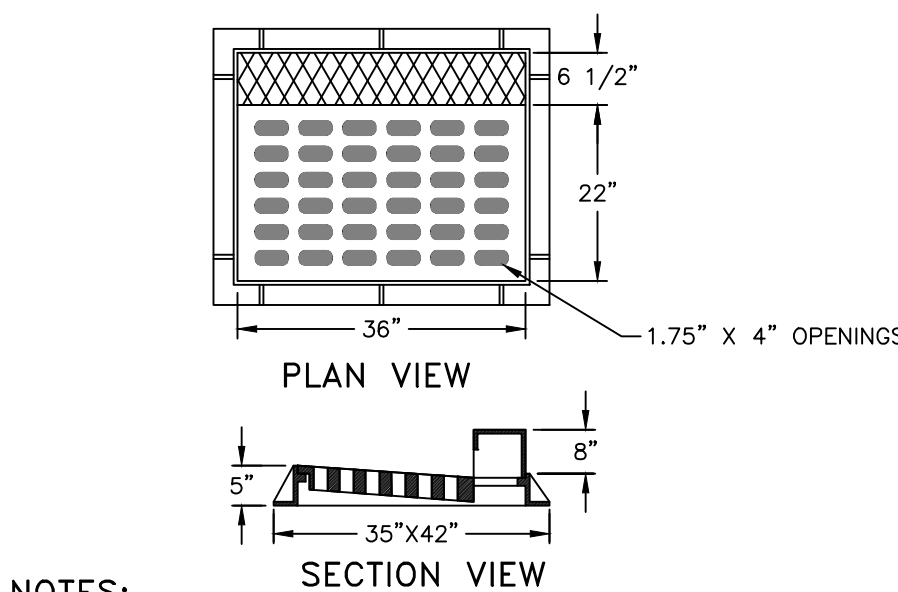
NOTES:
 1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 3433, OR APPROVED EQUAL.
 2. CB 1 SHALL RECEIVE A FLAT INLET. CATCH BASINS 2 & 3 RECEIVE CURB INLETS (RE-USE EXISTING CURB INLET ON CB 3)

CAST IRON STORMWATER FLAT INLET GRATE DETAIL
NOT TO SCALE



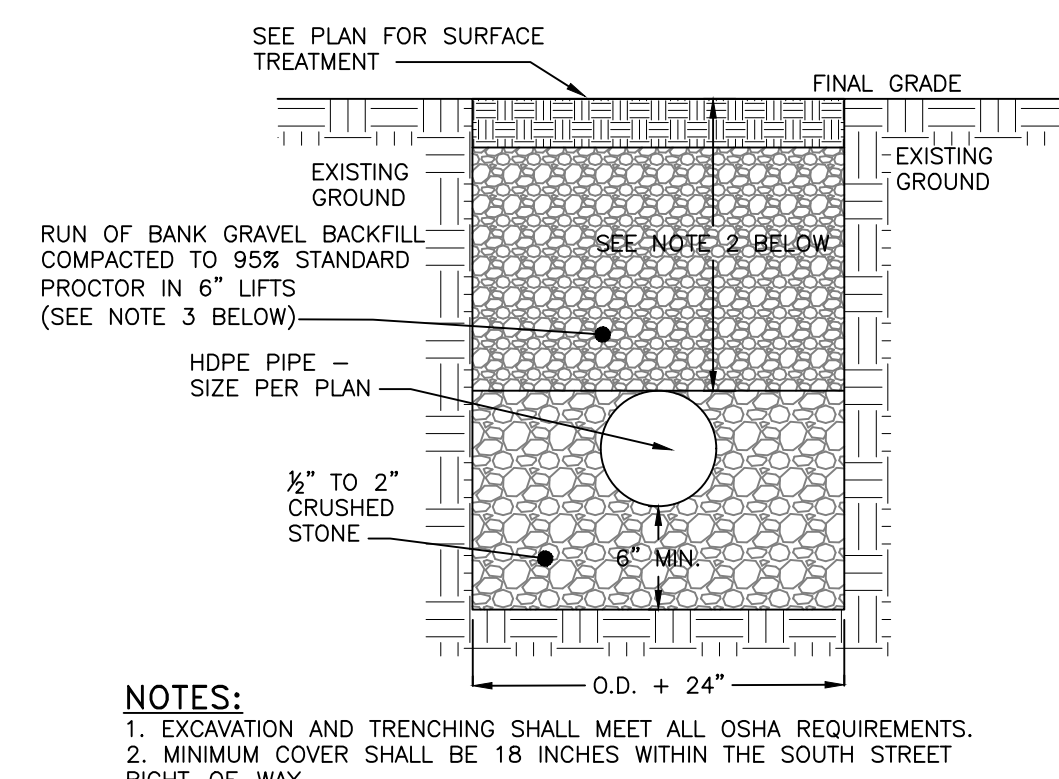
DIMENSION TABLE:

| B | C | E | F | X | BB | CC | FF |
|-----|-----|----|-----|----|-----|-----|-----|
| 30" | 24" | 4" | 22" | 1" | 14" | 36" | 34" |



NOTES:
 1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
 2. CATCH BASINS TO RECEIVE CURB INLETS ARE CB 2 AND CB 3 WITHIN SOUTH STREET.

CAST IRON STORMWATER CURB INLET GRATE DETAIL
NOT TO SCALE



NOTES:
 1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
 2. MINIMUM COVER SHALL BE 18 INCHES WITHIN THE SOUTH STREET RIGHT-OF-WAY.
 3. BACKFILL WITHIN THE RIGHT-OF-WAY SHALL BE NYS DOT ITEM 304.14 SUBBASE COURSE TYPE 2 FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT OR GRASS, PLACED IN 8" MAXIMUM LIFTS AND COMPACTED TO 95% STANDARD PROCTOR.

STORMWATER PIPE IN TRENCH DETAIL
NOT TO SCALE

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

GATE VALVE DETAIL
NOT TO SCALE

| DRAWN BY: CMB | | | | CHECKED BY: MAB | | | |
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CONSTRUCTION DETAILS
 416 MAIN STREET
 416-420 MAIN STREET
 CITY OF BEACON
 DUTCHESS COUNTY, NEW YORK
 TAX ID: 6054-20-056780 & 056774

JOB #: 2020-005
 DATE: 4/28/2020
 SCALE: NTS
 TITLE: CD-2
 SHEET: 10 OF 10



Traffic Impact Study

416-420 Main Street
City of Beacon, Dutchess County, New York

April 28, 2020

Prepared For
416 Main Street, LLC
420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC
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New York, NY 101

Prepared By
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400 Columbus Avenue, Suite 180E
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A handwritten signature in black ink, appearing to read 'Philip J. Grealy', written over a horizontal line.

Philip J. Grealy, Ph.D., P.E.
License No. 59858

A handwritten signature in black ink, appearing to read 'Richard G. D'Andrea', written over a horizontal line.

Richard G. D'Andrea, P.E., PTOE
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MC Project No. 20000282A





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I. INTRODUCTION

A. PROJECT DESCRIPTION AND LOCATION

(Figure No. 1)

This report has been prepared to evaluate the potential traffic and parking impacts associated with the proposed 416-420 Main Street Mixed-Use Development, which is proposed to be developed on the property located on the northeast corner of the Main Street/Schenck Avenue intersection and extended to South Street in the City of Beacon, Dutchess County, New York. The Site, which is improved by and existing one (1)-story retail building and a vacant adjoining lot, is proposed to consist of two (2) buildings totaling 16,848 sq. ft. including 14,703 sq. ft. at the front mixed-use building (fronting on Main Street) and 2,145 sq. ft. at rear building (fronting on South Street). The mixed-use building fronting on Main Street will consist of a total of 4,616 sq. ft. of first floor retail space, which will include the existing 1,675 sq. ft. Kitchen & Coffee (formerly Ella's Bellas Café) that will remain, as well as 7,872 sq. ft. of commercial office space on the second and third floors and 2,215 sq. ft. of residential space containing two (2) residential apartment units on the fourth floor. The rear lot building will consist of a 2,145 sq. ft. residential live/work building that will contain one (1) residential unit. The Site will provide limited parking facilities with one (1) driveway connection to Schenck Avenue for two (2) off-street parking spaces that will be provided for use by the residential tenants in the mixed-use building while a second driveway connection will be provided to South Street for use by the residential building to the rear of the Site, which will also provide two (2) off-street parking spaces.

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

B. SCOPE OF STUDY

This study has been prepared to identify current and future traffic operating conditions on the surrounding roadway network and to assess the potential traffic impacts of the proposed 416-420 Main Street Mixed-Use Development. Existing and future parking conditions were also evaluated.

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 2020 Existing Traffic Volumes representing existing traffic conditions in the vicinity of the site.

The Year 2020 Existing Traffic Volumes were then projected to the 2025 Design Year to take into account background traffic growth. In addition, traffic for other specific potential or approved developments in the area were estimated and then added to the Projected Traffic Volumes to obtain the Year 2025 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 2020 No-Build Traffic Volumes resulting in the Year 2020 Build Traffic Volumes.

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

In addition to the traffic analysis summarized above, a detailed parking analysis has also been conducted, which identifies the current available parking supply in the vicinity of the site based on observations of the occupied and available parking spaces during weekday and weekend peak periods. The available parking supply was then compared to the required parking spaces as determined by the City of Beacon Zoning Code parking requirements.

II. EXISTING ROADWAY AND TRAFFIC DESCRIPTIONS

A. DESCRIPTION OF EXISTING ROADWAYS

(Figure No. 1)

As shown on Figure No. 1, the proposed 416-420 Main Street Mixed-Use Development will be accessed from Main Street, Schenck Avenue and South Street. One driveway connection will be provided to Schenck Avenue for parking to be provided for the building with Main Street frontage while a second driveway connection will be provided to South Street for use by the residential building to the rear of the Site. The following is a brief description of the roadways located within the study area. In addition, Section III-F provides a further description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service and any recommended improvements for each of the study area intersections. Appendix “D” contains copies of the capacity analyses which indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. Main Street

Main Street is a City street that consists of one lane in each direction and traverses in a northwest/southeast direction between NYS Route 9D and Churchill Street. Beyond Churchill Street, Main Street continues in a more northeasterly direction. Northwest of Fishkill Avenue, the roadway is classified as an Urban Major Collector, southeast of Fishkill Avenue it is classified as a local roadway. In the vicinity of the site, the roadway intersects with Schenck Avenue at an unsignalized “T” shaped intersection as well as with Fishkill Avenue/Teller Avenue (NYS Route 52) at a signalized full movement intersection. Sidewalks are provided on both sides of the street and striped pedestrian crossings are provided at the Schenck Avenue intersection. Signalized pedestrian crossings are provided at the Fishkill Avenue/Teller Avenue intersection. Parking is permitted on both sides of Main Street for its entire length with the parking limited to two-hour parking between 9AM and 5PM seven days a week. Main Street has a City Speed Limit of 30 MPH northeast of Fishkill Avenue, while the speed limit southwest of Fishkill Avenue is 25 MPH.

2. Schenck Avenue

Schenck Avenue is a local City street that consists of one lane in each direction and traverses in a north/south direction. Within the study area, the roadway intersects with Main Street and South Street at two unsignalized “T” shaped intersections. Sidewalks and on-street parking, with no parking restrictions, are provided on both sides of the roadway between Main Street and Van Nydeck Avenue. South of Van Nydeck Avenue a sidewalk is only provided on the west side of the roadway.

3. Fishkill Avenue/Teller Avenue (NYS Route 52)

Fishkill Avenue and Teller Avenue are classified as Urban Minor Arterials. These roadways are also known as NYS Route 52 but are owned and maintained by the City. Fishkill Avenue and Teller Avenue each consist of one lane in each direction and traverse in a generally north/south direction. The roadway intersects Main Street at a full movement signalized intersection. Sidewalks are provided on both sides of the roadway to the north and south of Main Street. On street parking is not permitted along Teller Avenue, while limited on street parking is permitted along the east side of Fishkill Avenue. Fishkill Avenue and Teller Avenue each have a posted City Speed Limit of 30 MPH.

B. YEAR 2019 EXISTING TRAFFIC VOLUMES

(Figures No. 2, 3 and 4)

Manual traffic counts were collected by representatives of Maser Consulting, P.A. on Tuesday February 4, 2020 for the AM and PM Peak Hours and Saturday February 1, 2020 for the Saturday Midday Peak Hour to determine the existing traffic volume conditions at the study area intersections. These traffic counts were then compared to traffic volume data from previous traffic studies conducted by our office and to traffic volume data available from the New York State Department of Transportation (NYSDOT) for the Fishkill Avenue/Teller Avenue (NYS Route 52) Corridor. Based on this information, the Year 2020 Existing Traffic Volumes were established for the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours at the following study area intersections.

- Fishkill Avenue/Teller Avenue (NYS Route 52) and Main Street
- Main Street and Schenck Avenue

III. EVALUATION OF FUTURE TRAFFIC CONDITIONS

A. YEAR 2025 NO-BUILD TRAFFIC VOLUMES

(Figure No. 5 through 13)

The Year 2020 Existing Traffic Volumes were increased by a growth factor of 2.0% per year to account for general background growth resulting in the Year 2025 Projected Traffic Volumes, which are shown on Figures No. 5, 6 and 7 for each of the Peak Hours. In addition, traffic associated with the proposed 13 Creek Drive Development was also accounted for. The resulting Other Development traffic volumes associated with that development are shown on Figures No. 8, 9 and 10 for each of the peak hours. These volumes were added to the 2025 Projected Traffic Volumes resulting in the Year 2025 No-Build Traffic Volumes, which are shown on Figures No. 11, 12 and 13 for the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours, respectively.

B. SITE GENERATED TRAFFIC VOLUMES

(Table No. 1)

Estimates of the amount of traffic to be generated by the proposed residential development during each of the peak hours were developed based on information published by the Institute of Transportation Engineers (ITE) as contained in the report entitled “Trip Generation”, 10th Edition, 2017, based on Land Use Category – 820 – Retail, 710 – Office Building and 220 – Multifamily Home and 210 – Single Family Home. Table No. 1 summarizes the trip generation rates and corresponding site generated traffic volumes for the Weekday Peak AM, Weekday Peak PM and Saturday Hours.

It should be noted that the Kitchen & Coffee use (formerly Ella’s Bellas Café), which consists of 1,675 sq. ft. is an existing operating use that will be incorporated into the overall development but will remain upon completion. Traffic associated with this use has been captured in the existing traffic volume counts identified above, therefore no additional traffic generation associated with this use has been accounted for in the analysis.

In addition, the rear lot which is currently zoned PB – Business Off-Street, may be rezoned into to the T-Transitional Zone in the near future. Under this zoning, even if the proposed single-family home artist/live work space was be modified to two (2) artist live-work units, it is expected that this would result in similar traffic generation to the single live-work space and therefore no separate analysis has been conducted for this condition.

C. ARRIVAL/DEPARTURE DISTRIBUTIONS

(Figures No. 14 and 15)

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

D. 2020 BUILD CONDITIONS TRAFFIC VOLUMES

(Figures No. 16 through 21)

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

E. DESCRIPTION OF ANALYSIS PROCEDURES

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

- **Signalized Intersection Capacity Analysis**

The capacity analysis for a signalized intersection was performed in accordance with the procedures described in the *Highway Capacity Manual, 6th Edition*, published by the Transportation Research Board. The terminology used in identifying traffic flow conditions is Levels of Service. A Level of Service “A” represents the best condition and a Level of Service “F” represents the worst condition. A Level of Service “C” is generally used as a design standard while a Level of Service “D” is acceptable during peak periods. A Level of Service “E” represents an operation near capacity. In order to identify an intersection’s Level of Service, the average amount of vehicle delay is computed for each approach to the intersection as well as for the overall intersection.

- Unsignalized Intersection Capacity Analysis

The unsignalized intersection capacity analysis method utilized in this report was also performed in accordance with the procedures described in the *Highway Capacity Manual, 6th Edition*. 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

(Tables No. 2AM, 2PM and 2SAT)

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.

Tables No. 2AM, 2PM and 2SAT, contained in Appendix “B” summarize the results of the capacity analysis for the 2020 Existing, 2025 No-Build and 2025 Build Conditions for each of the peak hours analyzed, respectively. Appendix “D” contains copies of the capacity analysis which also indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. Fishkill Avenue/Teller Avenue (NYS Route 52) and Main Street

Fishkill Avenue/Teller Avenue and Main Street intersect at a full movement signalized intersection. Each of the approaches to the intersection consist of a single lane and signalized pedestrian crosswalks are provided on all four intersection approaches. “Right Turns on Red” are also prohibited on all four approaches. On-street parking is also provided on each of the Main Street intersection approaches as well as the east side of Fishkill Avenue within approximately 250 ft. of the intersection.

Capacity analysis was conducted for this intersection utilizing the 2020 Existing, 2025 No-Build and 2025 Build Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service “B” during each of the peak hours and will remain under all analysis conditions (existing, no-build and build).

2. Main Street and Schenck Avenue

Main Street and Schenck Avenue intersect at a “T” shaped unsignalized intersection. Main Street consists of one lane in each direction and on-street parallel parking is provided on both sides of the street. Schenck Avenue also consists of one lane in each direction and is controlled by a “Stop” sign approaching the intersection. On-street parallel parking is provided on the west side of Schenck Avenue only. Painted pedestrian crosswalks are provided on the eastbound and southbound approaches to the intersection.

Capacity analysis was conducted for this intersection utilizing the 2020 Existing, 2025 No-Build and 2025 Build Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service “B” or better during all time periods and that this level of service will be maintained under future No-Build and Build conditions.

IV. PARKING ANALYSIS

A. EXISTING PARKING CONDITIONS

(Figure 1P, Tables P-1, P-2, P-3)

Manual parking counts of the available and occupied parking spaces were collected by representatives of Maser Consulting, P.A. for all on-street and off-street public parking spaces found within 500± ft. of the proposed project Site location, in order to identify the existing parking conditions in the area. These parking counts included the following areas, which are also identified on Figure 1P contained in Appendix “A”:

- Main Street between Tioronda Avenue & Veterans Place (On-Street)
- Van Nydeck Avenue between Tioronda Avenue & Fishkill Avenue (On-Street)
- Schenck Avenue between Main Street & North Street (On-Street)
- South Street between Schenck Avenue & Locust Place (On-Street)
- North Street between Schenck Avenue & North Street (On-Street)
- Main Street/Van Nydeck Street Public Lot (70 Spaces Off-Street)
- Van Nydeck Street Public Lot (23 Spaces Off-Street)
- Veterans Place/Henry Street Public Lot (70 Spaces Off-Street)

Figure No. 1P also provides a summary of the parking restrictions for the study area including in the off-street public parking lots and all area roadways listed above with on-street parking provided.

The parking counts were conducted on Wednesday February 5th, 2020 during the AM (7AM-9AM), Midday (11AM-2PM) and PM (3:30PM-7PM) peak periods, on Saturday February 8th, 2020 between 11:00 AM and 2:30 PM and Sunday February 9th, 202 between 11:00 AM and 2:00 PM.

The parking counts are summarized in Tables P-1, P-2 and P-3, contained in Appendix “B”, for the Weekday, Saturday and Sunday parking counts respectively. The tables identify the total parking spaces, the total occupied spaces and the total available (unoccupied) spaces within the studied area. The parking count data indicates that during the Weekday periods there are in excess of 125 available (unoccupied) parking spaces within the 500± ft. study area, while during the Saturday and Sunday peak periods there are as few as 30 available parking spaces in the vicinity of the site.

B. FUTURE PARKING CONDITIONS

The parking requirements for the proposed development based on the City of Beacon Code as identified in Section 223-26.F and 223-41.18.G.(2) were reviewed in order to determine the required parking supply for the development. The below summarizes the required City Code parking supply ratios and the equivalent required number of parking spaces for each use within the proposed development. Note that the below parking requirements does not account for the parking required for the existing Kitchen & Coffee (formerly Ella’s Bellas Café) since this is an existing use and any parking currently associated with this use is already accounted for in the parking counts discussed above.

| SUMMARY OF OFF-STREET PARKING REQUIREMENTS PER CITY OF BEACON CITY CODE | | |
|--|-----------------------------------|------------------------------------|
| USE | REQUIRED PARKING RATIO | REQUIRED PARKING SPACES |
| MIXED-USE BUILDING FRONTING MAIN STREET (CMS – CENTRAL MAIN STREET ZONING DISTRICT) | | |
| NEW RETAIL (2,941 SQ.FT.) | 2 SPACE/1,000 SQ. FT. | 6 SPACES |
| OFFICE (7,872 SQ.FT.) | 2 SPACE/1,000 SQ. FT. | 16 SPACES |
| APARTMENTS (2 UNITS) | 1 SPACE/DWELLING UNIT | 2 SPACES |
| REAR LOT BUILDING (PB- BUSINESS OFF-STREET ZONING DISTRICT) | | |
| RESIDENTIAL (1 UNIT) | 2 SPACES/DWELLING UNIT | 2 SPACES |
| | TOTAL | 26 SPACES |

The proposed development will be provided a total of four (4) off-street parking spaces, two (2) spaces for the use of the mixed-use building’s 4th floor residential units and two (2) spaces for the rear residential building. No designated parking will be provided for the retail or commercial office space in the mixed-use building. The rear lot building will be provided with two (2) off-street parking spaces in the driveway for the one (1) live/work unit. The remaining of the required 22 parking spaces would have to be accommodated by public parking, both on-street and in City of Beacon Public Parking lots in the area. In addition, as part of the proposed development, the Applicant proposes to stripe new on-street parking spaces along the east side of Schenck Avenue between Main Street and South Street and along both sides of South Street in the vicinity of the Site in order better define

parking in this area. Furthermore, the elimination of one (1) of the two (2) existing curb cuts to the subject property from Schenck Avenue will provide for an additional parking space along the east side of Schenck Avenue.

As indicated previously, during a typical weekday, greater than 125 parking spaces were found to be available within 500 ft. of the proposed development, which would more than accommodate the required parking that is not captured by the on-site parking provided. During the Weekend (Saturday & Sunday) peak parking periods, as few as 30 parking spaces were found to be available within 500 ft. of the proposed development. However, on Saturday and Sunday the second and third floor office uses are anticipated to be closed and/or have very limited activity. In fact, based on Institute of Transportation Engineers (ITE) data contained in their publication entitled Parking Generation Manual, 5th Edition, an office use of this size can be expected to generate a peak parking demand of between 2 (based on average parking rate) and 6 vehicles (based on 85th percentile parking rate) on a Saturday. Using the ITE parking data for a Saturday, the development would require 16 total parking spaces on Saturday and a similar total would be required on Sunday. Including the four (4) parking spaces provided on-site the net parking demand on the weekend would be approximately 12 spaces, which can be accommodated by the available public parking in the vicinity of the site.

In addition to the above, per Section 223-26C(6) of the City Code “...*the Planning Board may approve the joint use of parking spaces by two or more establishments on the same lot or on contiguous lots, the total capacity of which is less than the sum of the spaces required for each, provided that said Board finds that the capacity to be provided will substantially meet the intent of this article by reason of variation in the probable time of maximum use by patrons or employees at such establishments and provided that such approval of such joint use shall be automatically terminated upon a change of use at any such establishment.*” Shared on-street parking can be expected to occur within 500 ft. of the Site between the proposed project and other uses along Main Street where patrons may park along the Main Street area to visit multiple properties/uses in the same trip and/or spaces occupied by residential tenants during the nighttime hours may be available for use by retail and commercial patrons during the daytime hours. While shared parking may occur as indicated, no credit for this has been accounted for in the parking analysis discussed above.

Finally, it should also be noted that as indicate in the City Code Section 223-41.18.G.(3) the CMS Zone parking requires identified in Section 223-41.18.G.(2) may be modified by the Planning, in its discretion, based on information provided demonstrating one or more of the following.

- (a) That the projected operational characteristics of the proposed use require a different amount of parking.
- (b) That adequate shared parking, contractually obligated for the duration of the proposed use, is available within 500 feet of the site and within the CMS or PB Districts.
- (c) That the applicant has provided sufficient bicycle parking to reduce anticipated vehicular travel demand.
- (d) That there is sufficient public parking available within 800 feet of the site and within the CMS or PB Districts to meet foreseeable parking needs of the proposed use and surrounding uses for the duration of the proposed use.
- (e) That the applicant will voluntarily dedicate land for public parking on site or will acquire land by purchase or long-term lease (for the duration of the proposed use) within 800 feet of the site and within the CMS or PB Districts and voluntarily dedicate such land to the City for public parking.
- (f) That a professional parking study of the proposed use and the surrounding area demonstrates that a different amount of parking would be appropriate for the use in its particular location and/or that existing and/or proposed off-site parking is sufficient.

The information presented herein demonstrates that items (b), (d), (e) and (f) are met for this development. The Applicant is also proposing to provide two (2) sets of bicycle racks at the rear of the front lot building for public use, which satisfies item (c) as well.

C. OTHER PARKING RELATED CONSIDERATIONS

1. Off-Street Loading – No separate off-street loading space is provided as part of the proposed development. Per City Code Section 233-26H.2.(a) and (b) no off-street loading spaces are required for retail buildings with a gross floor of less than 5,000 sq. ft. and for office establishments of less than 10,000 sq. ft.
2. Rear Lot Zoning – As previously indicated the rear lot is currently zoned PB – Business Off-Street but may be rezoned to the T-Transitional Zone in the future by the City. Under this zoning, even if the proposed single-family artist live/work space was modified to one (1) artist live-work unit with two bedrooms, the unit would require the same number of parking spaces (two (2) spaces - 1 space per dwelling unit + 1/4 for

- each bedroom + 1/2 for the live/work space) as the apartment unit, which results in the same parking conclusions as discussed above.
3. Schenck Avenue One-Way – Schenck Avenue is currently a two-way roadway with on-street parking on both sides of the roadway. Between Main Street and South Street, the roadway has an approximate width of 26 ft. curb-to-curb. Assuming a 7 ft. parking lane on each side of the street this leaves an approximately 12 ft. travel lane between parked vehicles to accommodate two-way traffic. While hourly volumes on this road are relatively low, less than 70 cars per hour, the City could consider making this roadway a one-way roadway from Main Street to South Street. This would result in southbound traffic traveling towards Main Street being redirected to other local roadways, but it is not anticipated that this would result in any significant traffic impacts. Appropriate signing would be necessary at the Main Street/Schenck Avenue and Schenck Avenue/South Street intersections would be required to accommodate this modification. A modification to one-way flow on this portion of Schenck Avenue would better accommodate the existing two-sided parking.

V. SUMMARY AND CONCLUSION

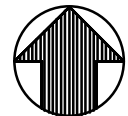
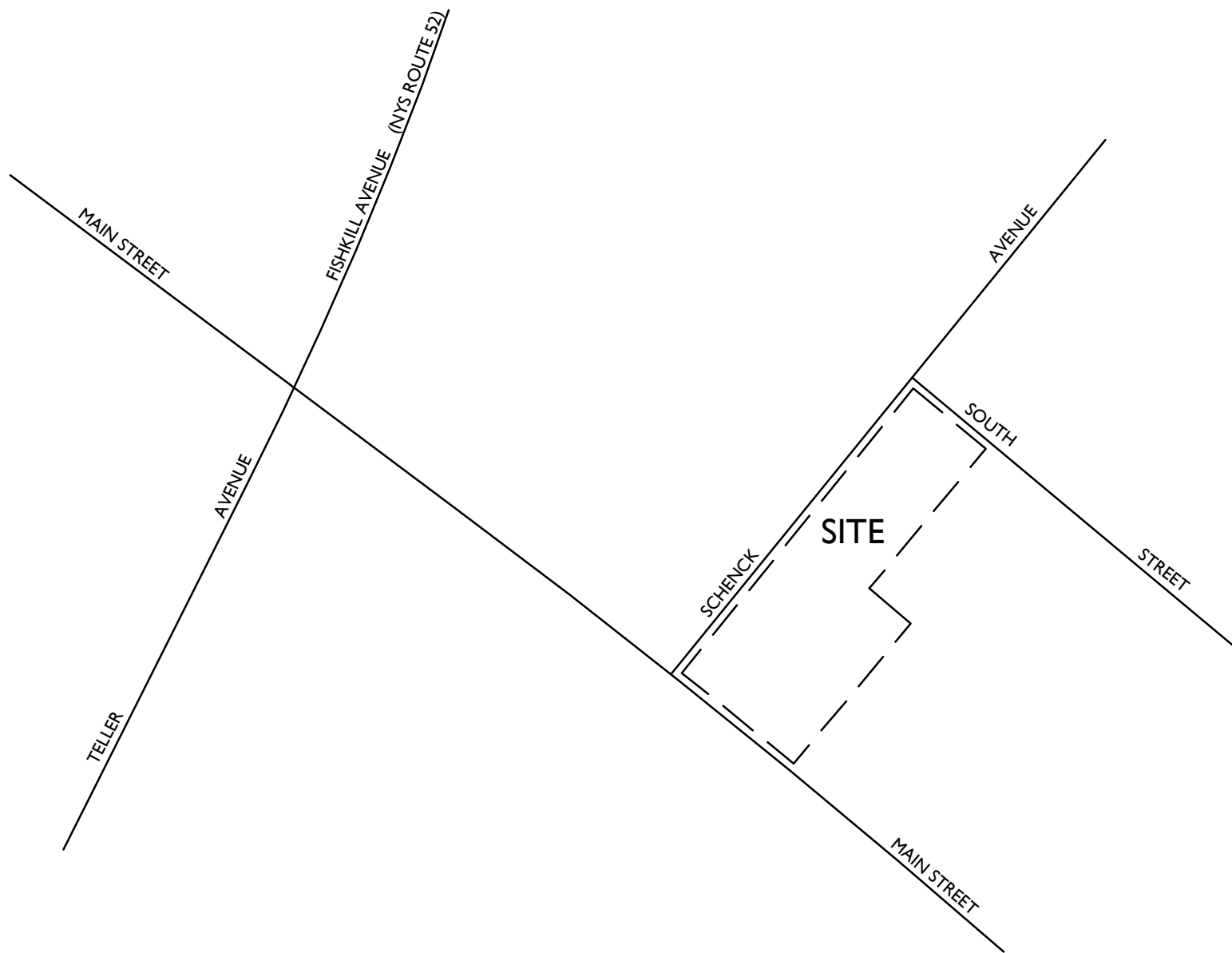
Based on the above analysis, similar Levels of Service and delays will be experienced at the area intersections under the future No-Build and future Build Conditions. Thus, the traffic associated with the proposed 416-420 Main Street Mixed-Use Development is not expected to cause any significant impact in overall operation. Furthermore, based on the observations of the existing available parking in the vicinity of the Site as well as the analysis of the required parking demand of the development, the parking needs for the proposed development can be accommodated by the public parking in the vicinity of the Site during both Weekday and Weekend peak parking periods.



416 – 420 MAIN STREET

APPENDIX A

FIGURES



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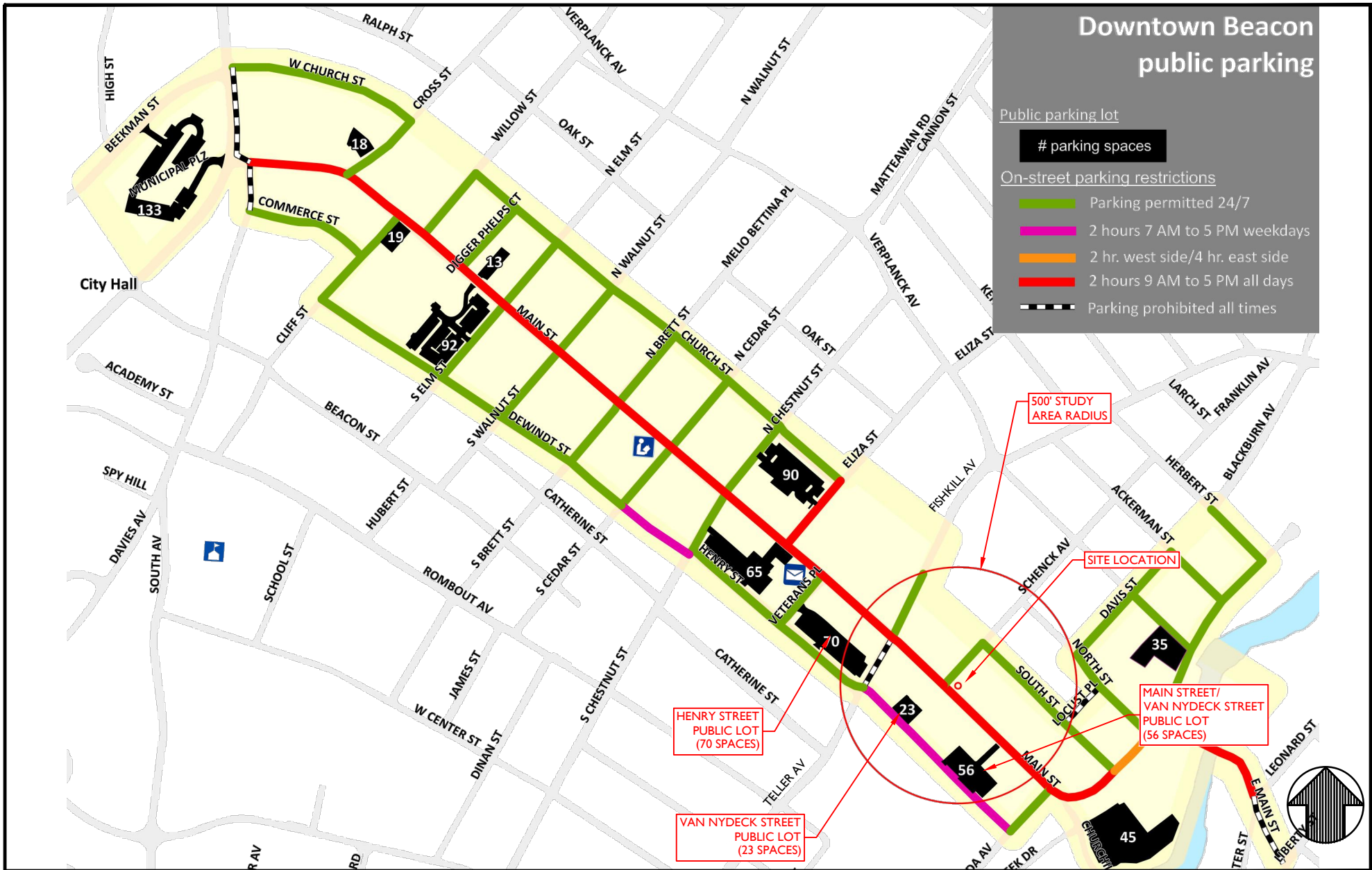
Downtown Beacon public parking

Public parking lot

parking spaces

On-street parking restrictions

- █ Parking permitted 24/7
- █ 2 hours 7 AM to 5 PM weekdays
- █ 2 hr. west side/4 hr. east side
- █ 2 hours 9 AM to 5 PM all days
- Parking prohibited all times





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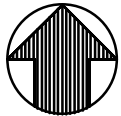
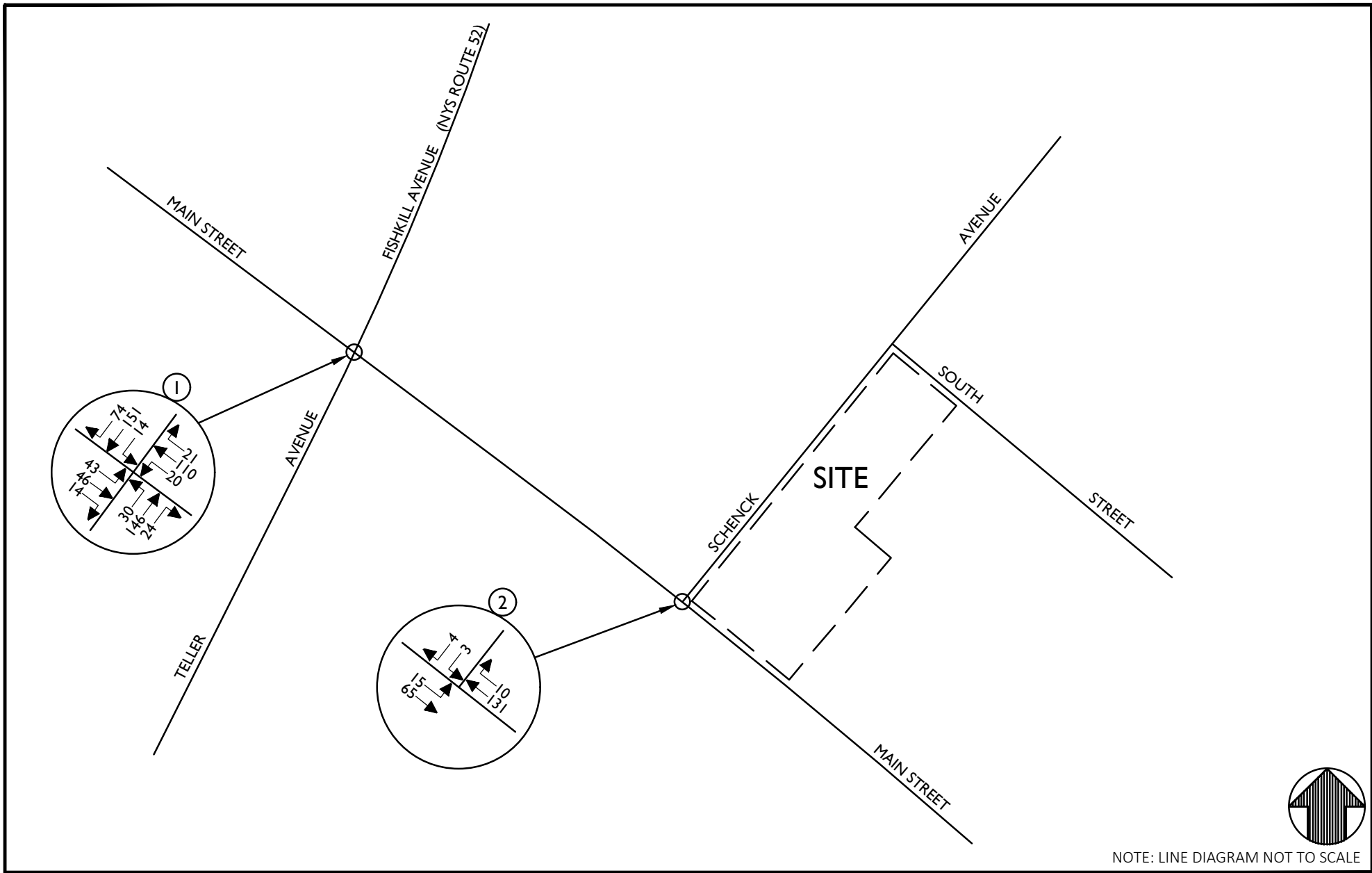


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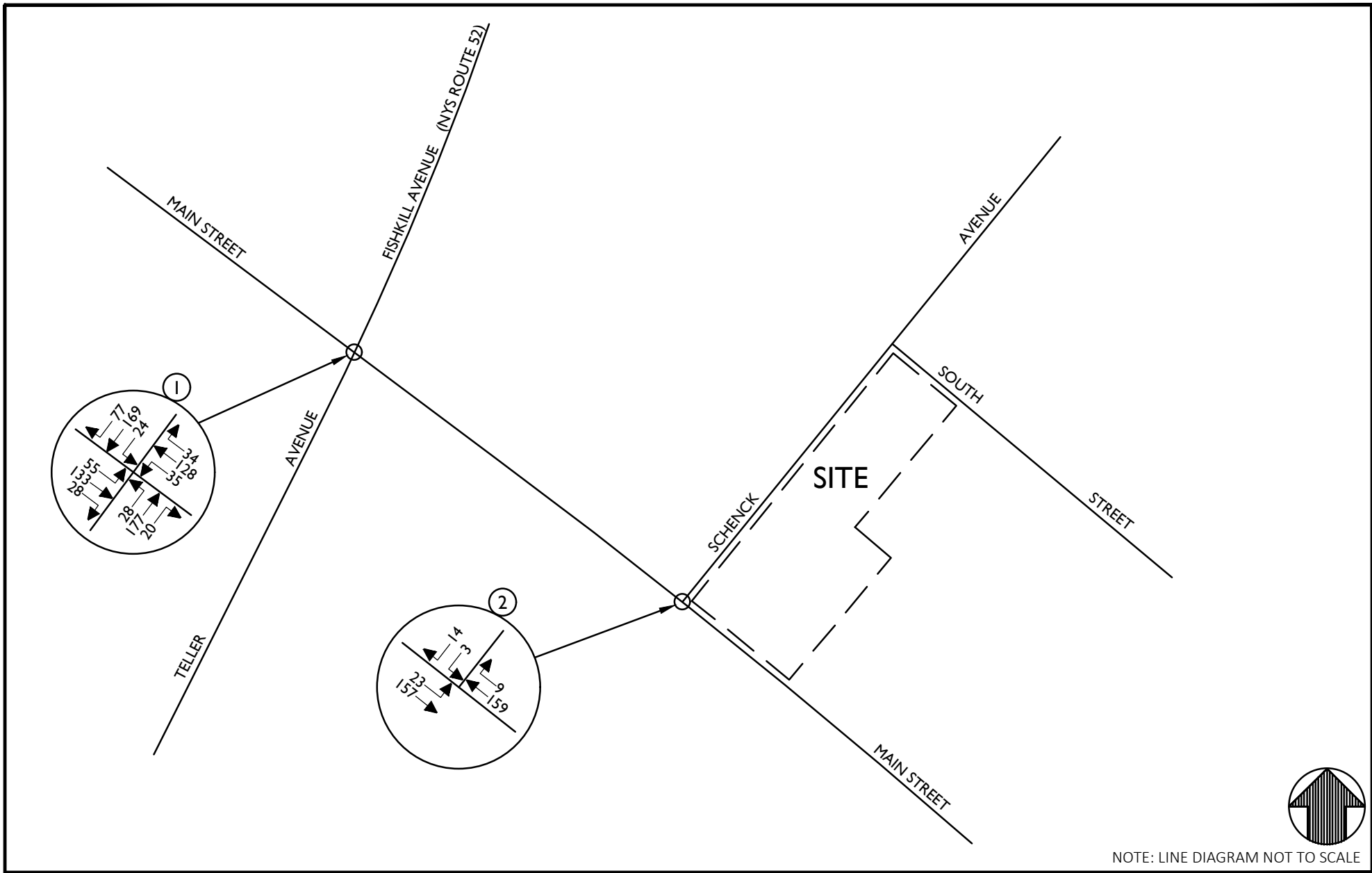
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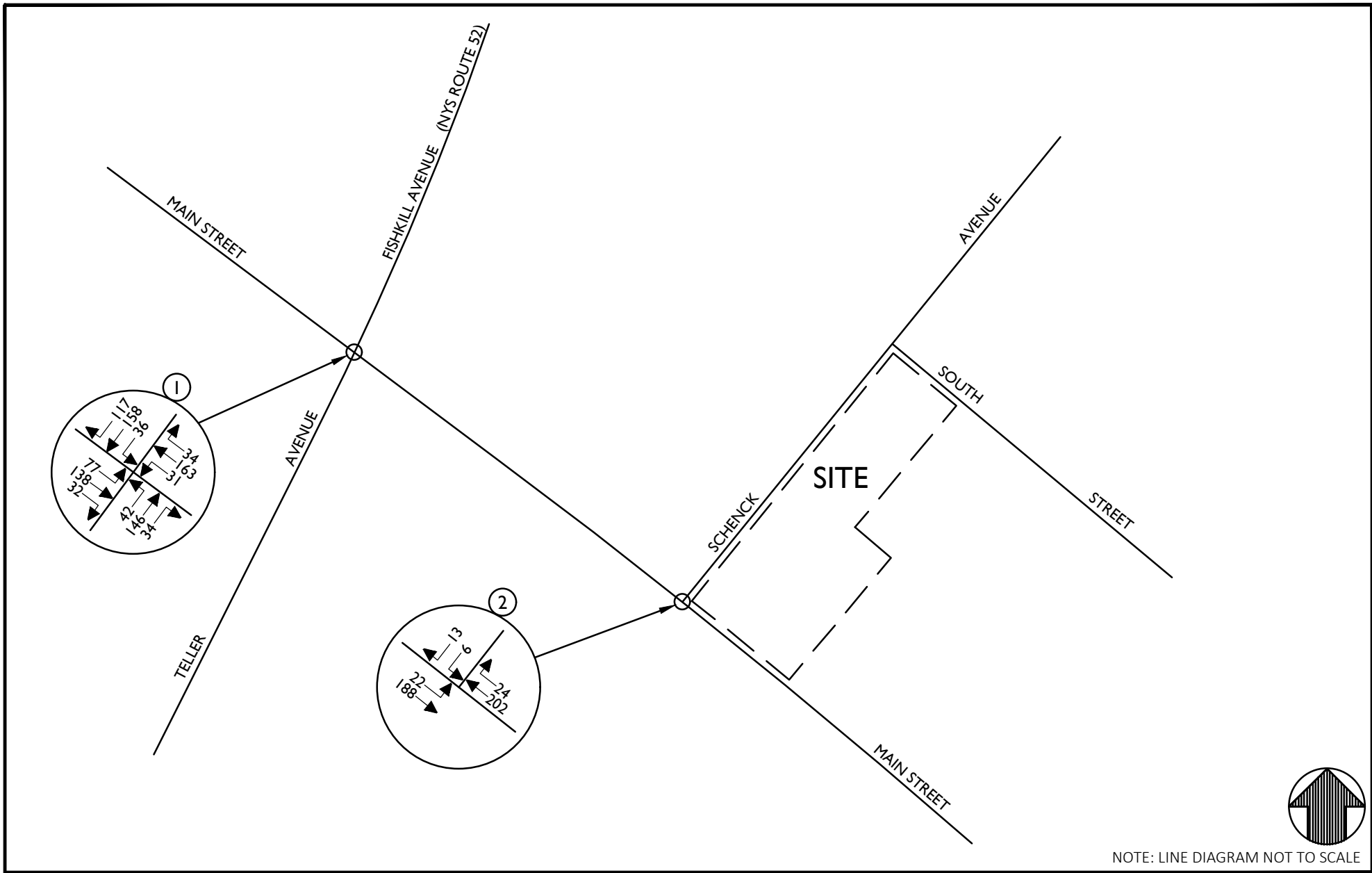
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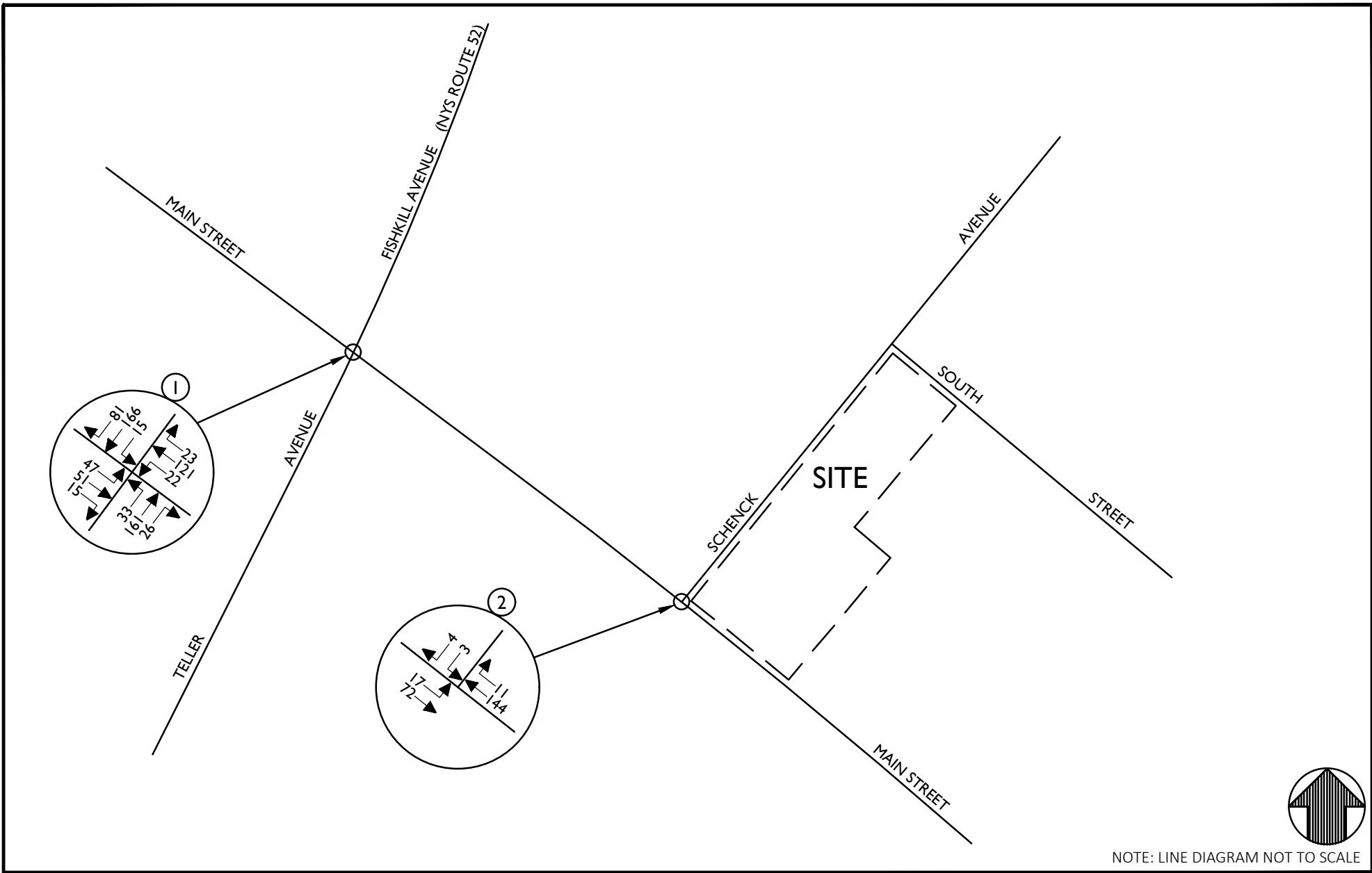


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| 20000282A | 200428RGD_FIGURE | | |
| SHEET TITLE: | | | |
| 2020 EXISTING TRAFFIC VOLUMES WEEKEND PEAK SAT HOUR | | | |
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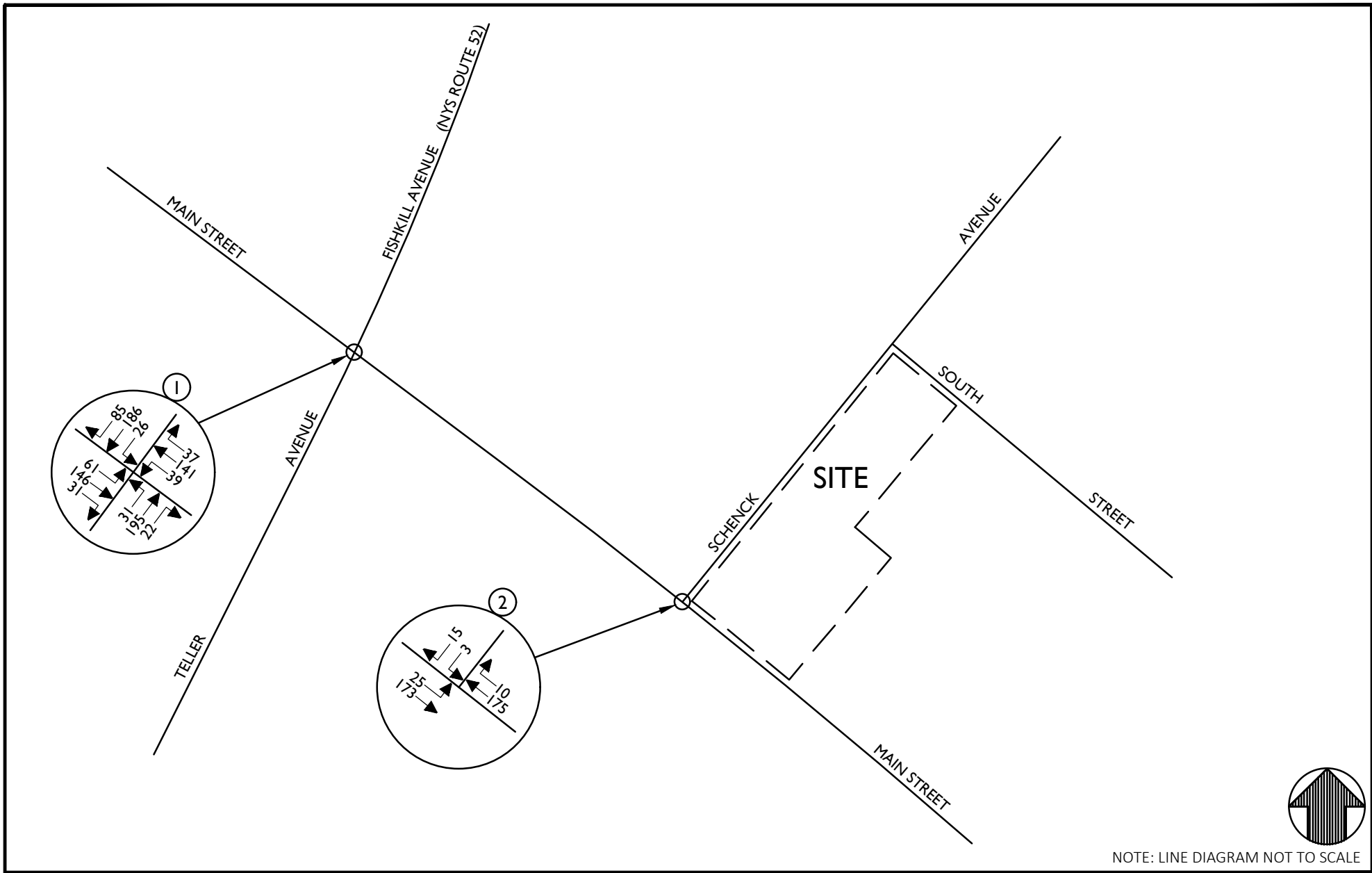


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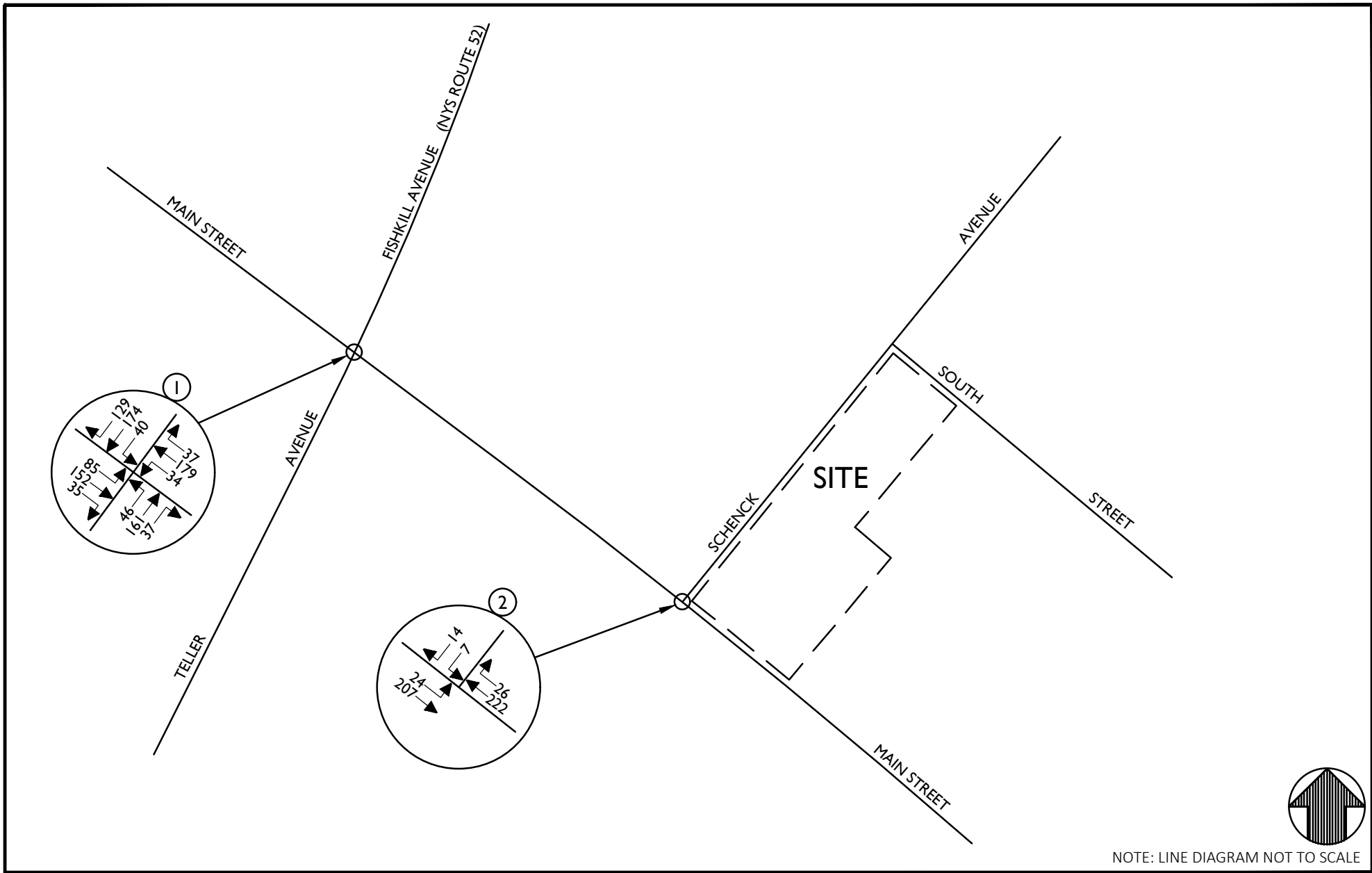
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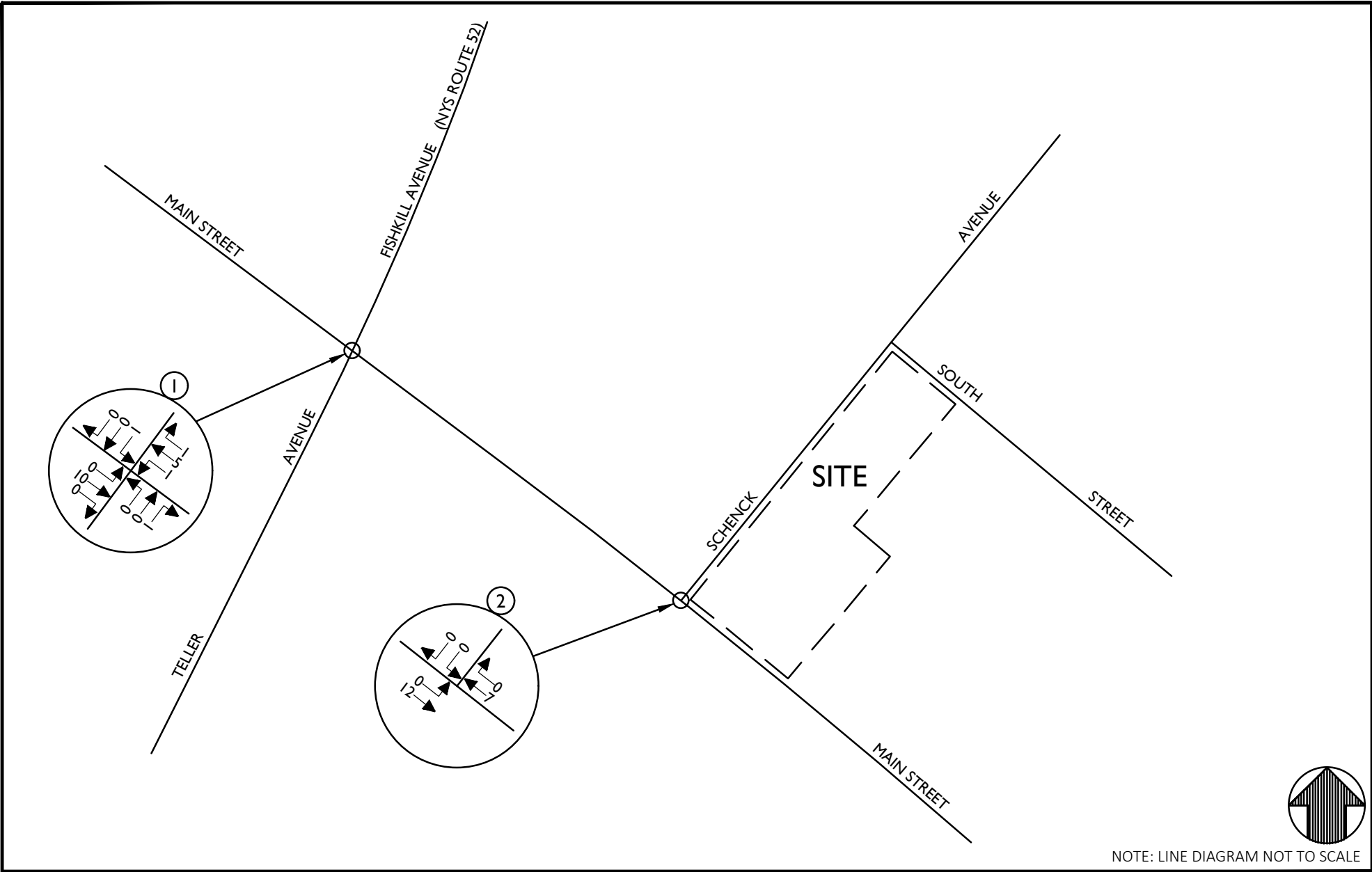
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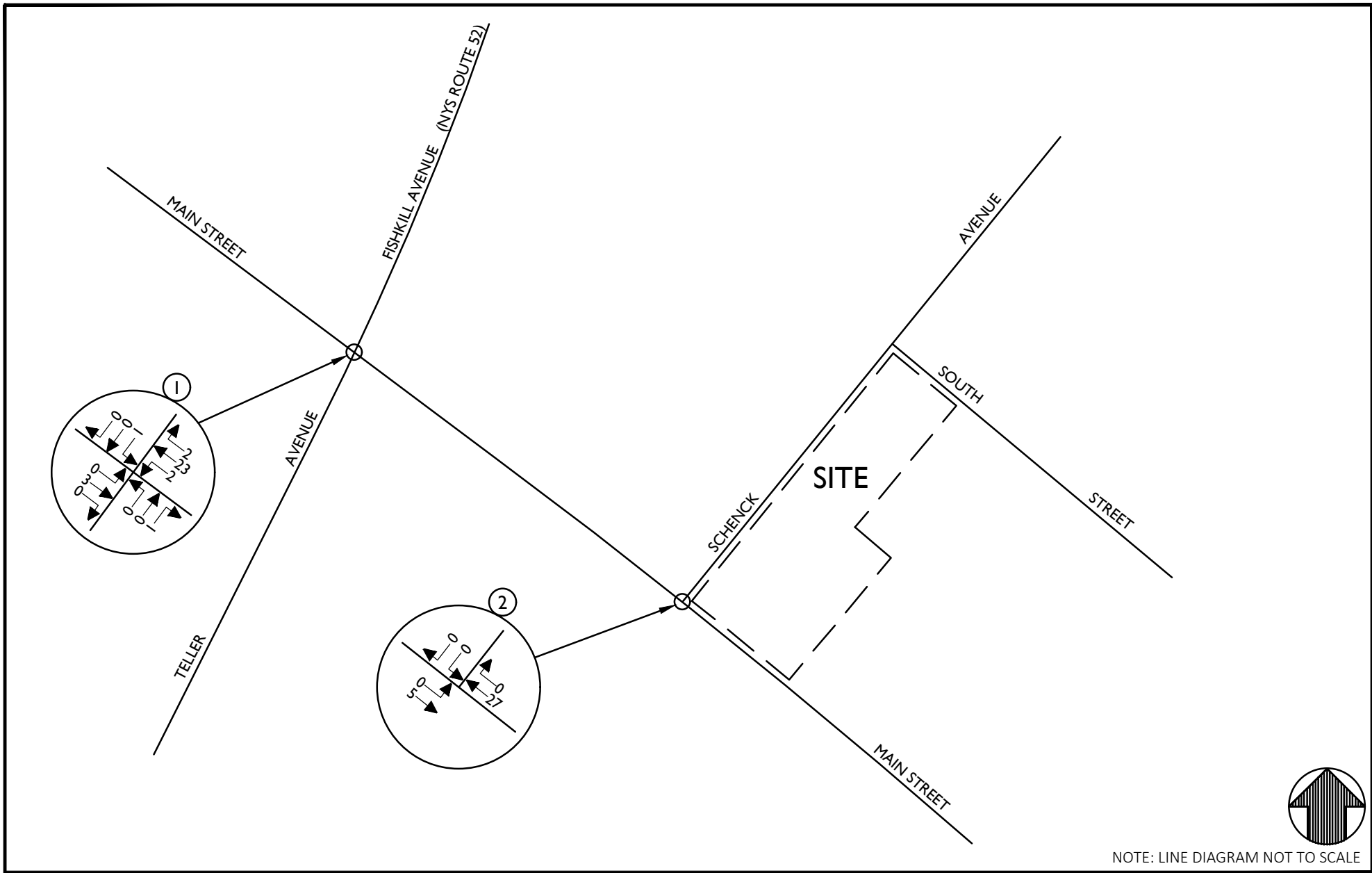
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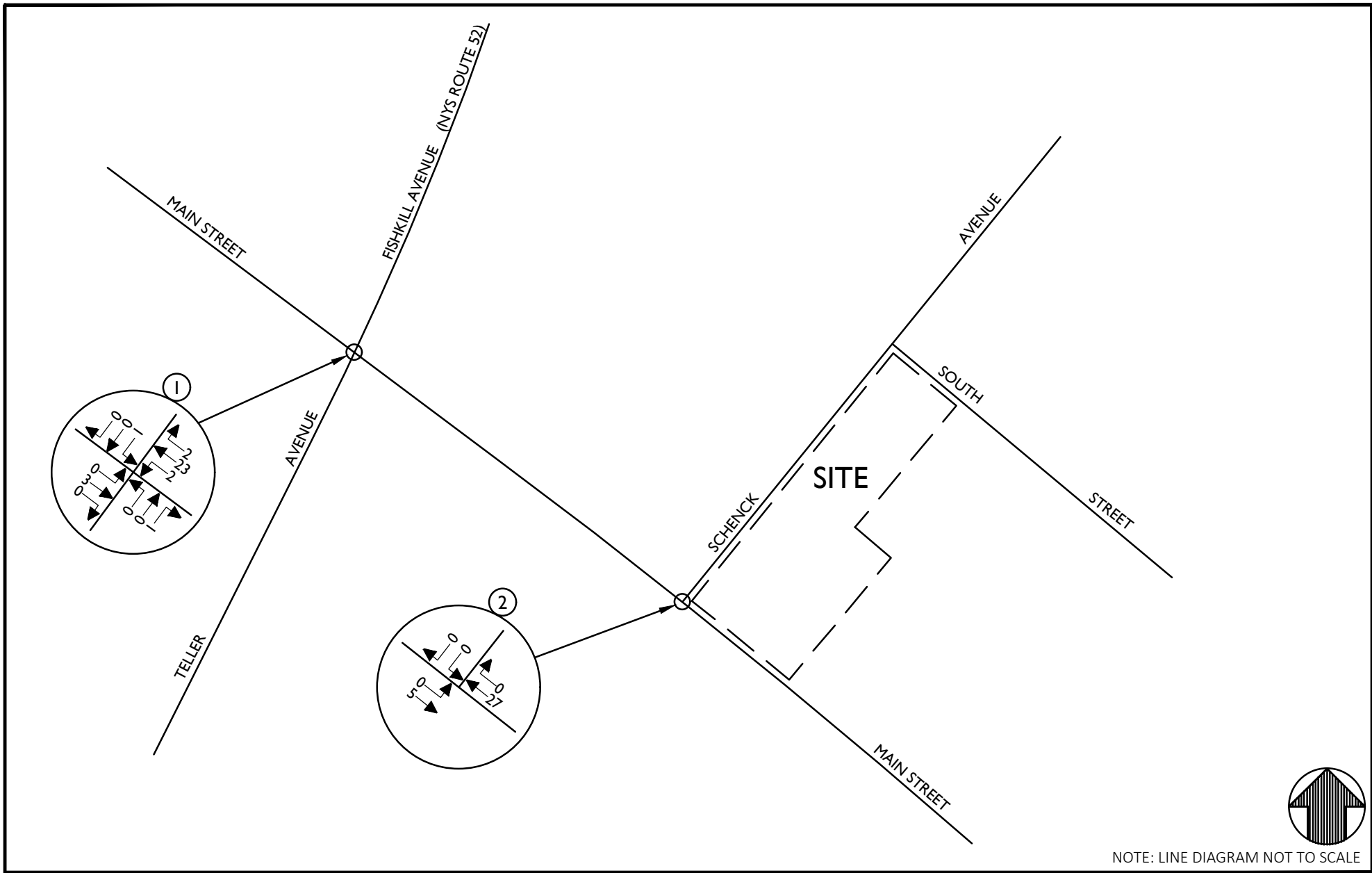
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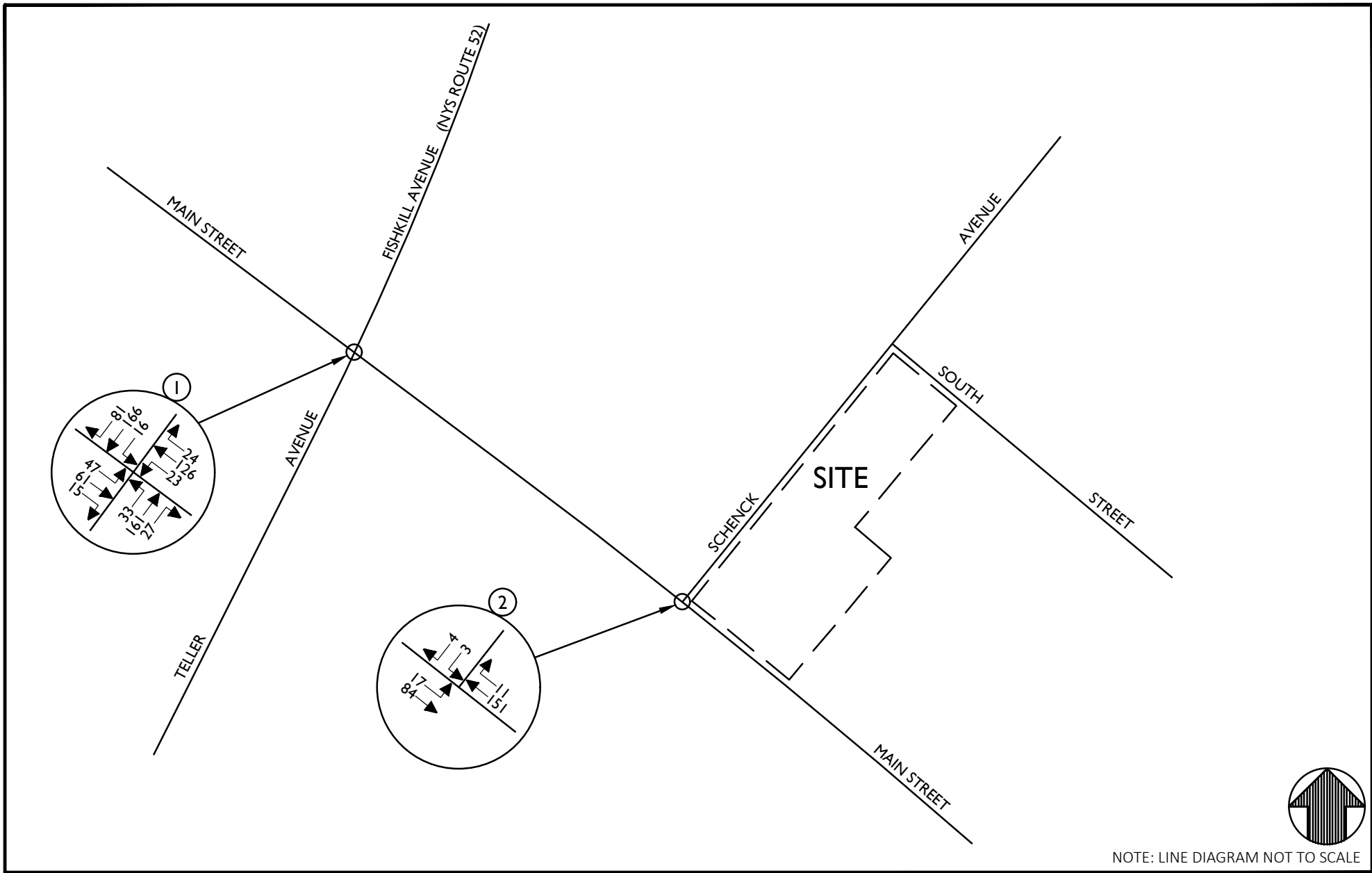
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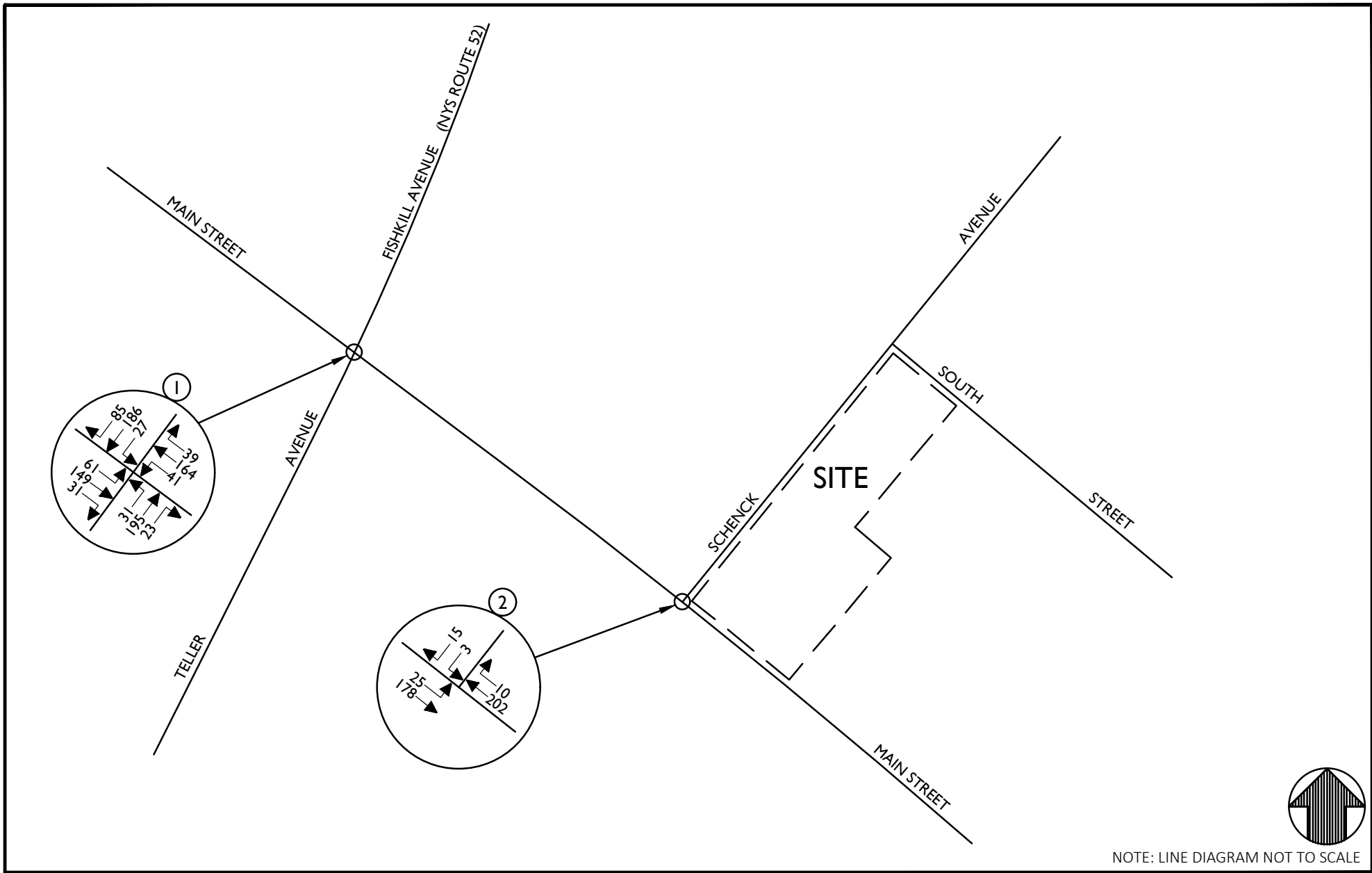
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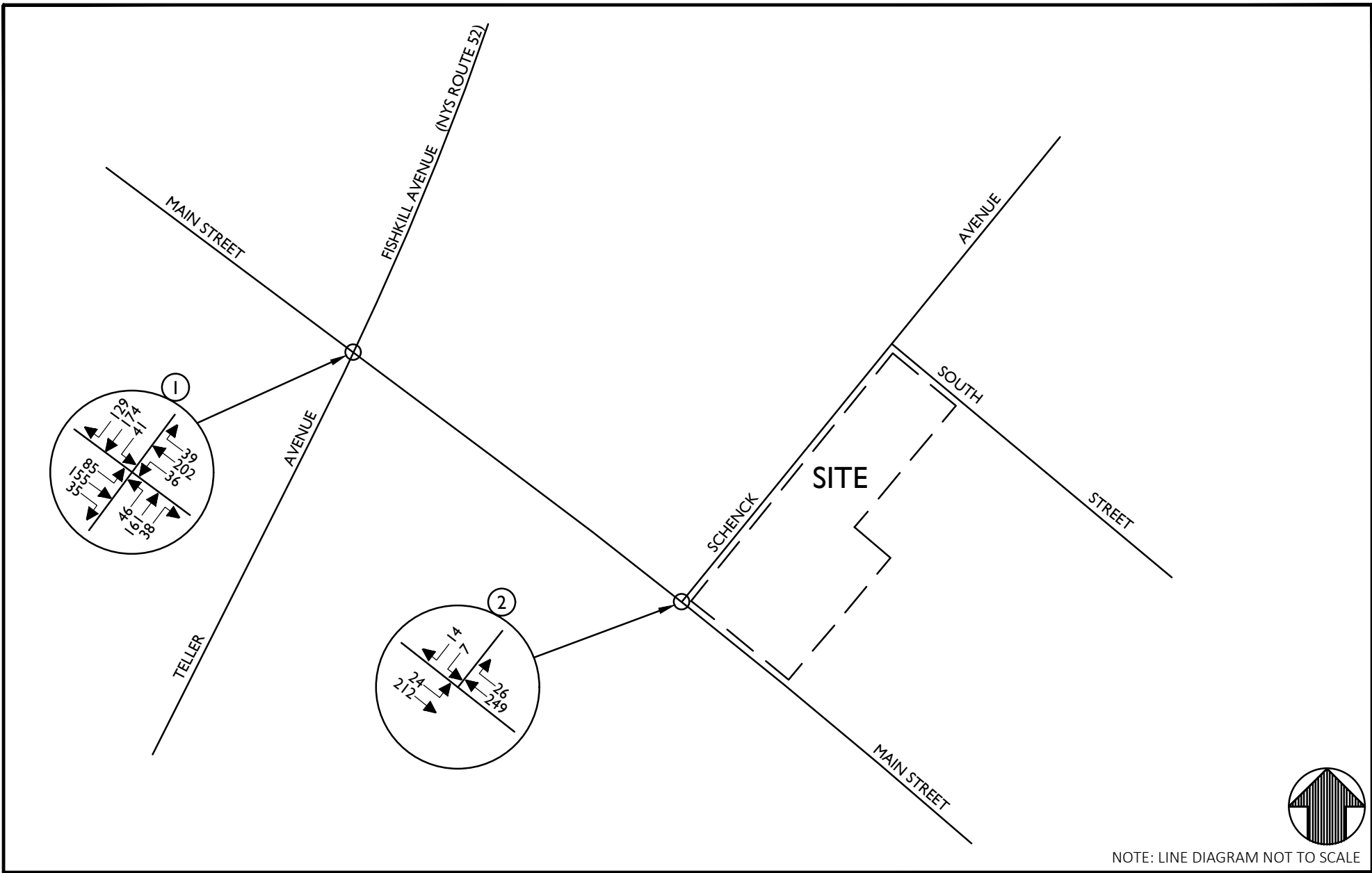
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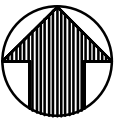
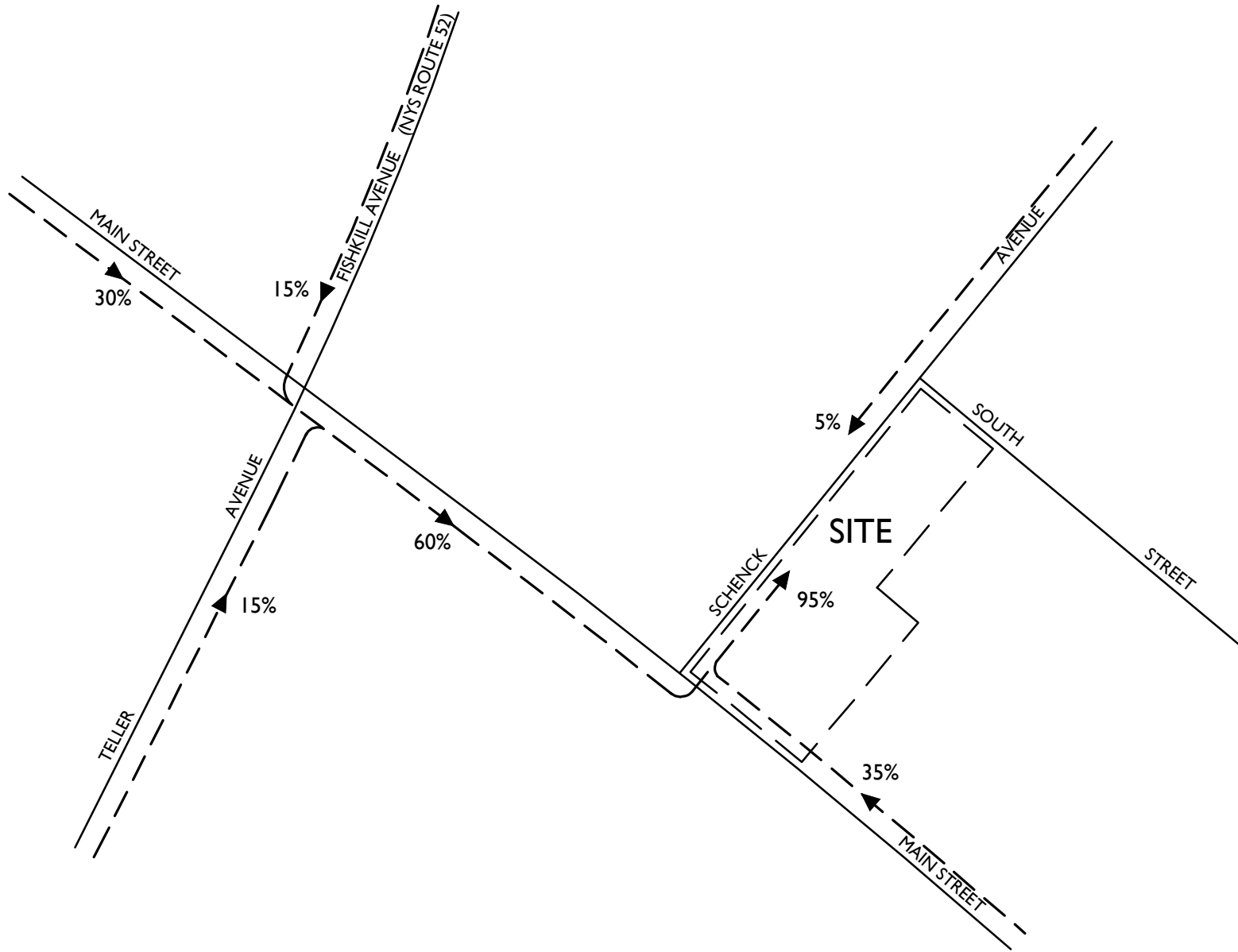


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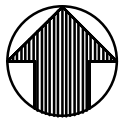
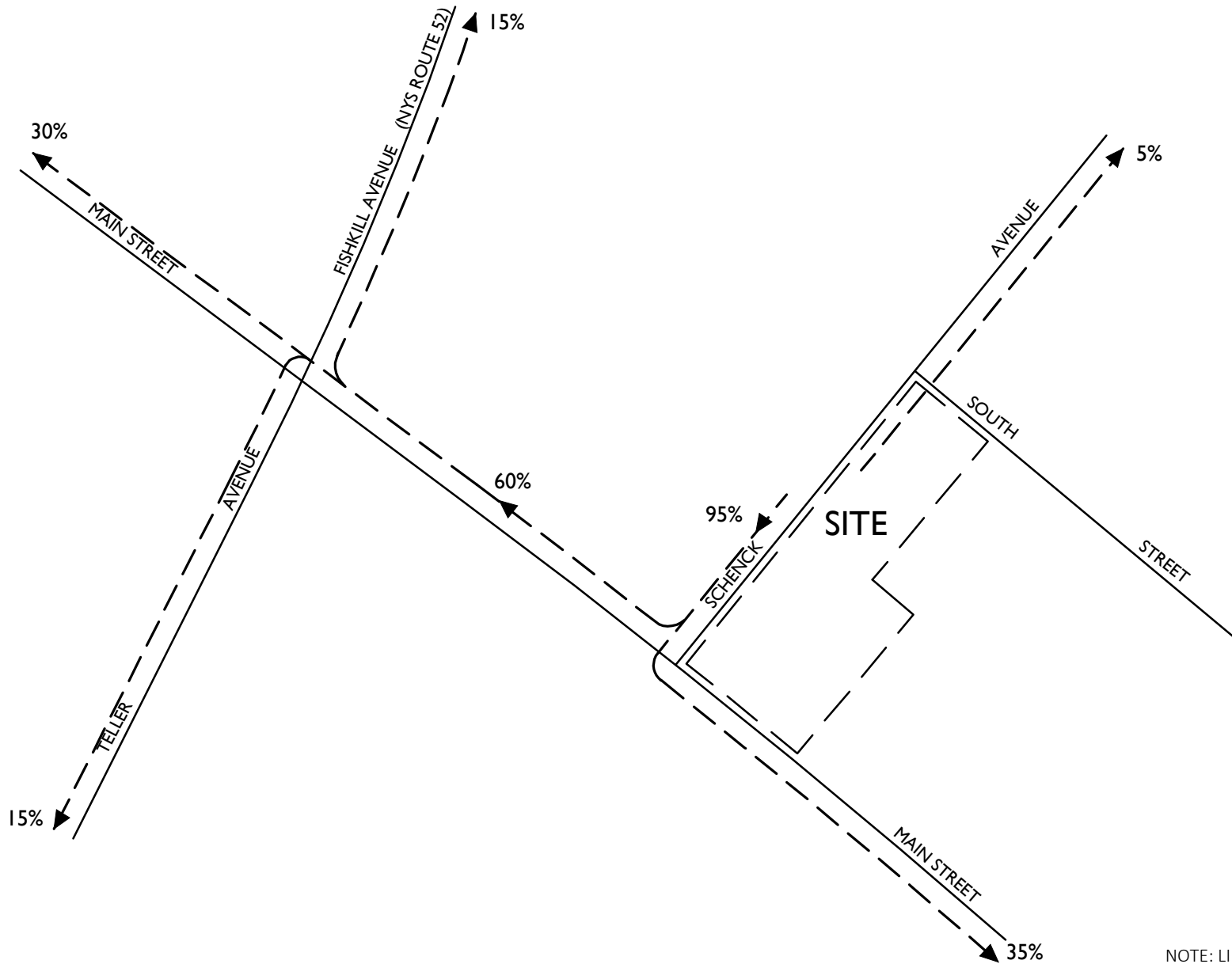
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416 - 420 MAIN STREET

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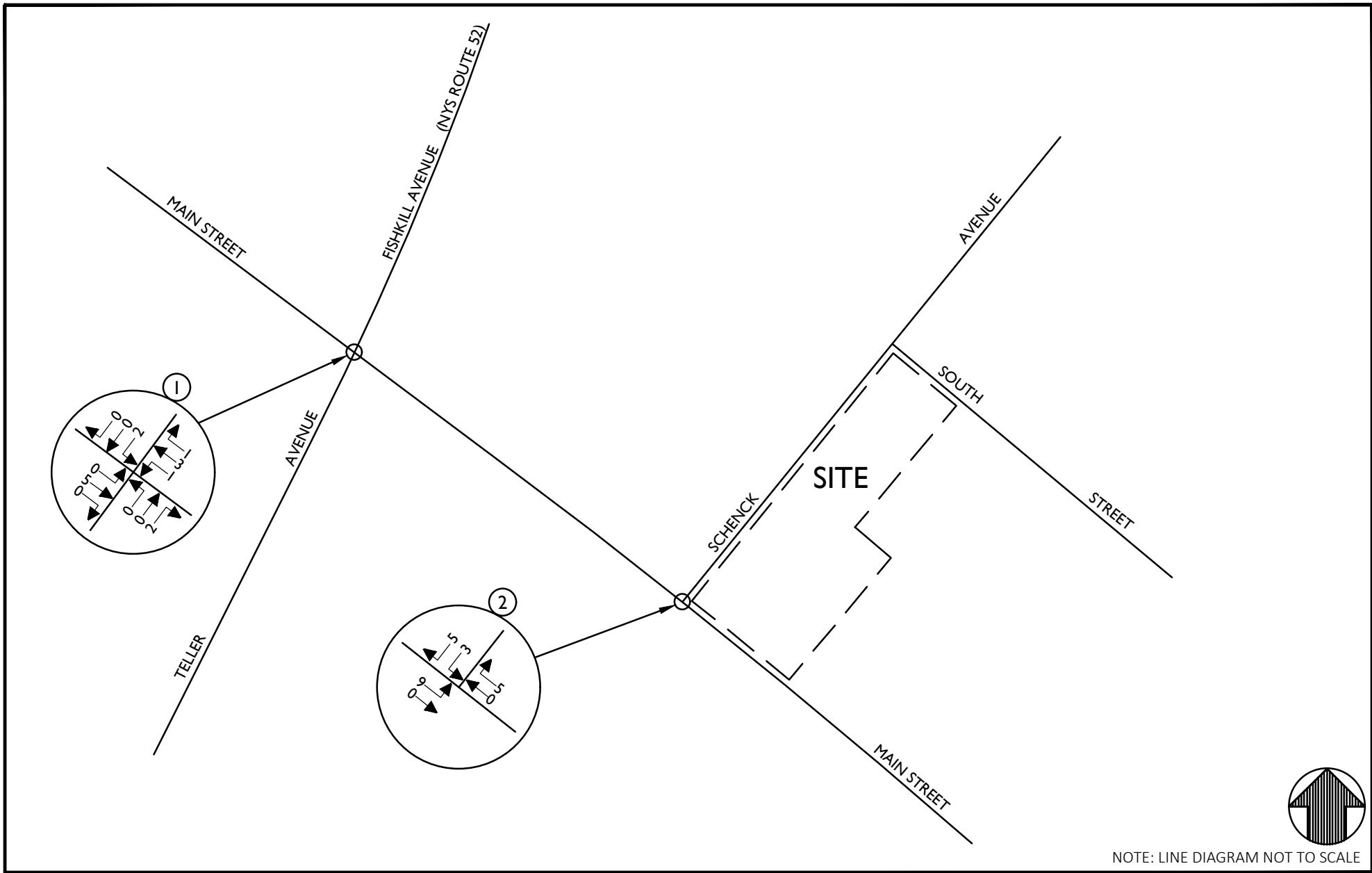
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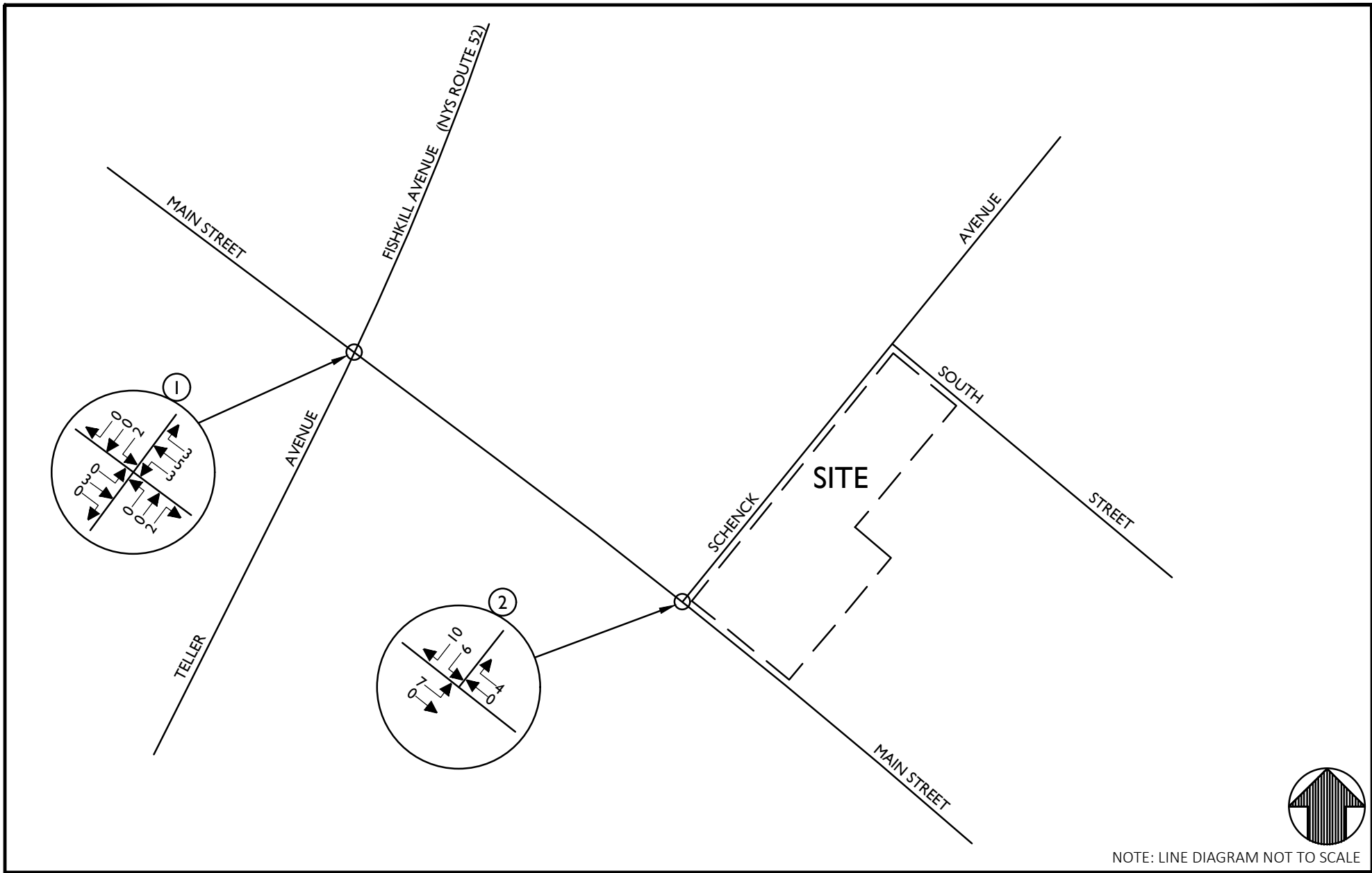
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| 20000282A | 200428RGD_FIGURE | | |
| SHEET TITLE: | | | |
| SITE GENERATED TRAFFIC VOLUMES WEEKDAY PEAK AM HOUR | | | |
| SHEET NUMBER: | | | |
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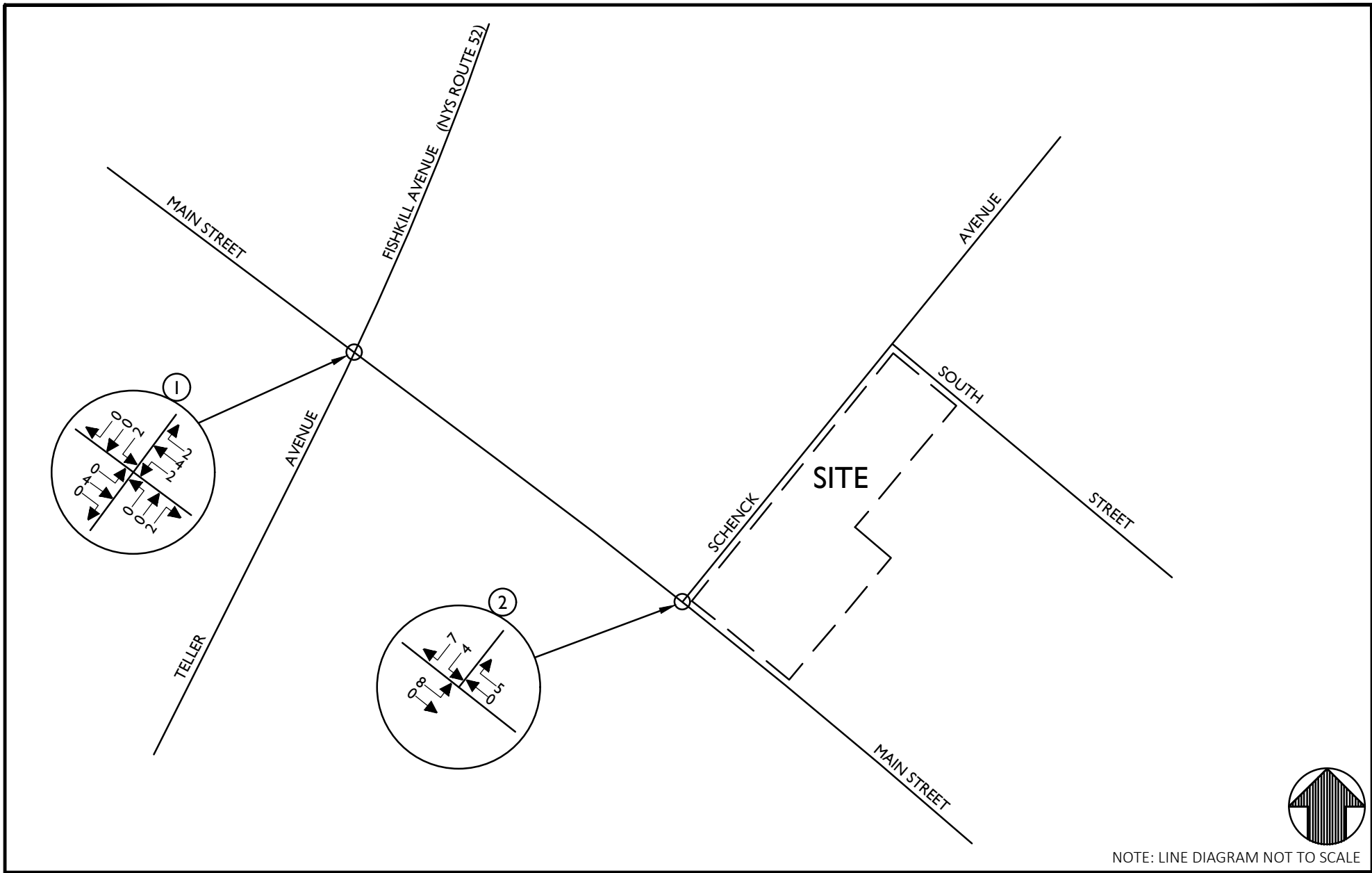


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| PROJECT NUMBER | DRAWING NAME | | |
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| SHEET TITLE: | | | |
| SITE GENERATED TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR | | | |
| SHEET NUMBER: | | | |
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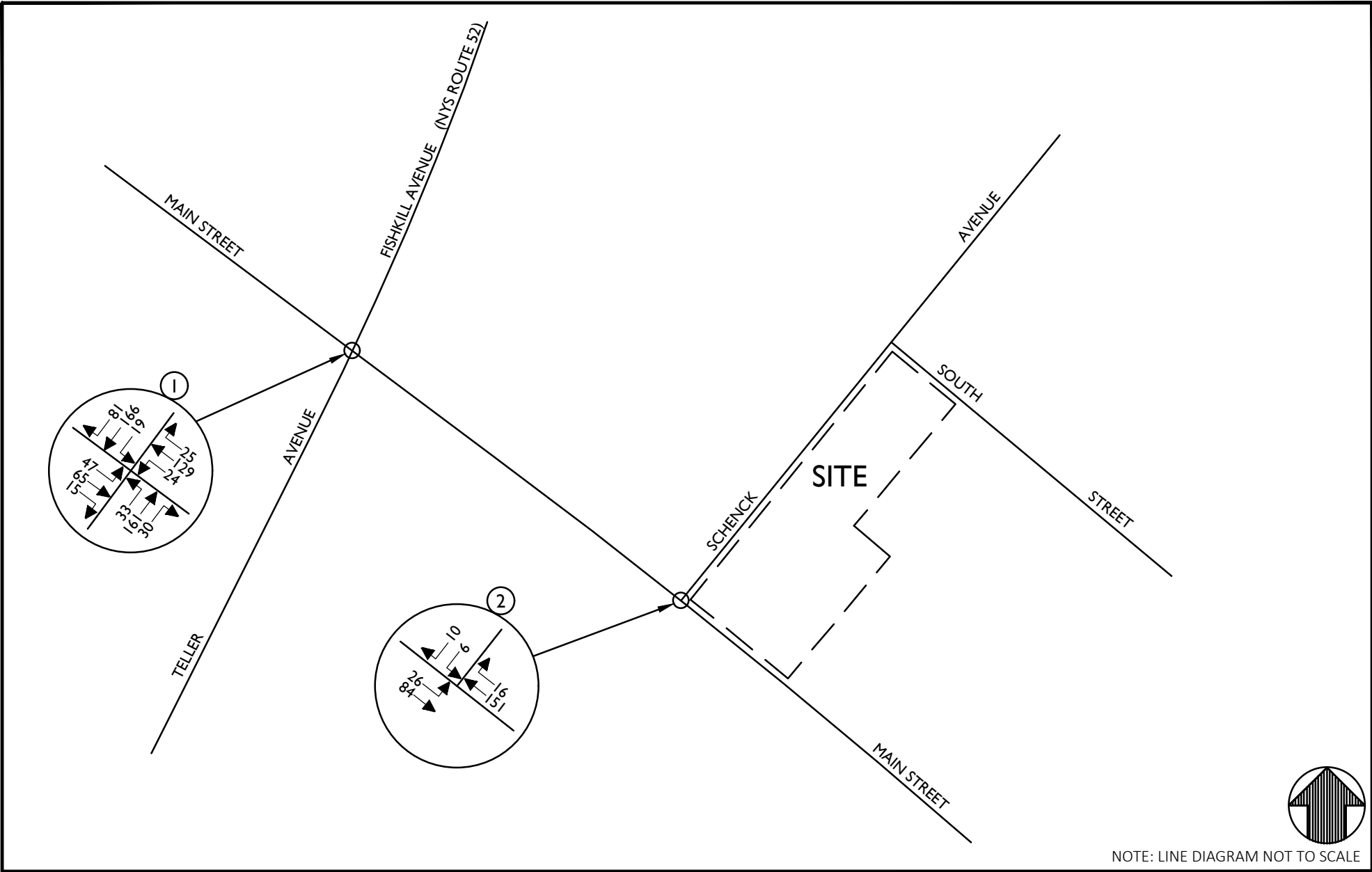
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| PROJECT NUMBER | DRAWING NAME | | |
| 20000282A | 200428RGD_FIGURE | | |
| SHEET TITLE: | | | |
| SITE GENERATED TRAFFIC VOLUMES WEEKEND PEAK SAT HOUR | | | |
| SHEET NUMBER: | | | |
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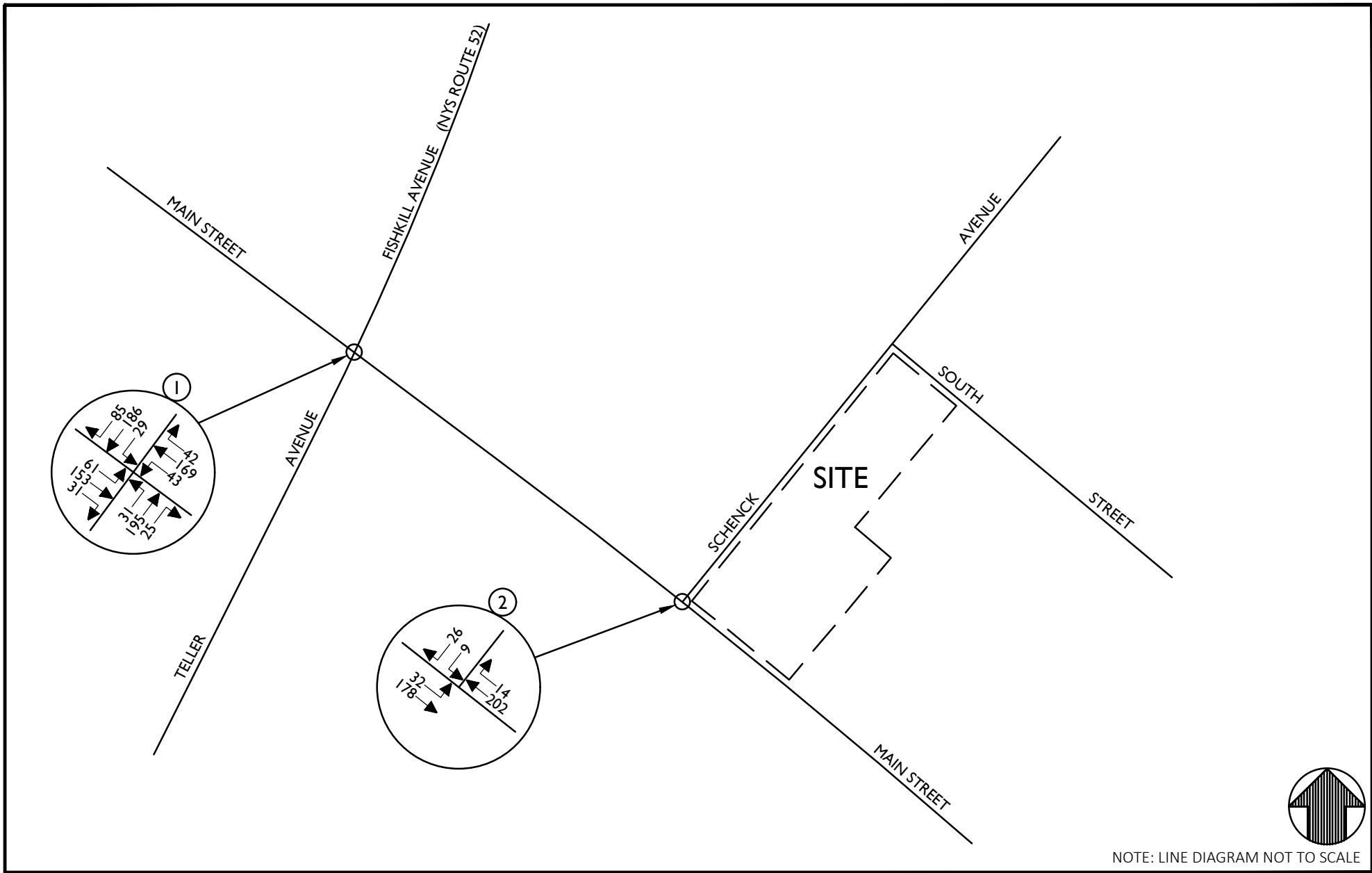
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| PROJECT NUMBER | DRAWING NAME | | |
| 20000282A | 200428RGD_FIGURE | | |
| SHEET TITLE: | | | |
| 2025 BUILD TRAFFIC VOLUMES WEEKDAY PEAK AM HOUR | | | |
| SHEET NUMBER: | | | |
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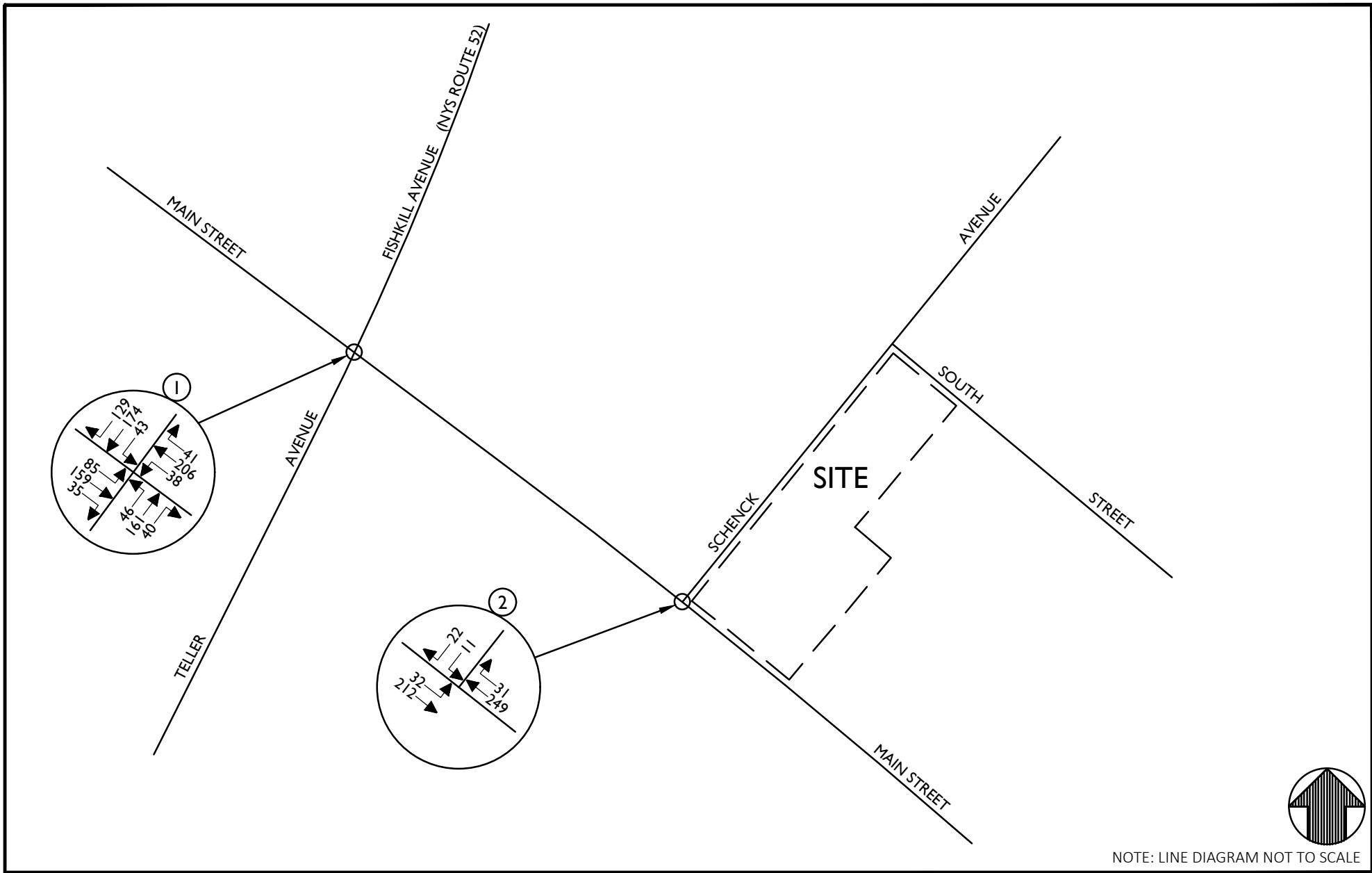
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| PROJECT NUMBER | DRAWING NAME | | |
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| SHEET TITLE: | | | |
| 2025 BUILD TRAFFIC VOLUMES WEEKDAY PEAK PM HOUR | | | |
| SHEET NUMBER: | | | |
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| SHEET TITLE: | | | |
| 2025 BUILD TRAFFIC VOLUMES WEEKEND PEAK SAT HOUR | | | |
| SHEET NUMBER: | | | |
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416 – 420 MAIN STREET

APPENDIX B

TABLES

TABLE NO. 1

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

| 416-420 MAIN STREET CITY OF BEACON, NEW YORK | ENTRY | | EXIT | |
|--|-------------------|--------|-------------------|--------|
| | HTGR ¹ | VOLUME | HTGR ¹ | VOLUME |
| NEW RETAIL² (2,941 S.F.) | | | | |
| PEAK AM HOUR | 1.70 | 5 | 1.36 | 4 |
| PEAK PM HOUR | 2.04 | 6 | 2.04 | 6 |
| SATURDAY PEAK HOUR | 2.38 | 7 | 2.04 | 6 |
| OFFICE (7,872 S.F.) | | | | |
| PEAK AM HOUR | 1.02 | 8 | 0.13 | 1 |
| PEAK PM HOUR | 0.13 | 1 | 1.14 | 9 |
| SATURDAY PEAK HOUR | 0.25 | 2 | 0.25 | 2 |
| APARTMENTS 4TH FLOOR RESIDENTIAL (2 DWELLING UNITS) | | | | |
| PEAK AM HOUR | 0.50 | 1 | 1.00 | 2 |
| PEAK PM HOUR | 1.00 | 2 | 0.50 | 1 |
| SATURDAY PEAK HOUR | 1.00 | 2 | 1.00 | 2 |
| APARTMENTS REAR LOT RESIDENTIAL (1 DWELLING UNITS) | | | | |
| PEAK AM HOUR | 0.50 | 1 | 1.00 | 2 |
| PEAK PM HOUR | 1.00 | 2 | 0.50 | 1 |
| SATURDAY PEAK HOUR | 1.00 | 2 | 1.00 | 2 |
| TOTAL | | | | |
| PEAK AM HOUR | - | 15 | - | 9 |
| PEAK PM HOUR | - | 11 | - | 17 |
| SATURDAY PEAK HOUR | - | 13 | - | 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 - 820 - SHOPPING CENTER, ITE LAND USE CODE - 710 - OFFICE BUILDING, ITE LAND USE CODE - 220 - MULTIFAMILY HOME, AND ITE LAND USE CODE - 210 - SINGLE FAMILY.

2) ELLA'S BELLAS CAFÉ (1,675 S.F.) IS AN EXISTING USE THAT WILL BE INCORPORATED INTO THE PROPOSED DEVELOPMENT. TRAFFIC GENERATION ASSOCIATED WITH THIS USE IS CAPTURED IN THE EXISTING TRAFFIC VOLUME COUNTS AND THEREFORE NO NEW TRAFFIC GENERATION HAS BEEN ASSUMED FOR THIS USE. THE TOTAL RETAIL SPACE INCLUDED IN THE DEVELOPMENT WILL BE 3,618 S.F.

TABLE NO. 2 AM
LEVEL OF SERVICE SUMMARY TABLE

| | | | | 2020 EXISTING | | | 2025 NO-BUILD | | | 2025 BUILD | | | CHANGE IN DELAY NO-BUILD TO BUILD |
|---|---|-----------------|--------|---------------------|-----|----------|---------------|-----|----------|-------------|-----|----------|---|
| | | | | AM | V/C | LOS | DELAY | V/C | LOS | DELAY | V/C | LOS | |
| 1 | MAIN STREET & TELLER AVENUE/ FISHKILL AVENUE | | | SIGNALIZED | | | | | | | | | |
| | | MAIN STREET | EB LTR | 0.20 | B | 14.1 | 0.22 | B | 14.2 | 0.22 | B | 14.2 | 0.0 |
| | | MAIN STREET | WB LTR | 0.26 | B | 14.7 | 0.27 | B | 14.7 | 0.28 | B | 14.8 | 0.1 |
| | | TELLER AVENUE | NB LTR | 0.27 | B | 11.6 | 0.30 | B | 11.9 | 0.30 | B | 11.9 | 0.0 |
| | | FISHKILL AVENUE | SB LTR | 0.30 | B | 11.9 | 0.33 | B | 12.2 | 0.34 | B | 12.3 | 0.1 |
| | | OVERALL | | | - | B | 12.7 | - | B | 13.0 | - | B | 13.1 |
| 2 | MAIN STREET & SCHENCK AVENUE | | | UNSIGNALIZED | | | | | | | | | |
| | | MAIN STREET | EB LT | 0.01 | A | 7.7 | 0.01 | A | 7.8 | 0.02 | A | 7.8 | 0.0 |
| | | SCHENCK AVENUE | SB LR | 0.01 | A | 9.8 | 0.01 | B | 10.0 | 0.03 | B | 10.2 | 0.2 |

NOTES:

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

TABLE NO. 2 PM
LEVEL OF SERVICE SUMMARY TABLE

| | | | | 2020 EXISTING | | | 2025 NO-BUILD | | | 2025 BUILD | | | CHANGE IN DELAY NO-BUILD TO BUILD |
|---|---|-----------------|--------|---------------------|-----|----------|---------------|-----|----------|-------------|-----|----------|---|
| | | | | PM | V/C | LOS | DELAY | V/C | LOS | DELAY | V/C | LOS | |
| 1 | MAIN STREET & TELLER AVENUE/ FISHKILL AVENUE | | | SIGNALIZED | | | | | | | | | |
| | | MAIN STREET | EB LTR | 0.37 | B | 16.2 | 0.42 | B | 16.8 | 0.42 | B | 16.9 | 0.1 |
| | | MAIN STREET | WB LTR | 0.32 | B | 15.5 | 0.40 | B | 16.5 | 0.41 | B | 16.7 | 0.2 |
| | | TELLER AVENUE | NB LTR | 0.28 | B | 11.6 | 0.31 | B | 12.0 | 0.31 | B | 12.0 | 0.0 |
| | | FISHKILL AVENUE | SB LTR | 0.32 | B | 12.1 | 0.35 | B | 12.4 | 0.35 | B | 12.5 | 0.1 |
| | | OVERALL | | | - | B | 13.7 | - | B | 14.3 | - | B | 14.4 |
| 2 | MAIN STREET & SCHENCK AVENUE | | | UNSIGNALIZED | | | | | | | | | |
| | | MAIN STREET | EB LT | 0.02 | A | 7.9 | 0.02 | A | 8.0 | 0.03 | A | 8.1 | 0.1 |
| | | SCHENCK AVENUE | SB LR | 0.03 | B | 10.6 | 0.03 | B | 10.9 | 0.07 | B | 11.5 | 0.6 |

NOTES:

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

TABLE NO. 2 SAT
LEVEL OF SERVICE SUMMARY TABLE

| | SAT | 2020 EXISTING | | | 2025 NO-BUILD | | | 2025 BUILD | | | CHANGE IN DELAY NO-BUILD TO BUILD | |
|---|---|------------------------|----------|----------|---------------|----------|----------|-------------|----------|----------|---|------------|
| | | V/C | LOS | DELAY | V/C | LOS | DELAY | V/C | LOS | DELAY | | |
| 1 | SIGNALIZED | | | | | | | | | | | |
| | MAIN STREET & TELLER AVENUE/ FISHKILL AVENUE | | | | | | | | | | | |
| | | MAIN STREET EB LTR | 0.45 | B | 17.3 | 0.50 | B | 18.2 | 0.50 | B | 18.4 | 0.2 |
| | | MAIN STREET WB LTR | 0.37 | B | 16.2 | 0.45 | B | 17.3 | 0.47 | B | 17.6 | 0.3 |
| | | TELLER AVENUE NB LTR | 0.28 | B | 11.7 | 0.31 | B | 12.0 | 0.32 | B | 12.0 | 0.0 |
| | | FISHKILL AVENUE SB LTR | 0.37 | B | 12.7 | 0.42 | B | 13.2 | 0.42 | B | 13.3 | 0.1 |
| | | OVERALL | - | B | 14.4 | - | B | 15.2 | - | B | 15.3 | 0.1 |
| 2 | UNSIGNALIZED | | | | | | | | | | | |
| | MAIN STREET & SCHENCK AVENUE | | | | | | | | | | | |
| | | MAIN STREET EB LT | 0.02 | A | 8.3 | 0.02 | A | 8.5 | 0.03 | A | 8.5 | 0.0 |
| | | SCHENCK AVENUE SB LR | 0.04 | B | 12.7 | 0.05 | B | 13.4 | 0.08 | B | 13.8 | 0.4 |

NOTES:

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

TABLE P-1

SUMMARY OF BEACON PARKING SPACE UTILIZATION WEEKDAY PEAK PARKING CONDITIONS

JOB # 20000282A
 LOCATION: BEACON, NY
 DAY: WEDNESDAY
 DATE: 02/05/20
 TIME: 7:00 AM - 9:30AM, 11:00 AM - 2:30 PM, & 3:30 PM - 7:00 PM

| | PARKING AREA CAPACITY ¹ | | | | | | | | TOTAL OCCUPIED PARKING SPACES | TOTAL UNOCCUPIED PARKING SPACES |
|-------------------------------------|------------------------------------|------------------------------------|--|--|-------------------------------------|--|---|---|----------------------------------|---------------------------------------|
| | HENRY STREET PUBLIC LOT | VAN NYDECK AVENUE PUBLIC LOT | MAIN STREET/ VAN NYDECK AVENUE PUBLIC LOT | VAN NYDECK AVENUE ON-STREET PARKING | MAIN STREET ON-STREET PARKING | SCHENCK AVENUE ON-STREET PARKING ² | SOUTH STREET ON-STREET PARKING ² | NORTH STREET ON-STREET PARKING ² | | |
| 299 TOTAL PARKING SPACES | 72 | 23 | 57 | 34 | 60 | 19 | 21 | 13 | | |
| TIME | OCCUPIED PARKING SPACES | | | | | | | | | |
| 7:00 AM 7:30 AM | 3 | 0 | 30 | 15 | 15 | 3 | 6 | 2 | 74 | 225 |
| 7:30 AM 8:00 AM | 6 | 0 | 27 | 15 | 9 | 3 | 8 | 3 | 71 | 228 |
| 8:00 AM 8:30 AM | 11 | 0 | 23 | 15 | 11 | 3 | 8 | 1 | 72 | 227 |
| 8:30 AM 9:00 AM | 17 | 0 | 22 | 12 | 14 | 3 | 6 | 2 | 76 | 223 |
| 9:00 AM 9:30 AM | 26 | 0 | 23 | 14 | 24 | 6 | 10 | 2 | 105 | 194 |
| 11:00 AM 11:30 AM | 51 | 1 | 27 | 14 | 44 | 8 | 14 | 1 | 160 | 139 |
| 11:30 AM 12:00 PM | 48 | 0 | 29 | 13 | 47 | 8 | 10 | 1 | 156 | 143 |
| 12:00 PM 12:30 PM | 43 | 1 | 28 | 13 | 47 | 7 | 12 | 1 | 152 | 147 |
| 12:30 PM 1:00 PM | 46 | 1 | 32 | 13 | 48 | 8 | 12 | 1 | 161 | 138 |
| 1:00 PM 1:30 PM | 44 | 1 | 35 | 12 | 48 | 9 | 11 | 3 | 163 | 136 |
| 1:30 PM 2:00 PM | 45 | 1 | 44 | 11 | 47 | 9 | 11 | 3 | 171 | 128 |
| 2:00 PM 2:30 PM | 43 | 1 | 43 | 11 | 47 | 10 | 10 | 3 | 168 | 131 |
| 3:30 PM 4:00 PM | 34 | 1 | 42 | 11 | 50 | 9 | 8 | 2 | 157 | 142 |
| 4:00 PM 4:30 PM | 39 | 1 | 39 | 11 | 39 | 7 | 7 | 2 | 145 | 154 |
| 4:30 PM 5:00 PM | 41 | 2 | 37 | 12 | 37 | 5 | 6 | 2 | 142 | 157 |
| 5:00 PM 5:30 PM | 40 | 1 | 40 | 13 | 48 | 2 | 7 | 2 | 153 | 146 |
| 5:30 PM 6:00 PM | 43 | 2 | 40 | 14 | 42 | 3 | 7 | 4 | 155 | 144 |
| 6:00 PM 6:30 PM | 33 | 1 | 40 | 13 | 46 | 3 | 9 | 4 | 149 | 150 |
| 6:30 PM 7:00 PM | 27 | 1 | 41 | 11 | 45 | 2 | 8 | 5 | 140 | 159 |

NOTES:

- 1) CAPACITY OF IDENTIFIED PARKING AREAS INCLUDING TOTAL SPACES AND OCCUPIED SPACES BY TIME INTERVAL FOR EACH AREA ARE BASED ON PARKING COUNT DATA COLLECTED BY REPRESENTATIVES OF MASER CONSULTING ON FEBRUARY 4, 2020. SEE FIGURE 1P CONTAINED IN APPENDIX A FOR FURTHER IDENTIFICATION OF PARKING AREAS AND INFORMATION ON PARKING RESTRICTIONS.
- 2) ON-STREET PARKING SPACES ALONG SCHENCK AVENUE, SOUTH STREET AND NORTH STREET ARE NOT STRIPED. TOTAL AVAILABLE PARKING SPACES IS AN ESTIMATE OF THE APPROXIMATE CAPACITY ALONG EACH ROADWAY.

TABLE P-2
SUMMARY OF BEACON PARKING SPACE UTILIZATION
SATURDAY PEAK PARKING CONDITIONS

JOB # 20000282A
 LOCATION: BEACON, NY
 DAY: SATURDAY
 DATE: 02/08/20
 TIME: 11:00 AM - 2:30 PM

| | PARKING AREA CAPACITY ¹ | | | | | | | | TOTAL OCCUPIED PARKING SPACES | TOTAL UNOCCUPIED PARKING SPACES |
|-----------------------------|------------------------------------|------------------------------|---|-------------------------------------|-------------------------------|---|---|---|-------------------------------|---------------------------------|
| | HENRY STREET PUBLIC LOT | VAN NYDECK AVENUE PUBLIC LOT | MAIN STREET/VAN NYDECK AVENUE PUBLIC LOT ³ | VAN NYDECK AVENUE ON-STREET PARKING | MAIN STREET ON-STREET PARKING | SCHENCK AVENUE ON-STREET PARKING ² | SOUTH STREET ON-STREET PARKING ² | NORTH STREET ON-STREET PARKING ² | | |
| 299 | 72 | 23 | 57 | 34 | 60 | 19 | 21 | 13 | | |
| TOTAL PARKING SPACES | | | | | | | | | | |
| TIME | OCCUPIED PARKING SPACES | | | | | | | | | |
| 11:00 AM 11:30 AM | 68 | 2 | 55 | 23 | 55 | 10 | 15 | 6 | 234 | 65 |
| 11:30 AM 12:00 PM | 64 | 2 | 57 | 24 | 56 | 15 | 17 | 5 | 240 | 59 |
| 12:00 PM 12:30 PM | 70 | 2 | 54 | 30 | 57 | 16 | 15 | 4 | 248 | 51 |
| 12:30 PM 1:00 PM | 72 | 2 | 56 | 26 | 59 | 14 | 16 | 3 | 248 | 51 |
| 1:00 PM 1:30 PM | 72 | 6 | 57 | 31 | 59 | 17 | 19 | 4 | 265 | 34 |
| 1:30 PM 2:00 PM | 72 | 6 | 57 | 29 | 57 | 16 | 18 | 5 | 260 | 39 |
| 2:00 PM 2:30 PM | 70 | 5 | 57 | 29 | 58 | 14 | 15 | 3 | 251 | 48 |

NOTES:

- 1) CAPACITY OF IDENTIFIED PARKING AREAS INCLUDING TOTAL SPACES AND OCCUPIED SPACES BY TIME INTERVAL FOR EACH AREA ARE BASED ON PARKING COUNT DATA COLLECTED BY REPRESENTATIVES OF MASER CONSULTING ON FEBRUARY 4, 2020. SEE FIGURE 1P CONTAINED IN APPENDIX A FOR FURTHER IDENTIFICATION OF PARKING AREAS AND INFORMATION ON PARKING RESTRICTIONS.
- 2) ON-STREET PARKING SPACES ALONG SCHENCK AVENUE, SOUTH STREET AND NORTH STREET ARE NOT STRIPED. TOTAL AVAILABLE PARKING SPACES IS AN ESTIAMTE OF THE APPROXIMATE CAPACITY ALONG EACH ROADWAY.
- 3) THE MAIN STREET/VAN NYDECK AVENUE PUBLIC LOT WAS OBSERVED TO HAVE ADDITIONAL VEHICLES PARKED BEYOND ITS AVAILABLE CAPACITY IN UN MARKED PARKING SPACES DURING PEAK PARKING PERIODS.

TABLE P-3
SUMMARY OF BEACON PARKING SPACE UTILIZATION
SUNDAY PEAK PARKING CONDITIONS

JOB # 20000282A
 LOCATION: BEACON, NY
 DAY: SUNDAY
 DATE: 02/09/20
 TIME: 11:00 AM - 2:30 PM

| | PARKING AREA CAPACITY ¹ | | | | | | | | TOTAL OCCUPIED PARKING SPACES | TOTAL UNOCCUPIED PARKING SPACES |
|---|------------------------------------|------------------------------------|---|--|-------------------------------------|--|---|---|----------------------------------|---------------------------------------|
| | HENRY STREET PUBLIC LOT | VAN NYDECK AVENUE PUBLIC LOT | MAIN STREET/ VAN NYDECK AVENUE PUBLIC LOT ³ | VAN NYDECK AVENUE ON-STREET PARKING | MAIN STREET ON-STREET PARKING | SCHENCK AVENUE ON-STREET PARKING ² | SOUTH STREET ON-STREET PARKING ² | NORTH STREET ON-STREET PARKING ² | | |
| 299 TOTAL PARKING SPACES | 72 | 23 | 57 | 34 | 60 | 19 | 21 | 13 | | |
| TIME | OCCUPIED PARKING SPACES | | | | | | | | | |
| 11:00 AM 11:30 AM | 46 | 4 | 46 | 16 | 50 | 7 | 9 | 9 | 187 | 112 |
| 11:30 AM 12:00 PM | 47 | 5 | 51 | 21 | 53 | 7 | 14 | 8 | 206 | 93 |
| 12:00 PM 12:30 PM | 46 | 6 | 57 | 28 | 53 | 9 | 16 | 9 | 224 | 75 |
| 12:30 PM 1:00 PM | 56 | 3 | 57 | 28 | 58 | 13 | 16 | 8 | 239 | 60 |
| 1:00 PM 1:30 PM | 60 | 6 | 57 | 31 | 60 | 13 | 21 | 6 | 254 | 45 |
| 1:30 PM 2:00 PM | 68 | 14 | 57 | 31 | 59 | 14 | 20 | 6 | 269 | 30 |
| 2:00 PM 2:30 PM | 62 | 12 | 57 | 32 | 57 | 13 | 20 | 6 | 259 | 40 |

NOTES:

- 1) CAPACITY OF IDENTIFIED PARKING AREAS INCLUDING TOTAL SPACES AND OCCUPIED SPACES BY TIME INTERVAL FOR EACH AREA ARE BASED ON PARKING COUNT DATA COLLECTED BY REPRESENTATIVES OF MASER CONSULTING ON FEBRUARY 4, 2020. SEE FIGURE 1P CONTAINED IN APPENDIX A FOR FURTHER IDENTIFICATION OF PARKING AREAS AND INFORMATION ON PARKING RESTRICTIONS.
- 2) ON-STREET PARKING SPACES ALONG SCHENCK AVENUE, SOUTH STREET AND NORTH STREET ARE NOT STRIPED. TOTAL AVAILABLE PARKING SPACES IS AN ESTIAMTE OF THE APPROXIMATE CAPACITY ALONG EACH ROADWAY.
- 3) THE MAIN STREET/VAN NYDECK AVENUE PUBLIC LOT WAS OBSERVED TO HAVE ADDITIONAL VEHICLES PARKED BEYOND ITS AVAILABLE CAPACITY IN UN MARKED PARKING SPACES DURING PEAK PARKING PERIODS.



416 – 420 MAIN STREET

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

| Control Delay (s/veh) | LOS by Volume-to-Capacity Ratio | |
|------------------------------|--|--------------------|
| | 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

| Control Delay (s/veh) | LOS by Volume-to-Capacity Ratio | |
|-----------------------|---------------------------------|----------|
| | 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

| Control Delay (s/veh) | LOS by Volume-to-Capacity Ratio | |
|-----------------------|---------------------------------|----------|
| | 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.



















416 – 420 MAIN STREET

APPENDIX D
CAPACITY ANALYSIS













2020 Existing Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak AM Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (vph) | 30 | 146 | 24 | 14 | 151 | 74 | 43 | 46 | 14 | 20 | 110 | 21 |
| Future Volume (vph) | 30 | 146 | 24 | 14 | 151 | 74 | 43 | 46 | 14 | 20 | 110 | 21 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 16 | 12 | 12 | 15 | 12 | 12 | 8 | 12 | 12 | 8 | 12 |
| Grade (%) | | 3% | | | -1% | | | 1% | | | | -2% |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 0.99 | | | 0.99 | | | 0.98 | | | 0.99 | |
| Frt | | 0.984 | | | 0.958 | | | 0.982 | | | 0.981 | |
| Flt Protected | | 0.993 | | | 0.997 | | | 0.979 | | | 0.993 | |
| Satd. Flow (prot) | 0 | 1955 | 0 | 0 | 1921 | 0 | 0 | 1512 | 0 | 0 | 1568 | 0 |
| Flt Permitted | | 0.930 | | | 0.979 | | | 0.840 | | | 0.959 | |
| Satd. Flow (perm) | 0 | 1828 | 0 | 0 | 1886 | 0 | 0 | 1279 | 0 | 0 | 1511 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 179 | | | 231 | | | 204 | | | 315 | |
| Travel Time (s) | | 4.1 | | | 5.3 | | | 4.6 | | | 7.2 | |
| Confl. Peds. (#/hr) | 11 | | 7 | 7 | | 11 | 31 | | 14 | 14 | | 31 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles (%) | 10% | 5% | 4% | 2% | 4% | 2% | 2% | 4% | 7% | 5% | 2% | 2% |
| Parking (#/hr) | | | | | | | | | 0 | | | 0 |
| Adj. Flow (vph) | 34 | 166 | 27 | 16 | 172 | 84 | 49 | 52 | 16 | 23 | 125 | 24 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 227 | 0 | 0 | 272 | 0 | 0 | 117 | 0 | 0 | 172 | 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 | 1.02 | 0.86 | 1.02 | 0.99 | 0.88 | 0.99 | 1.01 | 1.21 | 1.01 | 0.99 | 1.19 | 0.99 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 2 | | | 6 | | | 4 | | | 8 | |
| Permitted Phases | 2 | | | 6 | | | 4 | | | 8 | | |
| Minimum Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 30.0 | 30.0 | | 30.0 | 30.0 | |
| Total Split (%) | 53.8% | 53.8% | | 53.8% | 53.8% | | 46.2% | 46.2% | | 46.2% | 46.2% | |
| Maximum Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| All-Red Time (s) | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | |
| Pedestrian Calls (#/hr) | 9 | 9 | | 9 | 9 | | 22 | 22 | | 22 | 22 | |

2020 Existing Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

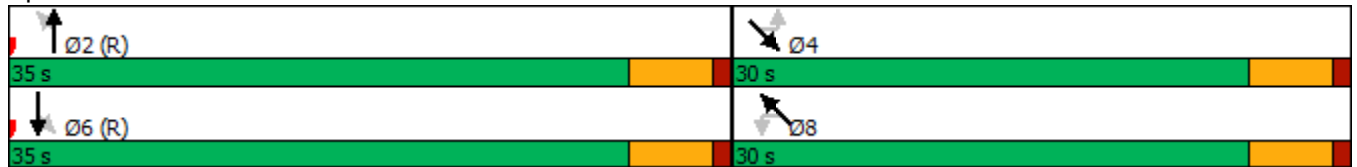
Peak AM Hour
 02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| v/c Ratio | | 0.27 | | | 0.31 | | | 0.24 | | | 0.30 | |
| Control Delay | | 11.9 | | | 12.3 | | | 15.2 | | | 15.7 | |
| Queue Delay | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Delay | | 11.9 | | | 12.3 | | | 15.2 | | | 15.7 | |
| Queue Length 50th (ft) | | 52 | | | 64 | | | 30 | | | 46 | |
| Queue Length 95th (ft) | | 91 | | | 108 | | | 62 | | | 86 | |
| Internal Link Dist (ft) | | 99 | | | 151 | | | 124 | | | 235 | |
| Turn Bay Length (ft) | | | | | | | | | | | | |
| Base Capacity (vph) | | 843 | | | 870 | | | 491 | | | 581 | |
| Starvation Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Reduced v/c Ratio | | 0.27 | | | 0.31 | | | 0.24 | | | 0.30 | |

Intersection Summary

















Area Type: Other
 Cycle Length: 65
 Actuated Cycle Length: 65
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 55
 Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



2020 Existing Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak AM Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 30 | 146 | 24 | 14 | 151 | 74 | 43 | 46 | 14 | 20 | 110 | 21 |
| Future Volume (veh/h) | 30 | 146 | 24 | 14 | 151 | 74 | 43 | 46 | 14 | 20 | 110 | 21 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 0.99 | | 0.99 | 0.99 | | 0.99 | 0.97 | | 0.96 | 0.97 | | 0.96 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 0.90 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1773 | 1844 | 1773 | 1879 | 1954 | 1879 | 1835 | 1761 | 1835 | 1949 | 1871 | 1949 |
| Adj Flow Rate, veh/h | 34 | 166 | 27 | 16 | 172 | 84 | 49 | 52 | 16 | 23 | 125 | 24 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 |
| Cap, veh/h | 138 | 615 | 93 | 78 | 562 | 260 | 262 | 251 | 69 | 108 | 478 | 85 |
| Arrive On Green | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |
| Sat Flow, veh/h | 161 | 1333 | 202 | 41 | 1218 | 562 | 476 | 653 | 179 | 117 | 1243 | 220 |
| Grp Volume(v), veh/h | 227 | 0 | 0 | 272 | 0 | 0 | 117 | 0 | 0 | 172 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1696 | 0 | 0 | 1821 | 0 | 0 | 1308 | 0 | 0 | 1580 | 0 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.0 | 0.0 | 0.0 | 6.1 | 0.0 | 0.0 | 3.3 | 0.0 | 0.0 | 4.7 | 0.0 | 0.0 |
| Prop In Lane | 0.15 | | 0.12 | 0.06 | | 0.31 | 0.42 | | 0.14 | 0.13 | | 0.14 |
| Lane Grp Cap(c), veh/h | 846 | 0 | 0 | 899 | 0 | 0 | 582 | 0 | 0 | 671 | 0 | 0 |
| V/C Ratio(X) | 0.27 | 0.00 | 0.00 | 0.30 | 0.00 | 0.00 | 0.20 | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 846 | 0 | 0 | 899 | 0 | 0 | 582 | 0 | 0 | 671 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 10.8 | 0.0 | 0.0 | 11.1 | 0.0 | 0.0 | 13.3 | 0.0 | 0.0 | 13.8 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.8 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.0 | 0.0 | 0.0 | 2.4 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 11.6 | 0.0 | 0.0 | 11.9 | 0.0 | 0.0 | 14.1 | 0.0 | 0.0 | 14.7 | 0.0 | 0.0 |
| LnGrp LOS | B | A | A | B | A | A | B | A | A | B | A | A |
| Approach Vol, veh/h | | 227 | | | 272 | | | 117 | | | | 172 |
| Approach Delay, s/veh | | 11.6 | | | 11.9 | | | 14.1 | | | | 14.7 |
| Approach LOS | | B | | | B | | | B | | | | B |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 35.0 | | 30.0 | | 35.0 | | 30.0 | | | | |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | | 30.0 | | 25.0 | | 30.0 | | 25.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.0 | | 5.3 | | 8.1 | | 6.7 | | | | |
| Green Ext Time (p_c), s | | 0.9 | | 0.4 | | 1.1 | | 0.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 12.7 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

2020 Existing Traffic Volumes
2: Main Street & Schenck Avenue

Peak AM Hour
02/20/2020



| Lane Group | SEL | SET | NWT | NWR | SWL | SWR |
|----------------------------|------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 15 | 65 | 131 | 10 | 3 | 4 |
| Future Volume (vph) | 15 | 65 | 131 | 10 | 3 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 8 | 12 |
| Grade (%) | | 1% | 1% | | -5% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | 0.990 | | 0.923 | |
| Flt Protected | | 0.991 | | | 0.979 | |
| Satd. Flow (prot) | 0 | 1806 | 1835 | 0 | 1495 | 0 |
| Flt Permitted | | 0.991 | | | 0.979 | |
| Satd. Flow (perm) | 0 | 1806 | 1835 | 0 | 1495 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 315 | 242 | | 417 | |
| Travel Time (s) | | 7.2 | 5.5 | | 9.5 | |
| Confl. Peds. (#/hr) | 34 | | | 29 | 29 | 34 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles (%) | 7% | 3% | 2% | 2% | 2% | 2% |
| Parking (#/hr) | | | | 0 | | 0 |
| Adj. Flow (vph) | 16 | 71 | 144 | 11 | 3 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 87 | 155 | 0 | 7 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 0 | 0 | | 8 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.01 | 1.01 | 1.01 | 1.01 | 1.16 | 0.97 |
| 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 0.8

| Movement | SEL | SET | NWT | NWR | SWL | SWR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↑ | ↑ | | ↑ | |
| Traffic Vol, veh/h | 15 | 65 | 131 | 10 | 3 | 4 |
| Future Vol, veh/h | 15 | 65 | 131 | 10 | 3 | 4 |
| Conflicting Peds, #/hr | 34 | 0 | 0 | 29 | 29 | 34 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | 0 | 0 | - | 0 | - |
| Grade, % | - | 1 | 1 | - | -5 | - |
| Peak Hour Factor | 91 | 91 | 91 | 91 | 91 | 91 |
| Heavy Vehicles, % | 7 | 3 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 71 | 144 | 11 | 3 | 4 |

















| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 189 | 0 | 0 |
| Stage 1 | - | - | 184 |
| Stage 2 | - | - | 132 |
| Critical Hdwy | 4.17 | - | 5.42 |
| Critical Hdwy Stg 1 | - | - | 4.42 |
| Critical Hdwy Stg 2 | - | - | 4.42 |
| Follow-up Hdwy | 2.263 | - | 3.318 |
| Pot Cap-1 Maneuver | 855 | - | 739 |
| Stage 1 | - | - | 892 |
| Stage 2 | - | - | 928 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 826 | - | 698 |
| Mov Cap-2 Maneuver | - | - | 698 |
| Stage 1 | - | - | 861 |
| Stage 2 | - | - | 908 |

| Approach | SE | NW | SW |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 4.5 | 0 | 9.8 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NWT | NWR | SEL | SE | SWLn1 |
|-----------------------|-----|-----|-------|----|-------|
| Capacity (veh/h) | - | - | 1326 | - | 754 |
| HCM Lane V/C Ratio | - | - | 0.012 | - | 0.01 |
| HCM Control Delay (s) | - | - | 7.7 | 0 | 9.8 |
| HCM Lane LOS | - | - | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0 | - | 0 |













2020 Existing Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak PM Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (vph) | 28 | 177 | 20 | 24 | 169 | 77 | 55 | 133 | 28 | 35 | 128 | 34 |
| Future Volume (vph) | 28 | 177 | 20 | 24 | 169 | 77 | 55 | 133 | 28 | 35 | 128 | 34 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 16 | 12 | 12 | 15 | 12 | 12 | 8 | 12 | 12 | 8 | 12 |
| Grade (%) | | 3% | | | -1% | | | 1% | | | | -2% |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 1.00 | | | 0.99 | | | 0.97 | | | 0.97 | |
| Frt | | 0.988 | | | 0.961 | | | 0.983 | | | 0.977 | |
| Flt Protected | | 0.994 | | | 0.996 | | | 0.987 | | | 0.991 | |
| Satd. Flow (prot) | 0 | 1971 | 0 | 0 | 1929 | 0 | 0 | 1543 | 0 | 0 | 1544 | 0 |
| Flt Permitted | | 0.943 | | | 0.964 | | | 0.879 | | | 0.920 | |
| Satd. Flow (perm) | 0 | 1868 | 0 | 0 | 1866 | 0 | 0 | 1352 | 0 | 0 | 1423 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 179 | | | 231 | | | 204 | | | 315 | |
| Travel Time (s) | | 4.1 | | | 5.3 | | | 4.6 | | | 7.2 | |
| Confl. Peds. (#/hr) | 9 | | 7 | 7 | | 9 | 61 | | 39 | 39 | | 61 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 2% | 6% | 5% | 2% | 4% | 2% | 2% | 2% | 2% | 3% | 2% | 3% |
| Parking (#/hr) | | | | | | | | | 0 | | | 0 |
| Adj. Flow (vph) | 29 | 186 | 21 | 25 | 178 | 81 | 58 | 140 | 29 | 37 | 135 | 36 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 236 | 0 | 0 | 284 | 0 | 0 | 227 | 0 | 0 | 208 | 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 | 1.02 | 0.86 | 1.02 | 0.99 | 0.88 | 0.99 | 1.01 | 1.21 | 1.01 | 0.99 | 1.19 | 0.99 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 2 | | | 6 | | | 4 | | | 8 | |
| Permitted Phases | 2 | | | 6 | | | 4 | | | 8 | | |
| Minimum Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 30.0 | 30.0 | | 30.0 | 30.0 | |
| Total Split (%) | 53.8% | 53.8% | | 53.8% | 53.8% | | 46.2% | 46.2% | | 46.2% | 46.2% | |
| Maximum Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| All-Red Time (s) | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | |
| Pedestrian Calls (#/hr) | 8 | 8 | | 8 | 8 | | 50 | 50 | | 50 | 50 | |

2020 Existing Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

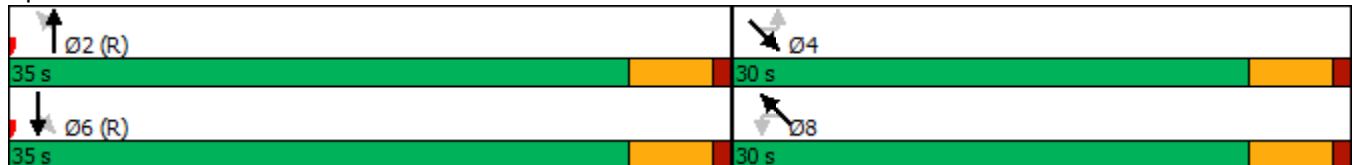
Peak PM Hour
 02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| v/c Ratio | | 0.27 | | | 0.33 | | | 0.44 | | | | 0.38 |
| Control Delay | | 11.9 | | | 12.5 | | | 18.1 | | | | 17.0 |
| Queue Delay | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Total Delay | | 11.9 | | | 12.5 | | | 18.1 | | | | 17.0 |
| Queue Length 50th (ft) | | 55 | | | 67 | | | 64 | | | | 58 |
| Queue Length 95th (ft) | | 97 | | | 117 | | | 120 | | | | 108 |
| Internal Link Dist (ft) | | 99 | | | 151 | | | 124 | | | | 235 |
| Turn Bay Length (ft) | | | | | | | | | | | | |
| Base Capacity (vph) | | 862 | | | 861 | | | 520 | | | | 547 |
| Starvation Cap Reductn | | 0 | | | 0 | | | 0 | | | | 0 |
| Spillback Cap Reductn | | 0 | | | 0 | | | 0 | | | | 0 |
| Storage Cap Reductn | | 0 | | | 0 | | | 0 | | | | 0 |
| Reduced v/c Ratio | | 0.27 | | | 0.33 | | | 0.44 | | | | 0.38 |

Intersection Summary

















Area Type: Other
 Cycle Length: 65
 Actuated Cycle Length: 65
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 55
 Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



2020 Existing Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak PM Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 28 | 177 | 20 | 24 | 169 | 77 | 55 | 133 | 28 | 35 | 128 | 34 |
| Future Volume (veh/h) | 28 | 177 | 20 | 24 | 169 | 77 | 55 | 133 | 28 | 35 | 128 | 34 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 0.99 | | 0.99 | 0.99 | | 0.99 | 0.95 | | 0.92 | 0.95 | | 0.92 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 0.90 |
| Work Zone On Approach | | No | | | No | | | No | | | | No |
| Adj Sat Flow, veh/h/ln | 1758 | 1828 | 1758 | 1879 | 1954 | 1879 | 1864 | 1790 | 1864 | 1949 | 1871 | 1949 |
| Adj Flow Rate, veh/h | 29 | 186 | 21 | 25 | 178 | 81 | 58 | 140 | 29 | 37 | 135 | 36 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 6 | 6 | 6 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 118 | 666 | 71 | 95 | 563 | 238 | 172 | 366 | 69 | 131 | 413 | 100 |
| Arrive On Green | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |
| Sat Flow, veh/h | 121 | 1444 | 153 | 75 | 1219 | 516 | 267 | 952 | 178 | 171 | 1073 | 260 |
| Grp Volume(v), veh/h | 236 | 0 | 0 | 284 | 0 | 0 | 227 | 0 | 0 | 208 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1717 | 0 | 0 | 1810 | 0 | 0 | 1397 | 0 | 0 | 1504 | 0 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.3 | 0.0 | 0.0 | 6.3 | 0.0 | 0.0 | 7.0 | 0.0 | 0.0 | 6.0 | 0.0 | 0.0 |
| Prop In Lane | 0.12 | | 0.09 | 0.09 | | 0.29 | 0.26 | | 0.13 | 0.18 | | 0.17 |
| Lane Grp Cap(c), veh/h | 855 | 0 | 0 | 896 | 0 | 0 | 607 | 0 | 0 | 644 | 0 | 0 |
| V/C Ratio(X) | 0.28 | 0.00 | 0.00 | 0.32 | 0.00 | 0.00 | 0.37 | 0.00 | 0.00 | 0.32 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 855 | 0 | 0 | 896 | 0 | 0 | 607 | 0 | 0 | 644 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 10.8 | 0.0 | 0.0 | 11.1 | 0.0 | 0.0 | 14.4 | 0.0 | 0.0 | 14.1 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.8 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.0 | 0.0 | 0.0 | 2.5 | 0.0 | 0.0 | 2.5 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 11.6 | 0.0 | 0.0 | 12.1 | 0.0 | 0.0 | 16.2 | 0.0 | 0.0 | 15.5 | 0.0 | 0.0 |
| LnGrp LOS | B | A | A | B | A | A | B | A | A | B | A | A |
| Approach Vol, veh/h | | 236 | | | 284 | | | 227 | | | 208 | |
| Approach Delay, s/veh | | 11.6 | | | 12.1 | | | 16.2 | | | 15.5 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 35.0 | | 30.0 | | 35.0 | | 30.0 | | | | |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | | 30.0 | | 25.0 | | 30.0 | | 25.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.3 | | 9.0 | | 8.3 | | 8.0 | | | | |
| Green Ext Time (p_c), s | | 0.9 | | 0.8 | | 1.1 | | 0.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 13.7 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

2020 Existing Traffic Volumes
2: Main Street & Schenck Avenue

Peak PM Hour
02/20/2020



| Lane Group | SEL | SET | NWT | NWR | SWL | SWR |
|-----------------------------|--------------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 23 | 157 | 159 | 9 | 3 | 14 |
| Future Volume (vph) | 23 | 157 | 159 | 9 | 3 | 14 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 8 | 12 |
| Grade (%) | | 1% | 1% | | -5% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | 0.993 | | 0.886 | |
| Flt Protected | | 0.994 | | | 0.992 | |
| Satd. Flow (prot) | 0 | 1842 | 1840 | 0 | 1454 | 0 |
| Flt Permitted | | 0.994 | | | 0.992 | |
| Satd. Flow (perm) | 0 | 1842 | 1840 | 0 | 1454 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 315 | 242 | | 417 | |
| Travel Time (s) | | 7.2 | 5.5 | | 9.5 | |
| Confl. Peds. (#/hr) | 57 | | | 48 | 48 | 57 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Parking (#/hr) | | | | 0 | | 0 |
| Adj. Flow (vph) | 26 | 178 | 181 | 10 | 3 | 16 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 204 | 191 | 0 | 19 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 0 | 0 | | 8 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.01 | 1.01 | 1.01 | 1.01 | 1.16 | 0.97 |
| 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

Movement SEL SET NWT NWR SWL SWR

| | | | | | | |
|--------------------------|--------|------|--------|------|--------|------|
| Lane Configurations | | ↑ | ↑ | | ↑ | |
| Traffic Vol, veh/h | 23 | 157 | 159 | 9 | 3 | 14 |
| Future Vol, veh/h | 23 | 157 | 159 | 9 | 3 | 14 |
| Conflicting Peds, #/hr57 | 0 | 0 | 48 | 48 | 57 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - None | | - None | | - None | |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | 0 | - | 0 | - | |
| Grade, % | - | 1 | 1 | - | -5 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 26 | 178 | 181 | 10 | 3 | 16 |

Major/Minor Major1 Major2 Minor2

| | | | | | | |
|----------------------|-------|---|---|---|-------|-------|
| Conflicting Flow All | 248 | 0 | - | 0 | 521 | 300 |
| Stage 1 | - | - | - | - | 243 | - |
| Stage 2 | - | - | - | - | 278 | - |
| Critical Hdwy | 4.12 | - | - | - | 5.42 | 5.72 |
| Critical Hdwy Stg 1 | - | - | - | - | 4.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 4.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1818 | - | - | - | 596 | 771 |
| Stage 1 | - | - | - | - | 853 | - |
| Stage 2 | - | - | - | - | 831 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1270 | - | - | - | 541 | 703 |
| Mov Cap-2 Maneuver | - | - | - | - | 541 | - |
| Stage 1 | - | - | - | - | 804 | - |
| Stage 2 | - | - | - | - | 801 | - |

Approach SE NW SW

















| | | | |
|----------------------|---|---|------|
| HCM Control Delay, s | 1 | 0 | 10.6 |
| HCM LOS | | | B |

Minor Lane/Major Mvmt NWT NWR SEL SE\$WLn1

| | | | | | |
|-----------------------|---|---|-------|---|-------|
| Capacity (veh/h) | - | - | 1270 | - | 668 |
| HCM Lane V/C Ratio | - | - | 0.021 | - | 0.029 |
| HCM Control Delay (s) | - | - | 7.9 | 0 | 10.6 |
| HCM Lane LOS | - | - | A | A | B |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0.1 |

2020 Existing Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak SAT Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (vph) | 42 | 146 | 34 | 36 | 158 | 117 | 77 | 138 | 32 | 31 | 163 | 34 |
| Future Volume (vph) | 42 | 146 | 34 | 36 | 158 | 117 | 77 | 138 | 32 | 31 | 163 | 34 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 16 | 12 | 12 | 15 | 12 | 12 | 8 | 12 | 12 | 8 | 12 |
| Grade (%) | | 3% | | | -1% | | | 1% | | | | -2% |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 0.99 | | | 0.98 | | | 0.95 | | | 0.96 | |
| Frt | | 0.979 | | | 0.949 | | | 0.983 | | | 0.980 | |
| Flt Protected | | 0.991 | | | 0.994 | | | 0.985 | | | 0.993 | |
| Satd. Flow (prot) | 0 | 2005 | 0 | 0 | 1902 | 0 | 0 | 1527 | 0 | 0 | 1536 | 0 |
| Flt Permitted | | 0.894 | | | 0.947 | | | 0.845 | | | 0.934 | |
| Satd. Flow (perm) | 0 | 1801 | 0 | 0 | 1808 | 0 | 0 | 1269 | 0 | 0 | 1429 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 179 | | | 231 | | | 204 | | | 315 | |
| Travel Time (s) | | 4.1 | | | 5.3 | | | 4.6 | | | 7.2 | |
| Confl. Peds. (#/hr) | 25 | | 15 | 15 | | 25 | 106 | | 83 | 83 | | 106 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 7% | 2% | 2% |
| Parking (#/hr) | | | | | | | | | 0 | | | 0 |
| Adj. Flow (vph) | 45 | 155 | 36 | 38 | 168 | 124 | 82 | 147 | 34 | 33 | 173 | 36 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 236 | 0 | 0 | 330 | 0 | 0 | 263 | 0 | 0 | 242 | 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 | 1.02 | 0.86 | 1.02 | 0.99 | 0.88 | 0.99 | 1.01 | 1.21 | 1.01 | 0.99 | 1.19 | 0.99 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 2 | | | 6 | | | 4 | | | 8 | |
| Permitted Phases | 2 | | | 6 | | | 4 | | | 8 | | |
| Minimum Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 30.0 | 30.0 | | 30.0 | 30.0 | |
| Total Split (%) | 53.8% | 53.8% | | 53.8% | 53.8% | | 46.2% | 46.2% | | 46.2% | 46.2% | |
| Maximum Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| All-Red Time (s) | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | |
| Pedestrian Calls (#/hr) | 20 | 20 | | 20 | 20 | | 55 | 55 | | 55 | 55 | |

2020 Existing Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

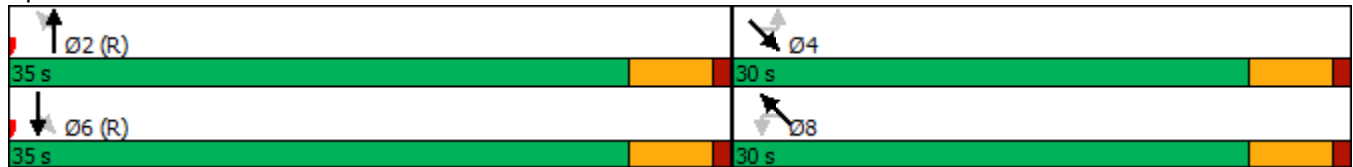
Peak SAT Hour
 02/20/2020

| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
|-------------------------|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|
| v/c Ratio | | 0.28 | | | 0.40 | | | 0.54 | | | 0.44 | |
| Control Delay | | 12.0 | | | 13.3 | | | 20.6 | | | 18.0 | |
| Queue Delay | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Delay | | 12.0 | | | 13.3 | | | 20.6 | | | 18.0 | |
| Queue Length 50th (ft) | | 55 | | | 81 | | | 79 | | | 69 | |
| Queue Length 95th (ft) | | 98 | | | 138 | | | 146 | | | 126 | |
| Internal Link Dist (ft) | | 99 | | | 151 | | | 124 | | | 235 | |
| Turn Bay Length (ft) | | | | | | | | | | | | |
| Base Capacity (vph) | | 831 | | | 834 | | | 488 | | | 549 | |
| Starvation Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Reduced v/c Ratio | | 0.28 | | | 0.40 | | | 0.54 | | | 0.44 | |

Intersection Summary

















Area Type: Other
 Cycle Length: 65
 Actuated Cycle Length: 65
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 55
 Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



2020 Existing Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak SAT Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 42 | 146 | 34 | 36 | 158 | 117 | 77 | 138 | 32 | 31 | 163 | 34 |
| Future Volume (veh/h) | 42 | 146 | 34 | 36 | 158 | 117 | 77 | 138 | 32 | 31 | 163 | 34 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 0.99 | | 0.97 | 0.98 | | 0.97 | 0.92 | | 0.86 | 0.92 | | 0.86 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 0.90 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1817 | 1890 | 1817 | 1909 | 1986 | 1909 | 1864 | 1790 | 1864 | 1949 | 1871 | 1949 |
| Adj Flow Rate, veh/h | 45 | 155 | 36 | 38 | 168 | 124 | 82 | 147 | 34 | 33 | 173 | 36 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 169 | 550 | 118 | 114 | 459 | 308 | 201 | 320 | 67 | 107 | 454 | 87 |
| Arrive On Green | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |
| Sat Flow, veh/h | 224 | 1191 | 255 | 113 | 995 | 667 | 334 | 833 | 173 | 115 | 1180 | 226 |
| Grp Volume(v), veh/h | 236 | 0 | 0 | 330 | 0 | 0 | 263 | 0 | 0 | 242 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1670 | 0 | 0 | 1776 | 0 | 0 | 1341 | 0 | 0 | 1521 | 0 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.2 | 0.0 | 0.0 | 7.7 | 0.0 | 0.0 | 8.5 | 0.0 | 0.0 | 7.1 | 0.0 | 0.0 |
| Prop In Lane | 0.19 | | 0.15 | 0.12 | | 0.38 | 0.31 | | 0.13 | 0.14 | | 0.15 |
| Lane Grp Cap(c), veh/h | 837 | 0 | 0 | 881 | 0 | 0 | 588 | 0 | 0 | 648 | 0 | 0 |
| V/C Ratio(X) | 0.28 | 0.00 | 0.00 | 0.37 | 0.00 | 0.00 | 0.45 | 0.00 | 0.00 | 0.37 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 837 | 0 | 0 | 881 | 0 | 0 | 588 | 0 | 0 | 648 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 10.8 | 0.0 | 0.0 | 11.5 | 0.0 | 0.0 | 14.9 | 0.0 | 0.0 | 14.5 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.8 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 2.4 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.0 | 0.0 | 0.0 | 3.0 | 0.0 | 0.0 | 3.0 | 0.0 | 0.0 | 2.6 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 11.7 | 0.0 | 0.0 | 12.7 | 0.0 | 0.0 | 17.3 | 0.0 | 0.0 | 16.2 | 0.0 | 0.0 |
| LnGrp LOS | B | A | A | B | A | A | B | A | A | B | A | A |
| Approach Vol, veh/h | | 236 | | | 330 | | | 263 | | | | 242 |
| Approach Delay, s/veh | | 11.7 | | | 12.7 | | | 17.3 | | | | 16.2 |
| Approach LOS | | B | | | B | | | B | | | | B |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 35.0 | | 30.0 | | 35.0 | | 30.0 | | | | |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | | 30.0 | | 25.0 | | 30.0 | | 25.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.2 | | 10.5 | | 9.7 | | 9.1 | | | | |
| Green Ext Time (p_c), s | | 0.9 | | 1.0 | | 1.4 | | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 14.4 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

2020 Existing Traffic Volumes
2: Main Street & Schenck Avenue

Peak SAT Hour
02/20/2020



| Lane Group | SEL | SET | NWT | NWR | SWL | SWR |
|-----------------------------|--------------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 22 | 188 | 202 | 24 | 6 | 13 |
| Future Volume (vph) | 22 | 188 | 202 | 24 | 6 | 13 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 8 | 12 |
| Grade (%) | | 1% | 1% | | -5% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | 0.986 | | 0.905 | |
| Flt Protected | | 0.995 | | | 0.985 | |
| Satd. Flow (prot) | 0 | 1844 | 1827 | 0 | 1475 | 0 |
| Flt Permitted | | 0.995 | | | 0.985 | |
| Satd. Flow (perm) | 0 | 1844 | 1827 | 0 | 1475 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 315 | 242 | | 417 | |
| Travel Time (s) | | 7.2 | 5.5 | | 9.5 | |
| Confl. Peds. (#/hr) | 113 | | | 104 | 104 | 113 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Parking (#/hr) | | | | 0 | | 0 |
| Adj. Flow (vph) | 24 | 202 | 217 | 26 | 6 | 14 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 226 | 243 | 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 | | 8 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.01 | 1.01 | 1.01 | 1.01 | 1.16 | 0.97 |
| 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 0.9

Movement SEL SET NWT NWR SWL SWR

| | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↑ | ↑ | | ↑ | |
| Traffic Vol, veh/h | 22 | 188 | 202 | 24 | 6 | 13 |
| Future Vol, veh/h | 22 | 188 | 202 | 24 | 6 | 13 |
| Conflicting Peds, #/hr | 13 | 0 | 0 | 104 | 104 | 113 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | 0 | 0 | - | 0 | - |
| Grade, % | - | 1 | 1 | - | -5 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 24 | 202 | 217 | 26 | 6 | 14 |

Major/Minor Major1 Major2 Minor2

| | | | | | | |
|----------------------|-------|---|---|---|-------|-------|
| Conflicting Flow All | 356 | 0 | - | 0 | 697 | 456 |
| Stage 1 | - | - | - | - | 343 | - |
| Stage 2 | - | - | - | - | 354 | - |
| Critical Hdwy | 4.12 | - | - | - | 5.42 | 5.72 |
| Critical Hdwy Stg 1 | - | - | - | - | 4.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 4.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 203 | - | - | - | 494 | 644 |
| Stage 1 | - | - | - | - | 790 | - |
| Stage 2 | - | - | - | - | 784 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 17 | - | - | - | 415 | 533 |
| Mov Cap-2 Maneuver | - | - | - | - | 415 | - |
| Stage 1 | - | - | - | - | 716 | - |
| Stage 2 | - | - | - | - | 728 | - |

Approach SE NW SW

















| | | | |
|----------------------|-----|---|------|
| HCM Control Delay, s | 0.9 | 0 | 12.7 |
| HCM LOS | | | B |

Minor Lane/Major Mvmt NWT NWR SEL SE\$WLn1

| | | | | | |
|-----------------------|---|---|-------|---|-------|
| Capacity (veh/h) | - | - | 1117 | - | 489 |
| HCM Lane V/C Ratio | - | - | 0.021 | - | 0.042 |
| HCM Control Delay (s) | - | - | 8.3 | 0 | 12.7 |
| HCM Lane LOS | - | - | A | A | B |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0.1 |













2025 No-Build Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak AM Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (vph) | 33 | 161 | 27 | 16 | 166 | 81 | 47 | 61 | 15 | 23 | 126 | 24 |
| Future Volume (vph) | 33 | 161 | 27 | 16 | 166 | 81 | 47 | 61 | 15 | 23 | 126 | 24 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 16 | 12 | 12 | 15 | 12 | 12 | 8 | 12 | 12 | 8 | 12 |
| Grade (%) | | 3% | | | -1% | | | 1% | | | | -2% |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 0.99 | | | 0.99 | | | 0.98 | | | 0.99 | |
| Frt | | 0.983 | | | 0.958 | | | 0.983 | | | 0.981 | |
| Flt Protected | | 0.993 | | | 0.997 | | | 0.981 | | | 0.993 | |
| Satd. Flow (prot) | 0 | 1953 | 0 | 0 | 1921 | 0 | 0 | 1366 | 0 | 0 | 1411 | 0 |
| Flt Permitted | | 0.923 | | | 0.977 | | | 0.840 | | | 0.955 | |
| Satd. Flow (perm) | 0 | 1812 | 0 | 0 | 1882 | 0 | 0 | 1155 | 0 | 0 | 1354 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 179 | | | 231 | | | 204 | | | 315 | |
| Travel Time (s) | | 4.1 | | | 5.3 | | | 4.6 | | | 7.2 | |
| Confl. Peds. (#/hr) | 11 | | 7 | 7 | | 11 | 31 | | 14 | 14 | | 31 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles (%) | 10% | 5% | 4% | 2% | 4% | 2% | 2% | 4% | 7% | 5% | 2% | 2% |
| Parking (#/hr) | | | | | | | | 0 | | | 0 | |
| Adj. Flow (vph) | 38 | 183 | 31 | 18 | 189 | 92 | 53 | 69 | 17 | 26 | 143 | 27 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 252 | 0 | 0 | 299 | 0 | 0 | 139 | 0 | 0 | 196 | 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 | 1.02 | 0.86 | 1.02 | 0.99 | 0.88 | 0.99 | 1.01 | 1.38 | 1.01 | 0.99 | 1.35 | 0.99 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 2 | | | 6 | | | 4 | | | 8 | |
| Permitted Phases | 2 | | | 6 | | | 4 | | | 8 | | |
| Minimum Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 30.0 | 30.0 | | 30.0 | 30.0 | |
| Total Split (%) | 53.8% | 53.8% | | 53.8% | 53.8% | | 46.2% | 46.2% | | 46.2% | 46.2% | |
| Maximum Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| All-Red Time (s) | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | |
| Pedestrian Calls (#/hr) | 9 | 9 | | 9 | 9 | | 22 | 22 | | 22 | 22 | |

2025 No-Build Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

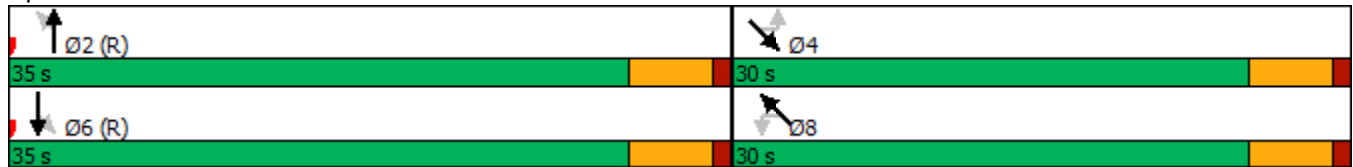
Peak AM Hour
 02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| v/c Ratio | | 0.30 | | | 0.34 | | | 0.31 | | | 0.38 | |
| Control Delay | | 12.2 | | | 12.6 | | | 16.5 | | | 17.1 | |
| Queue Delay | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Delay | | 12.2 | | | 12.6 | | | 16.5 | | | 17.1 | |
| Queue Length 50th (ft) | | 59 | | | 72 | | | 37 | | | 54 | |
| Queue Length 95th (ft) | | 101 | | | 119 | | | 75 | | | 100 | |
| Internal Link Dist (ft) | | 99 | | | 151 | | | 124 | | | 235 | |
| Turn Bay Length (ft) | | | | | | | | | | | | |
| Base Capacity (vph) | | 836 | | | 868 | | | 444 | | | 520 | |
| Starvation Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Reduced v/c Ratio | | 0.30 | | | 0.34 | | | 0.31 | | | 0.38 | |

Intersection Summary

















Area Type: Other
 Cycle Length: 65
 Actuated Cycle Length: 65
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 55
 Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



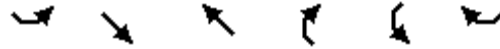
2025 No-Build Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak AM Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 33 | 161 | 27 | 16 | 166 | 81 | 47 | 61 | 15 | 23 | 126 | 24 |
| Future Volume (veh/h) | 33 | 161 | 27 | 16 | 166 | 81 | 47 | 61 | 15 | 23 | 126 | 24 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 0.99 | | 0.99 | 0.99 | | 0.99 | 0.97 | | 0.96 | 0.97 | | 0.96 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1773 | 1844 | 1773 | 1879 | 1954 | 1879 | 1835 | 1761 | 1835 | 1949 | 1871 | 1949 |
| Adj Flow Rate, veh/h | 38 | 183 | 31 | 18 | 189 | 92 | 53 | 69 | 17 | 26 | 143 | 27 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 |
| Cap, veh/h | 138 | 609 | 96 | 79 | 561 | 258 | 259 | 313 | 69 | 112 | 533 | 93 |
| Arrive On Green | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |
| Sat Flow, veh/h | 161 | 1319 | 208 | 44 | 1215 | 560 | 475 | 813 | 180 | 128 | 1385 | 242 |
| Grp Volume(v), veh/h | 252 | 0 | 0 | 299 | 0 | 0 | 139 | 0 | 0 | 196 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1688 | 0 | 0 | 1819 | 0 | 0 | 1468 | 0 | 0 | 1755 | 0 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.7 | 0.0 | 0.0 | 6.8 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 4.8 | 0.0 | 0.0 |
| Prop In Lane | 0.15 | | 0.12 | 0.06 | | 0.31 | 0.38 | | 0.12 | 0.13 | | 0.14 |
| Lane Grp Cap(c), veh/h | 843 | 0 | 0 | 898 | 0 | 0 | 641 | 0 | 0 | 738 | 0 | 0 |
| V/C Ratio(X) | 0.30 | 0.00 | 0.00 | 0.33 | 0.00 | 0.00 | 0.22 | 0.00 | 0.00 | 0.27 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 843 | 0 | 0 | 898 | 0 | 0 | 641 | 0 | 0 | 738 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 11.0 | 0.0 | 0.0 | 11.2 | 0.0 | 0.0 | 13.4 | 0.0 | 0.0 | 13.8 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.9 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.2 | 0.0 | 0.0 | 2.7 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 11.9 | 0.0 | 0.0 | 12.2 | 0.0 | 0.0 | 14.2 | 0.0 | 0.0 | 14.7 | 0.0 | 0.0 |
| LnGrp LOS | B | A | A | B | A | A | B | A | A | B | A | A |
| Approach Vol, veh/h | | 252 | | | 299 | | | 139 | | | 196 | |
| Approach Delay, s/veh | | 11.9 | | | 12.2 | | | 14.2 | | | 14.7 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 35.0 | | 30.0 | | 35.0 | | 30.0 | | | | |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | | 30.0 | | 25.0 | | 30.0 | | 25.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.7 | | 5.5 | | 8.8 | | 6.8 | | | | |
| Green Ext Time (p_c), s | | 1.0 | | 0.5 | | 1.2 | | 0.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 13.0 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

2025 No-Build Traffic Volumes
 2: Main Street & Schenck Avenue

Peak AM Hour
 02/20/2020



| Lane Group | SEL | SET | NWT | NWR | SWL | SWR |
|----------------------------|------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 17 | 84 | 151 | 11 | 3 | 4 |
| Future Volume (vph) | 17 | 84 | 151 | 11 | 3 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 8 | 12 |
| Grade (%) | | 1% | 1% | | -5% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | 0.991 | | 0.923 | |
| Flt Protected | | 0.992 | | | 0.979 | |
| Satd. Flow (prot) | 0 | 1809 | 1837 | 0 | 1495 | 0 |
| Flt Permitted | | 0.992 | | | 0.979 | |
| Satd. Flow (perm) | 0 | 1809 | 1837 | 0 | 1495 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 315 | 242 | | 417 | |
| Travel Time (s) | | 7.2 | 5.5 | | 9.5 | |
| Confl. Peds. (#/hr) | 34 | | | 29 | 29 | 34 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles (%) | 7% | 3% | 2% | 2% | 2% | 2% |
| Parking (#/hr) | | | | 0 | | 0 |
| Adj. Flow (vph) | 19 | 92 | 166 | 12 | 3 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 111 | 178 | 0 | 7 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 0 | 0 | | 8 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.01 | 1.01 | 1.01 | 1.01 | 1.16 | 0.97 |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 |
| Sign Control | | Free | Free | | Stop | |

Intersection Summary

Area Type: Other

Control Type: Unsignalized

2025 No-Build Traffic Volumes
 2: Main Street & Schenck Avenue

Peak AM Hour
 02/20/2020

Intersection

Int Delay, s/veh 0.7

| Movement | SEL | SET | NWT | NWR | SWL | SWR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↑ | ↑ | | ↑ | |
| Traffic Vol, veh/h | 17 | 84 | 151 | 11 | 3 | 4 |
| Future Vol, veh/h | 17 | 84 | 151 | 11 | 3 | 4 |
| Conflicting Peds, #/hr | 34 | 0 | 0 | 29 | 29 | 34 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | 0 | 0 | 0 | 0 | 0 |
| Grade, % | - | 1 | 1 | - | -5 | - |
| Peak Hour Factor | 91 | 91 | 91 | 91 | 91 | 91 |
| Heavy Vehicles, % | 7 | 3 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 19 | 92 | 166 | 12 | 3 | 4 |

















| Major/Minor | Major1 | Major2 | Minor2 | | | |
|----------------------|--------|--------|--------|---|-------|-------|
| Conflicting Flow All | 212 | 0 | - | 0 | 365 | 240 |
| Stage 1 | - | - | - | - | 206 | - |
| Stage 2 | - | - | - | - | 159 | - |
| Critical Hdwy | 4.17 | - | - | - | 5.42 | 5.72 |
| Critical Hdwy Stg 1 | - | - | - | - | 4.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 4.42 | - |
| Follow-up Hdwy | 2.263 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 829 | - | - | - | 702 | 826 |
| Stage 1 | - | - | - | - | 877 | - |
| Stage 2 | - | - | - | - | 909 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 800 | - | - | - | 661 | 782 |
| Mov Cap-2 Maneuver | - | - | - | - | 661 | - |
| Stage 1 | - | - | - | - | 845 | - |
| Stage 2 | - | - | - | - | 889 | - |

| Approach | SE | NW | SW |
|----------------------|-----|----|----|
| HCM Control Delay, s | 4.3 | 0 | 10 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NWT | NWR | SEL | SE | SW | Ln1 |
|-----------------------|-----|-----|-------|----|-------|-----|
| Capacity (veh/h) | - | - | 1300 | - | 725 | - |
| HCM Lane V/C Ratio | - | - | 0.014 | - | 0.011 | - |
| HCM Control Delay (s) | - | - | 7.8 | 0 | 10 | - |
| HCM Lane LOS | - | - | A | A | B | - |
| HCM 95th %tile Q(veh) | - | - | 0 | - | 0 | - |

2025 No-Build Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

Peak PM Hour
 02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (vph) | 31 | 195 | 23 | 27 | 186 | 85 | 61 | 149 | 31 | 41 | 164 | 39 |
| Future Volume (vph) | 31 | 195 | 23 | 27 | 186 | 85 | 61 | 149 | 31 | 41 | 164 | 39 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 16 | 12 | 12 | 15 | 12 | 12 | 8 | 12 | 12 | 8 | 12 |
| Grade (%) | | 3% | | | -1% | | | 1% | | | | -2% |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 1.00 | | | 0.99 | | | 0.98 | | | 0.98 | |
| Frt | | 0.988 | | | 0.962 | | | 0.982 | | | 0.978 | |
| Flt Protected | | 0.994 | | | 0.996 | | | 0.988 | | | 0.992 | |
| Satd. Flow (prot) | 0 | 1971 | 0 | 0 | 1931 | 0 | 0 | 1543 | 0 | 0 | 1550 | 0 |
| Flt Permitted | | 0.936 | | | 0.960 | | | 0.864 | | | 0.915 | |
| Satd. Flow (perm) | 0 | 1854 | 0 | 0 | 1860 | 0 | 0 | 1330 | 0 | 0 | 1421 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 179 | | | 231 | | | 204 | | | 315 | |
| Travel Time (s) | | 4.1 | | | 5.3 | | | 4.6 | | | 7.2 | |
| Confl. Peds. (#/hr) | 9 | | 7 | 7 | | 9 | 61 | | 39 | 39 | | 61 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 2% | 6% | 5% | 2% | 4% | 2% | 2% | 2% | 2% | 3% | 2% | 3% |
| Parking (#/hr) | | | | | | | | | 0 | | | 0 |
| Adj. Flow (vph) | 33 | 205 | 24 | 28 | 196 | 89 | 64 | 157 | 33 | 43 | 173 | 41 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 262 | 0 | 0 | 313 | 0 | 0 | 254 | 0 | 0 | 257 | 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 | 1.02 | 0.86 | 1.02 | 0.99 | 0.88 | 0.99 | 1.01 | 1.21 | 1.01 | 0.99 | 1.19 | 0.99 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 2 | | | 6 | | | 4 | | | 8 | |
| Permitted Phases | 2 | | | 6 | | | 4 | | | 8 | | |
| Minimum Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 30.0 | 30.0 | | 30.0 | 30.0 | |
| Total Split (%) | 53.8% | 53.8% | | 53.8% | 53.8% | | 46.2% | 46.2% | | 46.2% | 46.2% | |
| Maximum Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| All-Red Time (s) | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | |
| Pedestrian Calls (#/hr) | 8 | 8 | | 8 | 8 | | 50 | 50 | | 50 | 50 | |

2025 No-Build Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

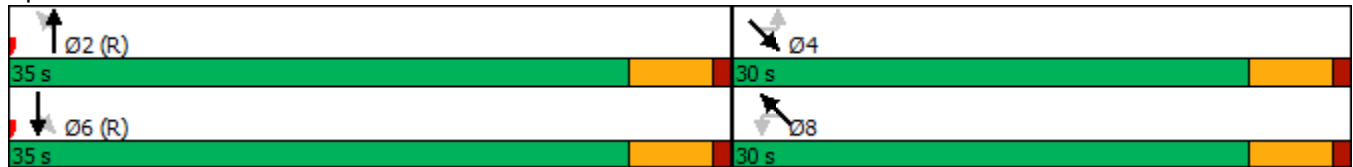
Peak PM Hour
 02/20/2020

| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
|-------------------------|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|
| v/c Ratio | | 0.31 | | | 0.36 | | | 0.50 | | | 0.47 | |
| Control Delay | | 12.2 | | | 12.9 | | | 19.4 | | | 18.6 | |
| Queue Delay | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Delay | | 12.2 | | | 12.9 | | | 19.4 | | | 18.6 | |
| Queue Length 50th (ft) | | 61 | | | 76 | | | 74 | | | 74 | |
| Queue Length 95th (ft) | | 107 | | | 129 | | | 137 | | | 135 | |
| Internal Link Dist (ft) | | 99 | | | 151 | | | 124 | | | 235 | |
| Turn Bay Length (ft) | | | | | | | | | | | | |
| Base Capacity (vph) | | 855 | | | 858 | | | 511 | | | 546 | |
| Starvation Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Reduced v/c Ratio | | 0.31 | | | 0.36 | | | 0.50 | | | 0.47 | |

Intersection Summary

Area Type: Other
 Cycle Length: 65
 Actuated Cycle Length: 65
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 55
 Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



2025 No-Build Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak PM Hour
02/20/2020

| Movement | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 31 | 195 | 23 | 27 | 186 | 85 | 61 | 149 | 31 | 41 | 164 | 39 |
| Future Volume (veh/h) | 31 | 195 | 23 | 27 | 186 | 85 | 61 | 149 | 31 | 41 | 164 | 39 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 0.99 | 0.99 | | 0.99 | 0.95 | | 0.92 | 0.95 | | 0.92 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 0.90 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1758 | 1828 | 1758 | 1879 | 1954 | 1879 | 1864 | 1790 | 1864 | 1949 | 1871 | 1949 |
| Adj Flow Rate, veh/h | 33 | 205 | 24 | 28 | 196 | 89 | 64 | 157 | 33 | 43 | 173 | 41 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 6 | 6 | 6 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 120 | 659 | 72 | 96 | 561 | 237 | 170 | 368 | 70 | 125 | 429 | 93 |
| Arrive On Green | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |
| Sat Flow, veh/h | 124 | 1428 | 157 | 78 | 1215 | 514 | 263 | 957 | 182 | 157 | 1116 | 242 |
| Grp Volume(v), veh/h | 262 | 0 | 0 | 313 | 0 | 0 | 254 | 0 | 0 | 257 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1709 | 0 | 0 | 1807 | 0 | 0 | 1402 | 0 | 0 | 1514 | 0 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 6.0 | 0.0 | 0.0 | 7.1 | 0.0 | 0.0 | 7.8 | 0.0 | 0.0 | 7.6 | 0.0 | 0.0 |
| Prop In Lane | 0.13 | | 0.09 | 0.09 | | 0.28 | 0.25 | | 0.13 | 0.17 | | 0.16 |
| Lane Grp Cap(c), veh/h | 851 | 0 | 0 | 894 | 0 | 0 | 609 | 0 | 0 | 647 | 0 | 0 |
| V/C Ratio(X) | 0.31 | 0.00 | 0.00 | 0.35 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 | 0.40 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 851 | 0 | 0 | 894 | 0 | 0 | 609 | 0 | 0 | 647 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 11.0 | 0.0 | 0.0 | 11.3 | 0.0 | 0.0 | 14.7 | 0.0 | 0.0 | 14.6 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.9 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.3 | 0.0 | 0.0 | 2.8 | 0.0 | 0.0 | 2.8 | 0.0 | 0.0 | 2.8 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 12.0 | 0.0 | 0.0 | 12.4 | 0.0 | 0.0 | 16.8 | 0.0 | 0.0 | 16.5 | 0.0 | 0.0 |
| LnGrp LOS | B | A | A | B | A | A | B | A | A | B | A | A |
| Approach Vol, veh/h | | 262 | | | 313 | | | 254 | | | 257 | |
| Approach Delay, s/veh | | 12.0 | | | 12.4 | | | 16.8 | | | 16.5 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 35.0 | | 30.0 | | 35.0 | | 30.0 | | | | |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | | 30.0 | | 25.0 | | 30.0 | | 25.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 8.0 | | 9.8 | | 9.1 | | 9.6 | | | | |
| Green Ext Time (p_c), s | | 1.0 | | 0.9 | | 1.2 | | 0.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 14.3 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

2025 No-Build Traffic Volumes
2: Main Street & Schenck Avenue

Peak PM Hour
02/20/2020



| Lane Group | SEL | SET | NWT | NWR | SWL | SWR |
|----------------------------|------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 25 | 178 | 202 | 10 | 3 | 15 |
| Future Volume (vph) | 25 | 178 | 202 | 10 | 3 | 15 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 8 | 12 |
| Grade (%) | | 1% | 1% | | -5% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | 0.994 | | 0.885 | |
| Flt Protected | | 0.994 | | | 0.993 | |
| Satd. Flow (prot) | 0 | 1842 | 1842 | 0 | 1454 | 0 |
| Flt Permitted | | 0.994 | | | 0.993 | |
| Satd. Flow (perm) | 0 | 1842 | 1842 | 0 | 1454 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 315 | 242 | | 417 | |
| Travel Time (s) | | 7.2 | 5.5 | | 9.5 | |
| Confl. Peds. (#/hr) | 57 | | | 48 | 48 | 57 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Parking (#/hr) | | | | 0 | | 0 |
| Adj. Flow (vph) | 28 | 202 | 230 | 11 | 3 | 17 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 230 | 241 | 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 | | 8 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.01 | 1.01 | 1.01 | 1.01 | 1.16 | 0.97 |
| 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 0.9

Movement SEL SET NWT NWR SWL SWR

| | | | | | | |
|--------------------------|--------|------|--------|------|--------|------|
| Lane Configurations | | ↑ | ↑ | | ↑ | |
| Traffic Vol, veh/h | 25 | 178 | 202 | 10 | 3 | 15 |
| Future Vol, veh/h | 25 | 178 | 202 | 10 | 3 | 15 |
| Conflicting Peds, #/hr57 | 0 | 0 | 48 | 48 | 57 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - None | | - None | | - None | |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | 0 | - | 0 | - | |
| Grade, % | - | 1 | 1 | - | -5 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 28 | 202 | 230 | 11 | 3 | 17 |

Major/Minor Major1 Major2 Minor2

| | | | | | | |
|----------------------|-------|---|---|---|-------|-------|
| Conflicting Flow All | 298 | 0 | - | 0 | 599 | 350 |
| Stage 1 | - | - | - | - | 293 | - |
| Stage 2 | - | - | - | - | 306 | - |
| Critical Hdwy | 4.12 | - | - | - | 5.42 | 5.72 |
| Critical Hdwy Stg 1 | - | - | - | - | 4.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 4.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 263 | - | - | - | 549 | 728 |
| Stage 1 | - | - | - | - | 821 | - |
| Stage 2 | - | - | - | - | 813 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 217 | - | - | - | 497 | 664 |
| Mov Cap-2 Maneuver | - | - | - | - | 497 | - |
| Stage 1 | - | - | - | - | 771 | - |
| Stage 2 | - | - | - | - | 784 | - |

Approach SE NW SW

















| | | | |
|------------------------|--|---|------|
| HCM Control Delay, s 1 | | 0 | 10.9 |
| HCM LOS | | | B |

Minor Lane/Major Mvmt NWT NWR SEL SE\$WLn1

| | | | | | |
|-----------------------|---|---|-------|---|-------|
| Capacity (veh/h) | - | - | 1217 | - | 629 |
| HCM Lane V/C Ratio | - | - | 0.023 | - | 0.033 |
| HCM Control Delay (s) | - | - | 8 | 0 | 10.9 |
| HCM Lane LOS | - | - | A | A | B |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0.1 |













2025 No-Build Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak SAT Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (vph) | 46 | 161 | 38 | 41 | 174 | 129 | 85 | 155 | 35 | 36 | 202 | 39 |
| Future Volume (vph) | 46 | 161 | 38 | 41 | 174 | 129 | 85 | 155 | 35 | 36 | 202 | 39 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 16 | 12 | 12 | 15 | 12 | 12 | 8 | 12 | 12 | 8 | 12 |
| Grade (%) | | 3% | | | -1% | | | 1% | | | | -2% |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 0.99 | | | 0.98 | | | 0.95 | | | 0.97 | |
| Frt | | 0.979 | | | 0.949 | | | 0.983 | | | 0.981 | |
| Flt Protected | | 0.991 | | | 0.994 | | | 0.985 | | | 0.994 | |
| Satd. Flow (prot) | 0 | 2005 | 0 | 0 | 1902 | 0 | 0 | 1528 | 0 | 0 | 1542 | 0 |
| Flt Permitted | | 0.885 | | | 0.939 | | | 0.825 | | | 0.930 | |
| Satd. Flow (perm) | 0 | 1783 | 0 | 0 | 1793 | 0 | 0 | 1244 | 0 | 0 | 1428 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 179 | | | 231 | | | 204 | | | 315 | |
| Travel Time (s) | | 4.1 | | | 5.3 | | | 4.6 | | | 7.2 | |
| Confl. Peds. (#/hr) | 25 | | 15 | 15 | | 25 | 106 | | 83 | 83 | | 106 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 7% | 2% | 2% |
| Parking (#/hr) | | | | | | | | | 0 | | | 0 |
| Adj. Flow (vph) | 49 | 171 | 40 | 44 | 185 | 137 | 90 | 165 | 37 | 38 | 215 | 41 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 260 | 0 | 0 | 366 | 0 | 0 | 292 | 0 | 0 | 294 | 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 | 1.02 | 0.86 | 1.02 | 0.99 | 0.88 | 0.99 | 1.01 | 1.21 | 1.01 | 0.99 | 1.19 | 0.99 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 2 | | | 6 | | | 4 | | | 8 | |
| Permitted Phases | 2 | | | 6 | | | 4 | | | 8 | | |
| Minimum Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 30.0 | 30.0 | | 30.0 | 30.0 | |
| Total Split (%) | 53.8% | 53.8% | | 53.8% | 53.8% | | 46.2% | 46.2% | | 46.2% | 46.2% | |
| Maximum Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| All-Red Time (s) | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | |
| Pedestrian Calls (#/hr) | 20 | 20 | | 20 | 20 | | 55 | 55 | | 55 | 55 | |

2025 No-Build Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

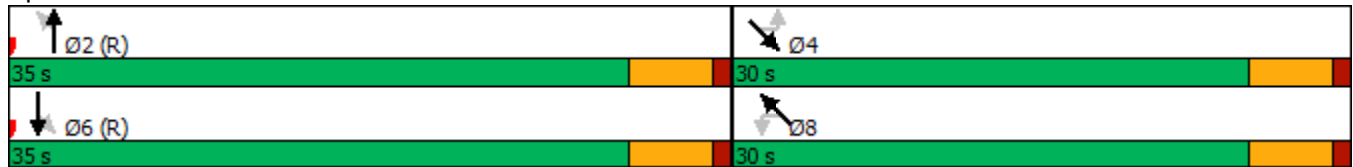
Peak SAT Hour
 02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| v/c Ratio | | 0.32 | | | 0.44 | | | 0.61 | | | 0.54 | |
| Control Delay | | 12.4 | | | 14.0 | | | 22.8 | | | 19.9 | |
| Queue Delay | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Delay | | 12.4 | | | 14.0 | | | 22.8 | | | 19.9 | |
| Queue Length 50th (ft) | | 61 | | | 93 | | | 90 | | | 87 | |
| Queue Length 95th (ft) | | 107 | | | 155 | | | 167 | | | 157 | |
| Internal Link Dist (ft) | | 99 | | | 151 | | | 124 | | | 235 | |
| Turn Bay Length (ft) | | | | | | | | | | | | |
| Base Capacity (vph) | | 822 | | | 827 | | | 478 | | | 549 | |
| Starvation Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Reduced v/c Ratio | | 0.32 | | | 0.44 | | | 0.61 | | | 0.54 | |

Intersection Summary

















Area Type: Other
 Cycle Length: 65
 Actuated Cycle Length: 65
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 55
 Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



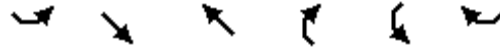
2025 No-Build Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak SAT Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 46 | 161 | 38 | 41 | 174 | 129 | 85 | 155 | 35 | 36 | 202 | 39 |
| Future Volume (veh/h) | 46 | 161 | 38 | 41 | 174 | 129 | 85 | 155 | 35 | 36 | 202 | 39 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 0.99 | | 0.97 | 0.98 | | 0.97 | 0.93 | | 0.86 | 0.93 | | 0.86 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 0.90 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1817 | 1890 | 1817 | 1909 | 1986 | 1909 | 1864 | 1790 | 1864 | 1949 | 1871 | 1949 |
| Adj Flow Rate, veh/h | 49 | 171 | 40 | 44 | 185 | 137 | 90 | 165 | 37 | 38 | 215 | 41 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 167 | 550 | 118 | 118 | 454 | 306 | 199 | 323 | 65 | 104 | 464 | 82 |
| Arrive On Green | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |
| Sat Flow, veh/h | 219 | 1191 | 256 | 122 | 984 | 662 | 328 | 841 | 170 | 109 | 1206 | 213 |
| Grp Volume(v), veh/h | 260 | 0 | 0 | 366 | 0 | 0 | 292 | 0 | 0 | 294 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1667 | 0 | 0 | 1769 | 0 | 0 | 1338 | 0 | 0 | 1528 | 0 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.8 | 0.0 | 0.0 | 8.7 | 0.0 | 0.0 | 9.9 | 0.0 | 0.0 | 9.0 | 0.0 | 0.0 |
| Prop In Lane | 0.19 | | 0.15 | 0.12 | | 0.37 | 0.31 | | 0.13 | 0.13 | | 0.14 |
| Lane Grp Cap(c), veh/h | 835 | 0 | 0 | 878 | 0 | 0 | 587 | 0 | 0 | 650 | 0 | 0 |
| V/C Ratio(X) | 0.31 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 | 0.50 | 0.00 | 0.00 | 0.45 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 835 | 0 | 0 | 878 | 0 | 0 | 587 | 0 | 0 | 650 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 11.0 | 0.0 | 0.0 | 11.8 | 0.0 | 0.0 | 15.2 | 0.0 | 0.0 | 15.1 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 1.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | 3.0 | 0.0 | 0.0 | 2.3 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.3 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 3.4 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 12.0 | 0.0 | 0.0 | 13.2 | 0.0 | 0.0 | 18.2 | 0.0 | 0.0 | 17.3 | 0.0 | 0.0 |
| LnGrp LOS | B | A | A | B | A | A | B | A | A | B | A | A |
| Approach Vol, veh/h | | 260 | | | 366 | | | 292 | | | 294 | |
| Approach Delay, s/veh | | 12.0 | | | 13.2 | | | 18.2 | | | 17.3 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 35.0 | | 30.0 | | 35.0 | | 30.0 | | | | |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | | 30.0 | | 25.0 | | 30.0 | | 25.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.8 | | 11.9 | | 10.7 | | 11.0 | | | | |
| Green Ext Time (p_c), s | | 1.0 | | 1.1 | | 1.5 | | 1.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 15.2 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

2025 No-Build Traffic Volumes
 2: Main Street & Schenck Avenue

Peak SAT Hour
 02/20/2020



| Lane Group | SEL | SET | NWT | NWR | SWL | SWR |
|-----------------------------|--------------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 24 | 212 | 249 | 26 | 7 | 14 |
| Future Volume (vph) | 24 | 212 | 249 | 26 | 7 | 14 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 8 | 12 |
| Grade (%) | | 1% | 1% | | -5% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | 0.987 | | 0.912 | |
| Flt Protected | | 0.995 | | | 0.983 | |
| Satd. Flow (prot) | 0 | 1844 | 1829 | 0 | 1483 | 0 |
| Flt Permitted | | 0.995 | | | 0.983 | |
| Satd. Flow (perm) | 0 | 1844 | 1829 | 0 | 1483 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 315 | 242 | | 417 | |
| Travel Time (s) | | 7.2 | 5.5 | | 9.5 | |
| Confl. Peds. (#/hr) | 113 | | | 104 | 104 | 113 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Parking (#/hr) | | | | 0 | | 0 |
| Adj. Flow (vph) | 26 | 228 | 268 | 28 | 8 | 15 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 254 | 296 | 0 | 23 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 0 | 0 | | 8 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.01 | 1.01 | 1.01 | 1.01 | 1.16 | 0.97 |
| 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 0.9

Movement SEL SET NWT NWR SWL SWR

| | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↑ | ↑ | | ↑ | |
| Traffic Vol, veh/h | 24 | 212 | 249 | 26 | 7 | 14 |
| Future Vol, veh/h | 24 | 212 | 249 | 26 | 7 | 14 |
| Conflicting Peds, #/hr | 13 | 0 | 0 | 104 | 104 | 113 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | 0 | 0 | 0 | 0 | - |
| Grade, % | - | 1 | 1 | - | -5 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 26 | 228 | 268 | 28 | 8 | 15 |

Major/Minor Major1 Major2 Minor2

| | | | | | | |
|----------------------|-------|---|---|---|-------|-------|
| Conflicting Flow All | 409 | 0 | - | 0 | 779 | 508 |
| Stage 1 | - | - | - | - | 395 | - |
| Stage 2 | - | - | - | - | 384 | - |
| Critical Hdwy | 4.12 | - | - | - | 5.42 | 5.72 |
| Critical Hdwy Stg 1 | - | - | - | - | 4.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 4.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 150 | - | - | - | 452 | 606 |
| Stage 1 | - | - | - | - | 759 | - |
| Stage 2 | - | - | - | - | 766 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 167 | - | - | - | 378 | 502 |
| Mov Cap-2 Maneuver | - | - | - | - | 378 | - |
| Stage 1 | - | - | - | - | 685 | - |
| Stage 2 | - | - | - | - | 711 | - |

Approach SE NW SW

















| | | | |
|----------------------|-----|---|------|
| HCM Control Delay, s | 0.9 | 0 | 13.4 |
| HCM LOS | | | B |

Minor Lane/Major Mvmt NWT NWR SEL SE\$WLn1

| | | | | | |
|-----------------------|---|---|-------|---|------|
| Capacity (veh/h) | - | - | 1067 | - | 453 |
| HCM Lane V/C Ratio | - | - | 0.024 | - | 0.05 |
| HCM Control Delay (s) | - | - | 8.5 | 0 | 13.4 |
| HCM Lane LOS | - | - | A | A | B |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0.2 |













2025 Build Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

Peak AM Hour
 02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (vph) | 33 | 161 | 30 | 19 | 166 | 81 | 47 | 65 | 15 | 25 | 129 | 26 |
| Future Volume (vph) | 33 | 161 | 30 | 19 | 166 | 81 | 47 | 65 | 15 | 25 | 129 | 26 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 16 | 12 | 12 | 15 | 12 | 12 | 8 | 12 | 12 | 8 | 12 |
| Grade (%) | | 3% | | | -1% | | | 1% | | | | -2% |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 0.99 | | | 0.99 | | | 0.98 | | | 0.99 | |
| Frt | | 0.982 | | | 0.959 | | | 0.984 | | | 0.980 | |
| Flt Protected | | 0.993 | | | 0.996 | | | 0.982 | | | 0.993 | |
| Satd. Flow (prot) | 0 | 1951 | 0 | 0 | 1922 | 0 | 0 | 1369 | 0 | 0 | 1409 | 0 |
| Flt Permitted | | 0.923 | | | 0.970 | | | 0.842 | | | 0.952 | |
| Satd. Flow (perm) | 0 | 1810 | 0 | 0 | 1871 | 0 | 0 | 1160 | 0 | 0 | 1348 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 179 | | | 231 | | | 204 | | | 315 | |
| Travel Time (s) | | 4.1 | | | 5.3 | | | 4.6 | | | 7.2 | |
| Confl. Peds. (#/hr) | 11 | | 7 | 7 | | 11 | 31 | | 14 | 14 | | 31 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles (%) | 10% | 5% | 4% | 2% | 4% | 2% | 2% | 4% | 7% | 5% | 2% | 2% |
| Parking (#/hr) | | | | | | | | 0 | | | 0 | |
| Adj. Flow (vph) | 38 | 183 | 34 | 22 | 189 | 92 | 53 | 74 | 17 | 28 | 147 | 30 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 255 | 0 | 0 | 303 | 0 | 0 | 144 | 0 | 0 | 205 | 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 | 1.02 | 0.86 | 1.02 | 0.99 | 0.88 | 0.99 | 1.01 | 1.38 | 1.01 | 0.99 | 1.35 | 0.99 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 2 | | | 6 | | | 4 | | | 8 | |
| Permitted Phases | 2 | | | 6 | | | 4 | | | 8 | | |
| Minimum Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 30.0 | 30.0 | | 30.0 | 30.0 | |
| Total Split (%) | 53.8% | 53.8% | | 53.8% | 53.8% | | 46.2% | 46.2% | | 46.2% | 46.2% | |
| Maximum Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| All-Red Time (s) | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | |
| Pedestrian Calls (#/hr) | 9 | 9 | | 9 | 9 | | 22 | 22 | | 22 | 22 | |

2025 Build Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

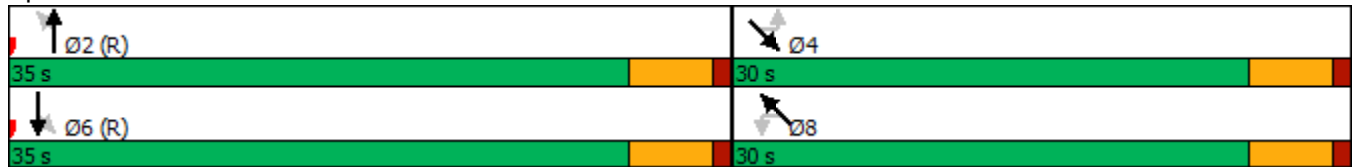
Peak AM Hour
 02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| v/c Ratio | | 0.31 | | | 0.35 | | | 0.32 | | | 0.40 | |
| Control Delay | | 12.2 | | | 12.7 | | | 16.6 | | | 17.4 | |
| Queue Delay | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Delay | | 12.2 | | | 12.7 | | | 16.6 | | | 17.4 | |
| Queue Length 50th (ft) | | 60 | | | 73 | | | 39 | | | 57 | |
| Queue Length 95th (ft) | | 102 | | | 121 | | | 78 | | | 105 | |
| Internal Link Dist (ft) | | 99 | | | 151 | | | 124 | | | 235 | |
| Turn Bay Length (ft) | | | | | | | | | | | | |
| Base Capacity (vph) | | 835 | | | 863 | | | 446 | | | 518 | |
| Starvation Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Reduced v/c Ratio | | 0.31 | | | 0.35 | | | 0.32 | | | 0.40 | |

Intersection Summary

















Area Type: Other
 Cycle Length: 65
 Actuated Cycle Length: 65
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 55
 Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



2025 Build Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak AM Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 33 | 161 | 30 | 19 | 166 | 81 | 47 | 65 | 15 | 25 | 129 | 26 |
| Future Volume (veh/h) | 33 | 161 | 30 | 19 | 166 | 81 | 47 | 65 | 15 | 25 | 129 | 26 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 0.99 | | 0.99 | 0.99 | | 0.99 | 0.97 | | 0.96 | 0.97 | | 0.96 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1773 | 1844 | 1773 | 1879 | 1954 | 1879 | 1835 | 1761 | 1835 | 1949 | 1871 | 1949 |
| Adj Flow Rate, veh/h | 38 | 183 | 34 | 22 | 189 | 92 | 53 | 74 | 17 | 28 | 147 | 30 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 |
| Cap, veh/h | 137 | 602 | 104 | 86 | 556 | 254 | 251 | 325 | 67 | 114 | 522 | 98 |
| Arrive On Green | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |
| Sat Flow, veh/h | 158 | 1304 | 225 | 58 | 1204 | 550 | 457 | 845 | 174 | 134 | 1358 | 256 |
| Grp Volume(v), veh/h | 255 | 0 | 0 | 303 | 0 | 0 | 144 | 0 | 0 | 205 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1687 | 0 | 0 | 1812 | 0 | 0 | 1476 | 0 | 0 | 1748 | 0 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.8 | 0.0 | 0.0 | 6.9 | 0.0 | 0.0 | 3.7 | 0.0 | 0.0 | 5.1 | 0.0 | 0.0 |
| Prop In Lane | 0.15 | | 0.13 | 0.07 | | 0.30 | 0.37 | | 0.12 | 0.14 | | 0.15 |
| Lane Grp Cap(c), veh/h | 842 | 0 | 0 | 896 | 0 | 0 | 643 | 0 | 0 | 735 | 0 | 0 |
| V/C Ratio(X) | 0.30 | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 | 0.22 | 0.00 | 0.00 | 0.28 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 842 | 0 | 0 | 896 | 0 | 0 | 643 | 0 | 0 | 735 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 11.0 | 0.0 | 0.0 | 11.3 | 0.0 | 0.0 | 13.4 | 0.0 | 0.0 | 13.9 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.9 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.2 | 0.0 | 0.0 | 2.7 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 11.9 | 0.0 | 0.0 | 12.3 | 0.0 | 0.0 | 14.2 | 0.0 | 0.0 | 14.8 | 0.0 | 0.0 |
| LnGrp LOS | B | A | A | B | A | A | B | A | A | B | A | A |
| Approach Vol, veh/h | | 255 | | | 303 | | | 144 | | | 205 | |
| Approach Delay, s/veh | | 11.9 | | | 12.3 | | | 14.2 | | | 14.8 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 35.0 | | 30.0 | | 35.0 | | 30.0 | | | | |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | | 30.0 | | 25.0 | | 30.0 | | 25.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.8 | | 5.7 | | 8.9 | | 7.1 | | | | |
| Green Ext Time (p_c), s | | 1.0 | | 0.5 | | 1.2 | | 0.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 13.1 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

2025 Build Traffic Volumes
2: Main Street & Schenck Avenue

Peak AM Hour
02/20/2020



| Lane Group | SEL | SET | NWT | NWR | SWL | SWR |
|----------------------------|------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 26 | 84 | 151 | 17 | 7 | 10 |
| Future Volume (vph) | 26 | 84 | 151 | 17 | 7 | 10 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 8 | 12 |
| Grade (%) | | 1% | 1% | | -5% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | 0.986 | | 0.922 | |
| Flt Protected | | 0.988 | | | 0.979 | |
| Satd. Flow (prot) | 0 | 1797 | 1827 | 0 | 1494 | 0 |
| Flt Permitted | | 0.988 | | | 0.979 | |
| Satd. Flow (perm) | 0 | 1797 | 1827 | 0 | 1494 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 315 | 242 | | 417 | |
| Travel Time (s) | | 7.2 | 5.5 | | 9.5 | |
| Confl. Peds. (#/hr) | 34 | | | 29 | 29 | 34 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles (%) | 7% | 3% | 2% | 2% | 2% | 2% |
| Parking (#/hr) | | | | 0 | | 0 |
| Adj. Flow (vph) | 29 | 92 | 166 | 19 | 8 | 11 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 121 | 185 | 0 | 19 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 0 | 0 | | 8 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.01 | 1.01 | 1.01 | 1.01 | 1.16 | 0.97 |
| 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 | | 4 | 1 | | 3 | |
| Traffic Vol, veh/h | 26 | 84 | 151 | 17 | 7 | 10 |
| Future Vol, veh/h | 26 | 84 | 151 | 17 | 7 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 29 | 29 | 34 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - None | | - None | | - None | |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | 0 | - | 0 | - | |
| Grade, % | - | 1 | 1 | - | -5 | - |
| Peak Hour Factor | 91 | 91 | 91 | 91 | 91 | 91 |
| Heavy Vehicles, % | 7 | 3 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 29 | 92 | 166 | 19 | 8 | 11 |

Major/Minor Major1 Major2 Minor2

| | | | | | | |
|----------------------|-------|---|---|---|-------|-------|
| Conflicting Flow All | 219 | 0 | - | 0 | 389 | 244 |
| Stage 1 | - | - | - | - | 210 | - |
| Stage 2 | - | - | - | - | 179 | - |
| Critical Hdwy | 4.17 | - | - | - | 5.42 | 5.72 |
| Critical Hdwy Stg 1 | - | - | - | - | 4.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 4.42 | - |
| Follow-up Hdwy | 2.263 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 821 | - | - | - | 685 | 822 |
| Stage 1 | - | - | - | - | 875 | - |
| Stage 2 | - | - | - | - | 895 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 292 | - | - | - | 640 | 778 |
| Mov Cap-2 Maneuver | - | - | - | - | 640 | - |
| Stage 1 | - | - | - | - | 836 | - |
| Stage 2 | - | - | - | - | 875 | - |

Approach SE NW SW

















| | | | |
|----------------------|-----|---|------|
| HCM Control Delay, s | 4.9 | 0 | 10.2 |
| HCM LOS | | | B |

Minor Lane/Major Mvmt NWT NWR SEL SE\$WLn1

| | | | | | |
|-----------------------|---|---|-------|---|-------|
| Capacity (veh/h) | - | - | 1292 | - | 715 |
| HCM Lane V/C Ratio | - | - | 0.022 | - | 0.026 |
| HCM Control Delay (s) | - | - | 7.8 | 0 | 10.2 |
| HCM Lane LOS | - | - | A | A | B |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0.1 |













2025 Build Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak PM Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (vph) | 31 | 195 | 25 | 29 | 186 | 85 | 61 | 153 | 31 | 43 | 169 | 42 |
| Future Volume (vph) | 31 | 195 | 25 | 29 | 186 | 85 | 61 | 153 | 31 | 43 | 169 | 42 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 16 | 12 | 12 | 15 | 12 | 12 | 8 | 12 | 12 | 8 | 12 |
| Grade (%) | | 3% | | | -1% | | | 1% | | | | -2% |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 1.00 | | | 0.99 | | | 0.98 | | | 0.98 | |
| Frt | | 0.987 | | | 0.962 | | | 0.983 | | | 0.978 | |
| Flt Protected | | 0.994 | | | 0.995 | | | 0.988 | | | 0.992 | |
| Satd. Flow (prot) | 0 | 1968 | 0 | 0 | 1929 | 0 | 0 | 1545 | 0 | 0 | 1549 | 0 |
| Flt Permitted | | 0.936 | | | 0.954 | | | 0.864 | | | 0.913 | |
| Satd. Flow (perm) | 0 | 1852 | 0 | 0 | 1849 | 0 | 0 | 1332 | 0 | 0 | 1417 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 179 | | | 231 | | | 204 | | | 315 | |
| Travel Time (s) | | 4.1 | | | 5.3 | | | 4.6 | | | 7.2 | |
| Confl. Peds. (#/hr) | 9 | | 7 | 7 | | 9 | 61 | | 39 | 39 | | 61 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 2% | 6% | 5% | 2% | 4% | 2% | 2% | 2% | 2% | 3% | 2% | 3% |
| Parking (#/hr) | | | | | | | | | 0 | | | 0 |
| Adj. Flow (vph) | 33 | 205 | 26 | 31 | 196 | 89 | 64 | 161 | 33 | 45 | 178 | 44 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 264 | 0 | 0 | 316 | 0 | 0 | 258 | 0 | 0 | 267 | 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 | 1.02 | 0.86 | 1.02 | 0.99 | 0.88 | 0.99 | 1.01 | 1.21 | 1.01 | 0.99 | 1.19 | 0.99 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 2 | | | 6 | | | 4 | | | 8 | |
| Permitted Phases | 2 | | | 6 | | | 4 | | | 8 | | |
| Minimum Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 30.0 | 30.0 | | 30.0 | 30.0 | |
| Total Split (%) | 53.8% | 53.8% | | 53.8% | 53.8% | | 46.2% | 46.2% | | 46.2% | 46.2% | |
| Maximum Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| All-Red Time (s) | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | |
| Pedestrian Calls (#/hr) | 8 | 8 | | 8 | 8 | | 50 | 50 | | 50 | 50 | |

2025 Build Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

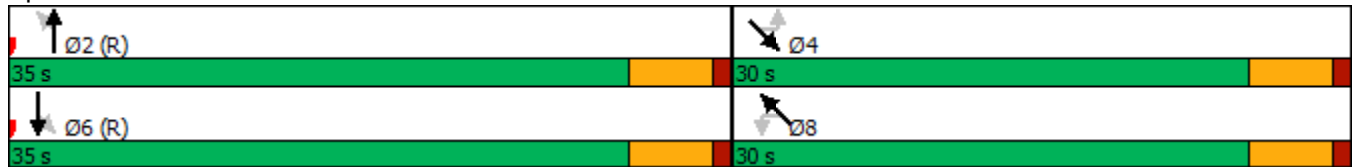
Peak PM Hour
 02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| v/c Ratio | | 0.31 | | | 0.37 | | | 0.50 | | | 0.49 | |
| Control Delay | | 12.3 | | | 13.0 | | | 19.5 | | | 19.0 | |
| Queue Delay | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Delay | | 12.3 | | | 13.0 | | | 19.5 | | | 19.0 | |
| Queue Length 50th (ft) | | 62 | | | 77 | | | 76 | | | 78 | |
| Queue Length 95th (ft) | | 109 | | | 131 | | | 140 | | | 141 | |
| Internal Link Dist (ft) | | 99 | | | 151 | | | 124 | | | 235 | |
| Turn Bay Length (ft) | | | | | | | | | | | | |
| Base Capacity (vph) | | 854 | | | 853 | | | 512 | | | 545 | |
| Starvation Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Reduced v/c Ratio | | 0.31 | | | 0.37 | | | 0.50 | | | 0.49 | |

Intersection Summary

















Area Type: Other
 Cycle Length: 65
 Actuated Cycle Length: 65
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 55
 Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



2025 Build Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

Peak PM Hour
 02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 31 | 195 | 25 | 29 | 186 | 85 | 61 | 153 | 31 | 43 | 169 | 42 |
| Future Volume (veh/h) | 31 | 195 | 25 | 29 | 186 | 85 | 61 | 153 | 31 | 43 | 169 | 42 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 0.99 | 0.99 | | 0.99 | 0.96 | | 0.92 | 0.95 | | 0.92 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 0.90 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1758 | 1828 | 1758 | 1879 | 1954 | 1879 | 1864 | 1790 | 1864 | 1949 | 1871 | 1949 |
| Adj Flow Rate, veh/h | 33 | 205 | 26 | 31 | 196 | 89 | 64 | 161 | 33 | 45 | 178 | 44 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 6 | 6 | 6 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 119 | 654 | 78 | 102 | 556 | 234 | 168 | 372 | 69 | 126 | 424 | 96 |
| Arrive On Green | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |
| Sat Flow, veh/h | 123 | 1417 | 168 | 89 | 1205 | 507 | 258 | 968 | 180 | 158 | 1103 | 249 |
| Grp Volume(v), veh/h | 264 | 0 | 0 | 316 | 0 | 0 | 258 | 0 | 0 | 267 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1708 | 0 | 0 | 1801 | 0 | 0 | 1406 | 0 | 0 | 1511 | 0 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 6.0 | 0.0 | 0.0 | 7.2 | 0.0 | 0.0 | 7.9 | 0.0 | 0.0 | 8.0 | 0.0 | 0.0 |
| Prop In Lane | 0.12 | | 0.10 | 0.10 | | 0.28 | 0.25 | | 0.13 | 0.17 | | 0.16 |
| Lane Grp Cap(c), veh/h | 851 | 0 | 0 | 892 | 0 | 0 | 610 | 0 | 0 | 646 | 0 | 0 |
| V/C Ratio(X) | 0.31 | 0.00 | 0.00 | 0.35 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 | 0.41 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 851 | 0 | 0 | 892 | 0 | 0 | 610 | 0 | 0 | 646 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 11.0 | 0.0 | 0.0 | 11.4 | 0.0 | 0.0 | 14.8 | 0.0 | 0.0 | 14.8 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.9 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.3 | 0.0 | 0.0 | 2.9 | 0.0 | 0.0 | 2.9 | 0.0 | 0.0 | 3.0 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 12.0 | 0.0 | 0.0 | 12.5 | 0.0 | 0.0 | 16.9 | 0.0 | 0.0 | 16.7 | 0.0 | 0.0 |
| LnGrp LOS | B | A | A | B | A | A | B | A | A | B | A | A |
| Approach Vol, veh/h | | 264 | | | 316 | | | 258 | | | | 267 |
| Approach Delay, s/veh | | 12.0 | | | 12.5 | | | 16.9 | | | | 16.7 |
| Approach LOS | | B | | | B | | | B | | | | B |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 35.0 | | 30.0 | | 35.0 | | 30.0 | | | | |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | | 30.0 | | 25.0 | | 30.0 | | 25.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 8.0 | | 9.9 | | 9.2 | | 10.0 | | | | |
| Green Ext Time (p_c), s | | 1.0 | | 0.9 | | 1.3 | | 0.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 14.4 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

2025 Build Traffic Volumes
 2: Main Street & Schenck Avenue

Peak PM Hour
 02/20/2020



| Lane Group | SEL | SET | NWT | NWR | SWL | SWR |
|-----------------------------|--------------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 33 | 178 | 202 | 14 | 10 | 26 |
| Future Volume (vph) | 33 | 178 | 202 | 14 | 10 | 26 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 8 | 12 |
| Grade (%) | | 1% | 1% | | -5% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | 0.991 | | 0.901 | |
| Flt Protected | | 0.992 | | | 0.987 | |
| Satd. Flow (prot) | 0 | 1839 | 1837 | 0 | 1472 | 0 |
| Flt Permitted | | 0.992 | | | 0.987 | |
| Satd. Flow (perm) | 0 | 1839 | 1837 | 0 | 1472 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 315 | 242 | | 417 | |
| Travel Time (s) | | 7.2 | 5.5 | | 9.5 | |
| Confl. Peds. (#/hr) | 57 | | | 48 | 48 | 57 |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Parking (#/hr) | | | | 0 | | 0 |
| Adj. Flow (vph) | 38 | 202 | 230 | 16 | 11 | 30 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 240 | 246 | 0 | 41 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 0 | 0 | | 8 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.01 | 1.01 | 1.01 | 1.01 | 1.16 | 0.97 |
| 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 1.5

Movement SEL SET NWT NWR SWL SWR

| | | | | | | |
|--------------------------|--------|------|--------|------|--------|------|
| Lane Configurations | | ↑ | ↑ | | ↑ | |
| Traffic Vol, veh/h | 33 | 178 | 202 | 14 | 10 | 26 |
| Future Vol, veh/h | 33 | 178 | 202 | 14 | 10 | 26 |
| Conflicting Peds, #/hr57 | 0 | 0 | 48 | 48 | 57 | |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - None | | - None | | - None | |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | 0 | - | 0 | - | |
| Grade, % | - | 1 | 1 | - | -5 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 38 | 202 | 230 | 16 | 11 | 30 |

Major/Minor Major1 Major2 Minor2

| | | | | | | |
|----------------------|-------|---|---|---|-------|-------|
| Conflicting Flow All | 303 | 0 | - | 0 | 621 | 352 |
| Stage 1 | - | - | - | - | 295 | - |
| Stage 2 | - | - | - | - | 326 | - |
| Critical Hdwy | 4.12 | - | - | - | 5.42 | 5.72 |
| Critical Hdwy Stg 1 | - | - | - | - | 4.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 4.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 258 | - | - | - | 536 | 726 |
| Stage 1 | - | - | - | - | 820 | - |
| Stage 2 | - | - | - | - | 801 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 212 | - | - | - | 481 | 662 |
| Mov Cap-2 Maneuver | - | - | - | - | 481 | - |
| Stage 1 | - | - | - | - | 763 | - |
| Stage 2 | - | - | - | - | 772 | - |

Approach SE NW SW

















| | | | |
|----------------------|-----|---|------|
| HCM Control Delay, s | 4.3 | 0 | 11.5 |
| HCM LOS | | | B |

Minor Lane/Major Mvmt NWT NWR SEL SE\$WLn1

| | | | | | |
|-----------------------|---|---|-------|---|-------|
| Capacity (veh/h) | - | - | 1212 | - | 599 |
| HCM Lane V/C Ratio | - | - | 0.031 | - | 0.068 |
| HCM Control Delay (s) | - | - | 8.1 | 0 | 11.5 |
| HCM Lane LOS | - | - | A | A | B |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0.2 |













2025 Build Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak SAT Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (vph) | 46 | 161 | 41 | 43 | 174 | 129 | 85 | 159 | 35 | 38 | 206 | 41 |
| Future Volume (vph) | 46 | 161 | 41 | 43 | 174 | 129 | 85 | 159 | 35 | 38 | 206 | 41 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 16 | 12 | 12 | 15 | 12 | 12 | 8 | 12 | 12 | 8 | 12 |
| Grade (%) | | 3% | | | -1% | | | 1% | | | | -2% |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 0.99 | | | 0.98 | | | 0.96 | | | 0.97 | |
| Frt | | 0.977 | | | 0.950 | | | 0.983 | | | 0.980 | |
| Flt Protected | | 0.991 | | | 0.994 | | | 0.985 | | | 0.993 | |
| Satd. Flow (prot) | 0 | 1999 | 0 | 0 | 1904 | 0 | 0 | 1528 | 0 | 0 | 1537 | 0 |
| Flt Permitted | | 0.886 | | | 0.935 | | | 0.822 | | | 0.927 | |
| Satd. Flow (perm) | 0 | 1781 | 0 | 0 | 1788 | 0 | 0 | 1241 | 0 | 0 | 1421 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 179 | | | 231 | | | 204 | | | 315 | |
| Travel Time (s) | | 4.1 | | | 5.3 | | | 4.6 | | | 7.2 | |
| Confl. Peds. (#/hr) | 25 | | 15 | 15 | | 25 | 106 | | 83 | 83 | | 106 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 7% | 2% | 2% |
| Parking (#/hr) | | | | | | | | | 0 | | | 0 |
| Adj. Flow (vph) | 49 | 171 | 44 | 46 | 185 | 137 | 90 | 169 | 37 | 40 | 219 | 44 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 264 | 0 | 0 | 368 | 0 | 0 | 296 | 0 | 0 | 303 | 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 | 1.02 | 0.86 | 1.02 | 0.99 | 0.88 | 0.99 | 1.01 | 1.21 | 1.01 | 0.99 | 1.19 | 0.99 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 2 | | | 6 | | | 4 | | | 8 | |
| Permitted Phases | 2 | | | 6 | | | 4 | | | 8 | | |
| Minimum Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | | 27.0 | 27.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 30.0 | 30.0 | | 30.0 | 30.0 | |
| Total Split (%) | 53.8% | 53.8% | | 53.8% | 53.8% | | 46.2% | 46.2% | | 46.2% | 46.2% | |
| Maximum Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| All-Red Time (s) | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | | 1.0 | 1.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | | 15.0 | 15.0 | |
| Pedestrian Calls (#/hr) | 20 | 20 | | 20 | 20 | | 55 | 55 | | 55 | 55 | |

2025 Build Traffic Volumes
 1: Teller Avenue/Fishkill Avenue & Main Street

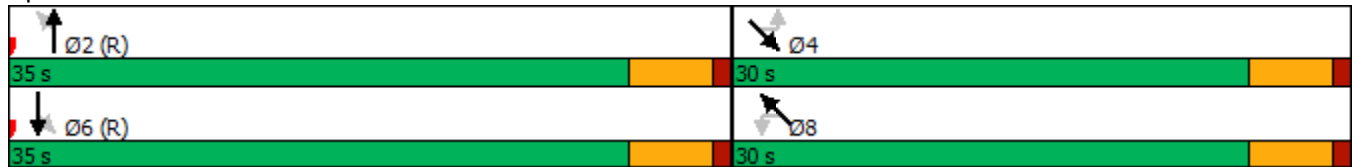
Peak SAT Hour
 02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| v/c Ratio | | 0.32 | | | 0.45 | | | 0.62 | | | 0.55 | |
| Control Delay | | 12.4 | | | 14.0 | | | 23.1 | | | 20.4 | |
| Queue Delay | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Delay | | 12.4 | | | 14.0 | | | 23.1 | | | 20.4 | |
| Queue Length 50th (ft) | | 62 | | | 93 | | | 92 | | | 91 | |
| Queue Length 95th (ft) | | 110 | | | 157 | | | 170 | | | 163 | |
| Internal Link Dist (ft) | | 99 | | | 151 | | | 124 | | | 235 | |
| Turn Bay Length (ft) | | | | | | | | | | | | |
| Base Capacity (vph) | | 822 | | | 825 | | | 477 | | | 546 | |
| Starvation Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | | | 0 | | | 0 | |
| Reduced v/c Ratio | | 0.32 | | | 0.45 | | | 0.62 | | | 0.55 | |

Intersection Summary

















Area Type: Other
 Cycle Length: 65
 Actuated Cycle Length: 65
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 55
 Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



2025 Build Traffic Volumes
1: Teller Avenue/Fishkill Avenue & Main Street

Peak SAT Hour
02/20/2020

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 46 | 161 | 41 | 43 | 174 | 129 | 85 | 159 | 35 | 38 | 206 | 41 |
| Future Volume (veh/h) | 46 | 161 | 41 | 43 | 174 | 129 | 85 | 159 | 35 | 38 | 206 | 41 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 0.99 | | 0.97 | 0.98 | | 0.97 | 0.93 | | 0.86 | 0.93 | | 0.86 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 0.90 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1817 | 1890 | 1817 | 1909 | 1986 | 1909 | 1864 | 1790 | 1864 | 1949 | 1871 | 1949 |
| Adj Flow Rate, veh/h | 49 | 171 | 44 | 46 | 185 | 137 | 90 | 169 | 37 | 40 | 219 | 44 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 165 | 542 | 128 | 122 | 452 | 303 | 196 | 326 | 64 | 106 | 457 | 85 |
| Arrive On Green | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |
| Sat Flow, veh/h | 215 | 1173 | 278 | 129 | 979 | 657 | 322 | 849 | 167 | 113 | 1187 | 221 |
| Grp Volume(v), veh/h | 264 | 0 | 0 | 368 | 0 | 0 | 296 | 0 | 0 | 303 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1666 | 0 | 0 | 1765 | 0 | 0 | 1338 | 0 | 0 | 1521 | 0 | 0 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.9 | 0.0 | 0.0 | 8.8 | 0.0 | 0.0 | 10.1 | 0.0 | 0.0 | 9.4 | 0.0 | 0.0 |
| Prop In Lane | 0.19 | | 0.17 | 0.12 | | 0.37 | 0.30 | | 0.12 | 0.13 | | 0.15 |
| Lane Grp Cap(c), veh/h | 834 | 0 | 0 | 877 | 0 | 0 | 587 | 0 | 0 | 648 | 0 | 0 |
| V/C Ratio(X) | 0.32 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 | 0.50 | 0.00 | 0.00 | 0.47 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 834 | 0 | 0 | 877 | 0 | 0 | 587 | 0 | 0 | 648 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 11.0 | 0.0 | 0.0 | 11.8 | 0.0 | 0.0 | 15.3 | 0.0 | 0.0 | 15.2 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 1.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | 3.1 | 0.0 | 0.0 | 2.4 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.3 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 12.0 | 0.0 | 0.0 | 13.3 | 0.0 | 0.0 | 18.4 | 0.0 | 0.0 | 17.6 | 0.0 | 0.0 |
| LnGrp LOS | B | A | A | B | A | A | B | A | A | B | A | A |
| Approach Vol, veh/h | | 264 | | | 368 | | | 296 | | | | 303 |
| Approach Delay, s/veh | | 12.0 | | | 13.3 | | | 18.4 | | | | 17.6 |
| Approach LOS | | B | | | B | | | B | | | | B |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 35.0 | | 30.0 | | 35.0 | | 30.0 | | | | |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | | 30.0 | | 25.0 | | 30.0 | | 25.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.9 | | 12.1 | | 10.8 | | 11.4 | | | | |
| Green Ext Time (p_c), s | | 1.1 | | 1.1 | | 1.5 | | 1.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 15.3 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

2025 Build Traffic Volumes
2: Main Street & Schenck Avenue

Peak SAT Hour
02/20/2020



| Lane Group | SEL | SET | NWT | NWR | SWL | SWR |
|-----------------------------|--------------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 33 | 212 | 249 | 31 | 11 | 22 |
| Future Volume (vph) | 33 | 212 | 249 | 31 | 11 | 22 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 8 | 12 |
| Grade (%) | | 1% | 1% | | -5% | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | 0.985 | | 0.910 | |
| Flt Protected | | 0.993 | | | 0.984 | |
| Satd. Flow (prot) | 0 | 1840 | 1826 | 0 | 1482 | 0 |
| Flt Permitted | | 0.993 | | | 0.984 | |
| Satd. Flow (perm) | 0 | 1840 | 1826 | 0 | 1482 | 0 |
| Link Speed (mph) | | 30 | 30 | | 30 | |
| Link Distance (ft) | | 315 | 242 | | 417 | |
| Travel Time (s) | | 7.2 | 5.5 | | 9.5 | |
| Confl. Peds. (#/hr) | 113 | | | 104 | 104 | 113 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Parking (#/hr) | | | | 0 | | 0 |
| Adj. Flow (vph) | 35 | 228 | 268 | 33 | 12 | 24 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 263 | 301 | 0 | 36 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 0 | 0 | | 8 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.01 | 1.01 | 1.01 | 1.01 | 1.16 | 0.97 |
| 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 | 33 | 212 | 249 | 31 | 11 | 22 |
| Future Vol, veh/h | 33 | 212 | 249 | 31 | 11 | 22 |
| Conflicting Peds, #/hr | 113 | 0 | 0 | 104 | 104 | 113 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | 0 | 0 | 0 | 0 | 0 |
| Grade, % | - | 1 | 1 | - | -5 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 35 | 228 | 268 | 33 | 12 | 24 |

Major/Minor Major1 Major2 Minor2

| | | | | | | |
|----------------------|-------|---|---|---|-------|-------|
| Conflicting Flow All | 414 | 0 | - | 0 | 800 | 511 |
| Stage 1 | - | - | - | - | 398 | - |
| Stage 2 | - | - | - | - | 402 | - |
| Critical Hdwy | 4.12 | - | - | - | 5.42 | 5.72 |
| Critical Hdwy Stg 1 | - | - | - | - | 4.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 4.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 145 | - | - | - | 442 | 604 |
| Stage 1 | - | - | - | - | 758 | - |
| Stage 2 | - | - | - | - | 755 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 163 | - | - | - | 366 | 500 |
| Mov Cap-2 Maneuver | - | - | - | - | 366 | - |
| Stage 1 | - | - | - | - | 677 | - |
| Stage 2 | - | - | - | - | 701 | - |

Approach SE NW SW

| | | | |
|----------------------|-----|---|------|
| HCM Control Delay, s | 4.1 | 0 | 13.8 |
| HCM LOS | | | B |

Minor Lane/Major Mvmt NWT NWR SEL SE\$WLn1

| | | | | | |
|-----------------------|---|---|-------|---|------|
| Capacity (veh/h) | - | - | 1063 | - | 446 |
| HCM Lane V/C Ratio | - | - | 0.033 | - | 0.08 |
| HCM Control Delay (s) | - | - | 8.5 | 0 | 13.8 |
| HCM Lane LOS | - | - | A | A | B |
| HCM 95th %tile Q(veh) | - | - | 0.1 | - | 0.3 |

To: John Gunn, Chair, and the City of Beacon Planning Board

Date: May 8, 2020

Re: **416-420 Main Street Site Plan, Special Permit, and Subdivision**

I have reviewed the cover letter from Cuddy + Feder with attached exhibits, including a Short EAF, Special Permit Application, and Traffic Impact Study by Maser Consulting, a Preliminary Subdivision Plat, and a 10-sheet Site Plan set, all dated April 28, 2020.

Proposal

The applicant is proposing to construct a 4-story, mixed-use building with 14,703 square feet on the front portion of the parcel in the Central Main Street (CMS) district and a 2,145 square foot apartment or live/work home on the rear portion of the parcel in the PB district. The project also needs subdivision approval to consolidate the two Main Street parcels. The entire 0.245-acre site is also in the Historic District and Landmark Overlay Zone (HDLO). A moratorium has been adopted by the City Council, so no approvals can be granted for this proposal until the moratorium is lifted.

Comments and Recommendations

1. For the Preliminary Subdivision Plat, the Schedule of Regulations should show the CMS minimum required lot depth as 75 feet and the PB district standards should be filled-in as “regulated in the least restrictive adjoining residential district” or in this case matching the R1-5 district across South Street.
2. For the Sheet 1 Site Plan:
 - a. In the CMS Zoning Table, the required front setback is 0-10 feet, the Main Street Frontage Proposed heading is mislabeled, and the minimum landscaped area should be included.
 - b. In the PB Zoning Table, an artist live/work use would require a special permit under Section 223-24.7 for the HDLO zone. Also, the proposed one-foot side yard will require a variance.
 - c. In the proposed T Zoning Table, the work/live home would be as-of-right, but the side yard would still need an area variance.
 - d. In the Parking Table, the office and retail floor areas do not match the numbers in the EAF or the Traffic Impact Study.
 - e. The central parking area could be enlarged to include at least 6 spaces, especially if the rear house was smaller and moved slightly closer to the South Street frontage.
 - f. The bike racks should be relocated to avoid damage from backing out vehicles.
 - g. The applicant should explain why the existing front tree and planter must be replaced.

3. For the Sheet 3 Landscaping and Lighting Plan, all the proposed landscaping should be identified by species and summarized in a planting schedule.
4. For the Sheets 4 and 5 Building Plans:
 - a. The proposed 4th story with 15-foot setbacks and the corner tower will need special permits from the City Council, since the project is in the HDLO zone. Recent amendments to the CMS building height section require a specific public benefit(s) for a special permit approval.
 - b. The elevations, especially for the live/work house, will need additional details, including materials, colors, and major measurements.
 - c. When appropriate, the elevations and renderings should be referred to the Architectural Review Subcommittee.
5. The plans should note how the trash is going to be handled.
6. The Board should discuss the relatively narrow width of Schenck Avenue, the proposal to stripe on-street parking on the east side, and the consideration of one-way designation in the Traffic Impact Study on page 14.

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
Michael Bodendorf, P.E., Project Engineer



May 8, 2020

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

RE: Site Plan and Traffic Review #1 for **Proposed Mixed-Used Development**, 416-420 Main Street, City of Beacon, Dutchess County, New York; CM Project #120-046(2)

Dear Mr. Gunn:

Creighton Manning Engineering, LLP (CM) has performed a review of the documents listed below in connection with the proposed mixed-used development, which consists of a 14,703-square-foot mixed-use building fronting Main Street and a 2,145-square-foot residential/live work building fronting South Street. The following documents were reviewed:

- Site Plan (Sheet 1 of 10) prepared by Aryeh Sigel, Architect, dated April 28, 2019
- Traffic Impact Study prepared by Maser Consulting, PA (Maser), dated April 28, 2020

The mixed-use building front Main Street will consist of 4,616 square feet of first floor retail space (including the existing 1,675-square-foot Kitchen & Coffee that will remain), 7,872 square feet of commercial office space on the second and third floors, and 2,215 square feet of residential space split between two apartment units. Two off-street parking spaces will be provided for use by the residential tenants in the mixed-use building and will be accessed via a driveway on Schenck Avenue. Two off-street parking spaces will be provided for the residential live/work building and will be accessed via a driveway on South Street.

We offer the following comments:

Site Plan

1. Sight lines should be shown on plans for both proposed driveways.
2. CM recommends providing pavers under bicycle racks rather than grass/turf for ease of maintenance.

Traffic Impact Study

1. The applicant accurately describes the existing parking permitted on both sides of Main Street. It is also noted that alternate side of the street parking is enforced from 4:00 AM to 9:00 AM.
2. CM agrees with the values shown in appended Table No. 1 for anticipated site-generated trips: 24 total trips during the weekday morning peak hour, 28 total trips during the weekday evening peak hour, and 25 total trips during the Saturday peak hour. The capacity analysis findings, which demonstrate minimal changes in levels of service, are consistent with NYSDOT and ITE's guideline stating that projects generating fewer than 100 trips are not anticipated to result in a significant impact.
3. CM agrees with the values shown on Figures 14 and 15 for arrival and departure distributions.
4. The applicant is seeking a substantial waiver/variance in the number of off-street parking spaces required for the project—26 spaces are required and four are proposed. The project's location in the heart of Beacon's central business district lends itself to this kind of request since a project of this kind could not be realized if it satisfied the off-street parking requirement. The applicant identified several existing public parking areas within 500 feet of the subject site that may be available to tenants and visitors of the proposed development.

The 500-foot radius is an acceptance and reasonable walking distance, and the methodology for collecting existing parking conditions data is sound.

- a. Has the parking analysis been coordinated with other pending projects that may be utilizing the same public parking areas to satisfy their parking requirements? Similarly, have vacancies in existing buildings with no off-street parking been considered?
 - b. Notwithstanding the preceding question, CM agrees that the available on-street parking is sufficient for the retail and office uses on a weekday. The Saturday and Sunday data demonstrates that the existing demand for parking is approaching the available supply with as few as 30 spaces available. Given that the study was performed in the winter, CM recommends that the parking data be seasonally adjusted.
 - c. Of the proposed two spaces for the residential units located on the 4th floor, one is an ADA-accessible space. If at least one of the tenants does not meet the requirements to use the ADA-accessible space, how will the parking needs be addressed?
5. The applicant seeks to mitigate its parking shortfall by proposing striped parking spaces on the east side of Schenck Avenue between Main Street and South Street. CM’s site visit in early May 2020 revealed that there is a No Parking restriction on the east side of Schenck Avenue presumably due to width of this roadway, approximately 25 feet (see photo below). Although traffic volumes are low on Schenck Avenue, permitting curbside parking on the east side on Schenck Avenue would leave an approximately 10-foot-wide area for two-way traffic, which is too narrow unless Schenck Avenue was changed to a one-way street for this block, as Maser discussed on page 14. The applicant should clarify if the on-street parking supply on Schenck Avenue (19 spaces) includes the east side of the street where parking is restricted.



General

1. As noted above, the applicant discusses the potential for Schenck Avenue being converted to a one-way northbound street for at least the block between Main Street and South Street. The applicant is correct that traffic volumes on Schenck Avenue are relatively low; presumably traffic volumes on South Street are also relatively low. Residents of South Street could experience a “doubling” of traffic as a result of the new traffic pattern plus a portion of the site’s exiting traffic that could no longer use Schenck Avenue to return to Main Street. Capacity is not an issue with such a change in traffic patterns, but a change in character could be a concern. Further study and outreach to affected residents are advised.
2. The crosswalk spanning Main Street at Schenck Avenue does provide the requisite pedestrian crossing signs. With the potential for an increase in pedestrian activity at this intersection resulting from the project, the applicant should show the appropriate MUTCD-compliant signs on the plan.

3. A "Stop" sign and stop line are missing from the Schenck Avenue approach to Main Street. With the potential for an increase in vehicular activity at this intersection resulting from the project, the plans should detail these traffic control features on the plan.

If you have any questions about the above comments, please do not hesitate to contact our office at (914) 800-9201.

Respectfully,
Creighton Manning Engineering, LLP



Frank A. Filiciotto, PE

\\CME-FILE01\Company\Projects\2020\120-046 Beacon - 2020 Traffic Reviews\Working\Correspondence\416-420 Main Street_Review 1.docx

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 Lane, P.E., L.S.
Arthur R. Tully, P.E.

May 8, 2020

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

RE: 416-420 Main Street
Subdivision & Site Plan
Tax Parcel 6054-29-05678 & 056774
City of Beacon

Dear Mr. Gunn:

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

- Correspondence from Cuddy & Feder dated April 28, 2020
- Correspondence from Hudson Land Design dated April 28, 2020.
- Application for Special Use Permit & Entity Disclosure Form.
- Short Environmental Assessment Form dated April 28, 2020.
- Traffic Impact Study titled "416-420 Main Street", dated April 28, 2020 as prepared by Maser Consulting.
- Plan titled "Preliminary Subdivision Plat – 416 Main Street", dated April 28, 2020, as prepared by Hudson Land Design.
- Plan set titled "Site Plan Application – 416-420 Main Street", dated April 28, 2020 and consisting of Sheets 1 of 10 through 10 as prepared by Aryeh Siegel, Architect and Hudson Land Design.

Based upon our review of the above documents and plans, we offer the following comments:

General Comments:

1. As a subdivision is also being completed as part of the project, the applicant will need to submit an application for subdivision approval.
2. It does not appear that the proposed project is in compliance with Section 223-12, Paragraph "A" of the Zoning Code, which reads "*Lot for every building. Every building hereafter erected shall be located on a lot as herein defined, and, except as herein provided, there shall be not more than one main building and its accessory buildings on one lot, except for multifamily or nonresidential buildings in districts where such uses are permitted.*" The applicant should provide further information to the Planning Board as to how the currently proposed project is in compliance with this paragraph of the zoning or revise the project to conform with zoning requirements.

3. The rear portion of the lot located along South Street is located in the PB Zone, which allows for artist live/work, but will require a Special Use Permit issued by the City Council. Setbacks for this structure would have to comply with the least restrictive adjoining residential district, which in this case would be the R1-5 Zone. The R1-5 Zone requires one side yard of 10 feet, with both side yards having minimum of 20 feet. As presently shown on the plans, the building proposed along South Street does not comply with the R1-5 Zoning and would require a variance for the side yard along Schenck Avenue.
4. Based upon the Parking & Loading Table, the project requires a total of 24 parking spaces. The applicant is currently proposing 4 on site parking spaces and is requesting a waiver for 20 parking spaces. The Planning Board should further discuss the request for this waiver.
5. The PB Bulk Table provided on Sheet 1 of 10 should be revised to reflect the required side yard requirement for both is 20 feet.
6. Sheet 1 of 10 should show the location of the Zoning line that bisects the property.
7. The "Proposed Area" box within the Parking Table on Sheet 1 of 10 for the structure at the rear of the parcel should be revised to reflect Artist Live/Work as noted on the plan.
8. The Line/Symbol Legend on the left side of Sheet 3 of 10 should be enlarged so that it is legible.
9. A Planting Schedule shall be provided on the Sheet 3 of 10, and the various plantings on the plan should be labeled as to what is proposed based upon the planting schedule.
10. Sheet 1 and 3 of the plan set should not as to whether the plantings along the adjoining property line with the Dacey parcel or existing or proposed.
11. Sheet 6 of 10 should note the size and material of the water line in Schenck Avenue that the water service lines are proposed to connect to.
12. The utility profile on Sheet 8 of 10 should be revised to include the water and sewer crossings that the proposed storm drainage will be crossing.

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
5/12/2020

Title:

Zoning Board of Appeals

Subject:

Zoning Board of Appeals – no meeting in May

Background:

City of Beacon Planning Board
5/12/2020

Title:

23-28 Creek Drive

Subject:

Request for Modification of Condition C-1 of Resolution Granting Preliminary and Final Subdivision Plat and Site Plan Approvals for 23-28 Creek Drive

Background:

ATTACHMENTS:

| Description | Type |
|---------------------|-------------------|
| Attorney Memorandum | Cover Memo/Letter |
| Draft Resolution | Resolution |

■ **Main Office**
445 Hamilton Avenue
White Plains, NY 10601
Phone 914.946.4777
Fax 914.946.6868

■ **Mid-Hudson Office**
200 Westage Business Center
Fishkill, NY 12524
Phone 845.896.0120

■ **New York City Office**
505 Park Avenue
New York, NY 10022
Phone 646.794.5747

MEMORANDUM

**TO: Chairman John Gunn and
Members of the City of Beacon Planning Board**

FROM: Keane & Beane, P.C.

RE: Resolution Subdivision/Site Plan Approval: 23-28 Creek Drive

DATE: May 10, 2020

As the City of Beacon prepares to close on the conveyance of its former Highway Garage parcel, it was discovered that Conditions C-1 and D-1 of the Planning Board's January 14, 2020 Resolution ("Resolution") are in conflict with the Purchase and Sale Agreement ("PSA") between the City and the Purchaser, 23-28 Creek Drive, LLC (hereinafter referred to as the "Applicant").

On the sale of any City property where there will be construction, the City requires that title to the property not be conveyed until such time as the Purchaser has secured its land use approvals, funding, entered into a contract with a Construction Manager and obtained a Building Permit ("BP") for the project. This ensures that the Project will be constructed. The deed also includes a right of reverter should the development not be completed.

Condition C-1 of the Resolution requires remediation to be completed before the BP can be issued. This is at odds with the PSA language stating a BP must be issued before the Property is conveyed. Understandably, the Purchaser does not want to remediate property it does not own and a Lender will not provide financing unless the Property is owned by the Purchaser.

Therefore, it is proposed that Condition C-1 be relocated to Section D of the Resolution and be revised to read as follows:

1. Prior to the pouring of any foundations, ~~t~~The Applicant shall submit documentation from NYSDEC demonstrating that the site remediation has been performed and has been closed out to the satisfaction of NYSDEC pursuant to the remediation work plan prepared for the Site. A copy of the remediation work plan as approved by NYSDEC for the required remediation work based upon review of the Phase II Environmental report, which identified petroleum contamination, shall be provided to the City of Beacon. Any additional contamination discovered during construction which requires remediation shall be remediated in accordance with all State and local laws, rules and regulations.

This would allow for the BP to be issued, remediation, demolition and site work could proceed, but pouring of any foundation and subsequent construction could not commence until the remediation of the site is complete as per NYSDEC.

Modifications to Condition D-1 are also proposed. Condition D-1 of the Resolution states that the proposed recreation/parkland, specifically the proposed public park and the proposed Greenway Trail segment, are of adequate size and location to meet the recreational demands of the future population of the site. Therefore, the Planning Board determined that no recreation fee was required for the eight (8) proposed apartments.

However, in the PSA between the City and the Applicant, the Applicant already agreed to pay the full recreation fee for the proposed apartments without any credit. Accordingly, it is proposed that Condition D-1 be revised as follows:

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. The Planning Board hereby determines that the proposed recreation/parkland, specifically the public park consisting of approximately 1 acre to be maintained by the Applicant and the Greenway Trail segment, are of adequate size and location to meet the anticipated recreational demands of the future population of the Project. ~~Therefore, that Applicant shall not be required to pay a Recreation Fee for the 8 new apartments approved herein.~~ However, this particular Project was the subject of a Purchase and Sale Agreement between the City and the Applicant whereby the City and the Applicant agreed to certain terms and conditions for the sale of this City property to the Applicant. The Planning Board understands that one of those conditions includes the Applicant's agreement to pay recreational fees associated with the Project. Therefore, based on such agreement, the Planning Board finds that, prior to the issuance of the Certificate of Occupancy, the Applicant shall pay a Recreation Fee as per the City's Fee Schedule in effect at the time of payment for the eight (8) residential units to be developed pursuant to the Site Plan Approval granted herein.

This will preserve the Planning Board's finding that the public park and Greenway Trail, as proposed, would meet the anticipated recreational demands of the future population of the project. But, based on the unique circumstances involved herein whereby the Applicant has previously entered into an agreement with the City to pay the full fees, as set forth in the PSA, the revised condition will provide for the agreed-upon payment of these fees to the City.

A proposed resolution reflecting these changes has been prepared for your consideration.

RESOLUTION

PLANNING BOARD BEACON, NEW YORK

GRANTING ADMINISTRATIVE REVISIONS TO CONDITIONS OF PRELIMINARY & FINAL SUBDIVISION PLAT APPROVALS AND SITE PLAN APPROVAL FOR 23-28 CREEK DRIVE

Parcel ID#6054-37-037625

WHEREAS, the Beacon Planning Board received applications for Preliminary and Final Subdivision Plat Approvals (lot line realignment) and Site Plan Approval from 23-28 Creek Drive, LLC (the “Applicant”), to construct a mixed-use development on the former City of Beacon (“DPW”) site with a total of eight (8) residential units and 20,000 square feet of commercial space, (the “Proposed Action” or “Project”), on a total of 3.144 acres, 2.807 acres of property located at 23-28 Creek Drive and designated on the Tax Map of the City of Beacon as **Parcel ID# 6054-37-037625** and 0.337 acres from the adjacent parcel which consists of land owned by Weber Projects III, LLC located at 7-15 Creek Drive and designated on the Tax Map of the City of Beacon as **Parcel ID# 6054-37-066670** in the Fishkill Creek Development (“FCD”) Zoning District (the “Property”); and

WHEREAS, the Planning Board approved the Subdivision and Site Plan applications by Resolution dated January 14, 2020 (“Resolution”); and

WHEREAS, the City previously entered into a Purchase and Sale Agreement (“PSA”) with the Applicant for the conveyance of Parcel 6054-37-037625 (which is the location of the former City Highway Garage) from the City to the Applicant; and

WHEREAS, in preparing to close on the conveyance of the City’s former Highway Garage parcel to the Applicant it was discovered that Conditions C-1 and D-1 of the Resolution are in conflict with certain terms of the PSA; and

WHEREAS, the City and the Applicant wish to resolve this conflict by an administrative amendment to such conditions as reflected herein, which administrative amendments do not require a public hearing and have no impact on the prior SEQRA determination for the Project.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Board hereby modifies Condition C-1 of the Resolution to relocate it to Section D of the Resolution and revise the language as follows:

Prior to the pouring of any foundations, The Applicant shall submit documentation from NYSDEC demonstrating that the site remediation has been performed and has been closed out to the satisfaction of NYSDEC pursuant to the remediation work plan prepared for the Site. A copy of the remediation work plan as approved by NYSDEC for the required

City of Beacon Planning Board
5/12/2020

Title:

Review Local Law - Short Term Rentals

Subject:

City Council request to review proposed Local Law concerning Short Term Rentals

Background:

ATTACHMENTS:

| Description | Type |
|---|-------------------|
| Local_Law_Short_Term_Rentals (1) | Local Law |
| Memo_short-term_rental_questions | Cover Memo/Letter |
| Full Environmental Assessment Form Part 1 | EAF |
| Full Environmental Assessment Form Part 2 | EAF |
| Full Environmental Assessment Form Part 3 | EAF |

DRAFT LOCAL LAW NO. ____ OF 2020

**CITY COUNCIL
CITY OF BEACON**

**PROPOSED LOCAL LAW TO CREATE
SECTION 223-26.5 AND AMEND SECTION 223-63 OF THE CODE OF
THE CITY OF BEACON**

A LOCAL LAW to create Section 223-26.5 and amend Section 223-63 of the Code of the City of Beacon concerning Short-Term Rentals.

BE IT ENACTED by the City Council of the City of Beacon as follows:

SECTION 1. Chapter 223, Article III, Section 26.5 entitled “Short-Term Rentals,” of the Code of the City of Beacon is hereby created as follows.

§ 223-26.5 Short-Term Rentals

- A. Findings. The City Council of the City of Beacon has determined it is in the best interest of the City and its residents to regulate short-term rentals. The City Council recognizes the benefits of short-term rentals to allow home-owners to supplement their income to defray the cost of housing and to provide lodging for visitors to the City. However, in order to protect the health, safety and welfare of the City and its residents, it is necessary to restrict the rental of homes for terms shorter than 30 consecutive days, a practice which is growing in popularity with the advent of internet and social media-based programs that connect property owners and persons seeking short-term rentals. In addition, studies have shown that short-term rentals are linked to increases in rent and housing costs because rental units are taken off the market and used as short-term rentals. Units are going to short-term renters rather than to permanent residents which results in a decrease in available housing stock within the City of Beacon. The City Council believes that the restrictions and requirements imposed herein further those objectives and the protection of the health, safety and welfare of the City and its residents.
- B. Definitions. As used in this section, the following words shall have the meanings indicated:

OWNER

An individual or group of individuals who are in possession of and have a fee interest in real property. The term “owner” shall include a corporation, limited-liability company, partnership, association, trustee, or other business entity.

OWNER-OCCUPIED

A one-family or two-family house used by the owner or tenant as his or her or their domicile or principal residence. All owners of the business entity must use the premise as his or her or their domicile or principal residence. When a property is titled in the name of a trustee, the owner-occupied requirement shall be satisfied if the grantor or grantee is the occupant of the property.

SHORT-TERM RENTAL

An entire dwelling unit, or a room or group of rooms or other living or sleeping space, made available to rent, lease or otherwise assigned for a tenancy of less than 30 consecutive days. The term “short-term rental” does not include multifamily dwelling buildings, dormitories, hotel or motel rooms, bed and breakfast inns or lodging houses, as permitted and regulated by the City of Beacon Zoning Ordinance.

- C. Permit required. It shall be unlawful to use, establish, maintain, operate, occupy, rent or lease any property as a short-term rental without first having obtained a short-term rental permit.
- D. Only one-family homes, two-family homes or accessory apartment units may be used as short-term rentals subject to the requirements set forth in this section. Short-term rentals shall be permitted in all zoning districts within the City of Beacon.
- E. Permit application.
 - (1) An application for a short-term rental permit shall be filed before the dwelling unit, or a room or group of rooms or other living or sleeping space within a dwelling unit, or any other space is advertised for short-term rental, and if the spaces are not advertised, then such permit shall be obtained before said space is leased or rented.
 - (2) Issuance of a short-term rental permit requires submission of an application to the Building Department and payment of the processing fee set forth in the City fee schedule.
 - (3) If a tenant seeks a short-term rental permit, the tenant’s application shall be signed by the landlord.

- (4) The form and content of the permit applications shall be as determined from time to time by the Building Department and shall contain such information and materials as the Building Department deems necessary to determine the sufficiency of the application. Such application shall contain, at a minimum:
- (i) Proof of receipt of New York State STAR Credit or STAR property tax exemption for the short-term rental property; and
 - (ii) Copy of utility bill in owner's name.
 - (iii) (a) The property address; (b) the total number of dwelling units located within the building; (c) the total number of bedrooms and bathrooms inside the building; (d) the total number of dwelling units and individual bedrooms proposed for short-term rental use; (e) the location of each such dwelling unit or individual bedroom within the building; and (f) the number of persons to be accommodated in each short-term rental area; and
 - (iv) A signed and notarized certification in a form acceptable to the City Clerk by each property owner attesting to the fact that (a) the owner resides at the property and it is the owner's domicile (primary residence); (b) that the property is fit for human habitation and safe; (c) that the property owner will comply with all of the conditions and restrictions of the permit; (d) that no portion of the area used for short-term rentals will utilize a cellar or attic, or any portion thereof, as habitable space unless it meets the requirements of the International Fire, Residential and Building Codes or successor law; (e) that the property is in compliance with all the provisions of this Article, the applicable provisions of the City Code, the International Series of Codes and the New York State Code Supplement; and (f) the required building permits and certificates of occupancy are in place for all existing structures on the property if applicable; and
 - (v) Such other information as the City may require to prove the property is owner-occupied and safe for renters.
 - (vi) If a property owner or tenant plans to rent the entire dwelling unit, the short-term rental application shall include the name and contact information of an agent with the right to enter and maintain possession of the dwelling. Such agent must be available twenty-four (24) hours a day to respond to tenant and neighborhood concerns and be capable of responding within two hours of notification from the City; and

- (5) All permits issued pursuant to this section shall be for a period of two years and shall be renewable for subsequent two-year terms upon application, conformance with this section and payment of the permit fee.
 - (6) If the status of the information changes during the course of any calendar year, it is the responsibility of the owner to submit such changes to the Building Department in writing within 30 days of the occurrence of such change. Failure to do so shall be deemed a violation of this section.
- F. Inspection. The property shall be inspected by the Building Department at the time of the initial application and prior to any permit renewal, to determine whether the property remains in compliance with the section and all other applicable provisions of the City Code, the International Series of Codes and New York State Code Supplement. If the Building Inspector determines that the short-term rental space is not in compliance, the owner shall cease use of the dwelling unit as a short-term rental until all noncomplying elements have been corrected and the owner shall apply for reinspection with the Building Department, subject to an additional fee.
- G. Owner-occupancy. It shall be unlawful to use, establish, maintain operate, occupy, rent or lease any property as a short-term rental if the property is not owner-occupied. The property used as a short-term rental shall be the principal residence of the owner, tenant, grantor or grantee at all times during the term of the permit.
- H. All short term rentals shall comply with the following standards:
- (1) If a property owner or tenant is renting out the entire dwelling unit, the property owner must engage the services of an agent with the right to enter and maintain possession of the dwelling. This agent must be available twenty-four (24) hours a day to respond to tenant and neighborhood concerns and be capable of responding within two hours of notification from the City.
 - (2) No owner shall offer or use any part of the property as a short-term rental not approved for residential use, including but not limited to, vehicles parked on the property, a storage shed, recreation room, trailer, garage, or any temporary structure such as a tent.
 - (3) A short-term rental property shall not be rented for any commercial purpose, or any other purpose not expressly permitted under this section, such as concerts or weddings.
 - (4) Short-term rental of an entire dwelling units is limited to 100 days in any one calendar year. A rental day shall be deemed to mean any day that the property is occupied for rental overnight.

- (5) If a property owner advertises their rental, the short-term rental permit number must be included in the listing.
 - (6) All guests are subject to the provisions of Code of the City of Beacon. The property owner or tenant is responsible for informing each guest of these provisions.
- I. Presumptive Evidence. The presence or existence of the following shall create a rebuttable presumption that a property is being utilized as a short-term rental:
- (1) The property is offered for lease or rent on a short-term rental website, including but not limited to Airbnb, HomeAway, VRBO and similar websites; or
 - (2) The property is offered for lease or rent by the use of any other advertising mechanism for a period of less than 30 days.
- J. A list of all short-term rental units located in the City of Beacon shall be maintained on the City's website and a hard copy shall be available for review in the City Building Department. Such list shall be updated every six months.
- K. Revocation of a permit.
- (1) The grounds upon which a permit can be revoked shall include but shall not be limited to:
 - (i) The permit was issued in error, or issued in whole or in part as a result of a false, untrue, or misleading statement on the permit application or other document submitted for filing, including but not limited to the schematic or certification; or
 - (ii) A short-term rental permit has been issued and the owner fails to continue to occupy the premises on a continuous basis as his or her primary residence; or
 - (iii) Use of the property as a short-term rental creates a hazard or public nuisance or other condition which negatively impacts the use and/or enjoyment of surrounding properties, or threatens the peace and good order, or quality of life in the surrounding community.
 - (iv) Failure to comply or violating the conditions of the permit.
 - (2) Any permit issued pursuant to this section may be revoked or suspended by the Building Inspector, after written notice to the owner. Written notice shall be served by registered or certified mail, return receipt requested, and by regular mail, to the applicant at the address shown on the application. The notice shall describe the reasons why the City is revoking the permit.

L. Appeals

- (1) Upon the denial, suspension or revocation of a permit, the applicant may, within 10 business days after receiving written notice, file a request, for a hearing before the Zoning Board of Appeals. Such request shall be filed with the Zoning Board of Appeals Secretary. Notice of the date, place and time of the hearing shall be given in writing by mail to the applicant at the address shown on the application. In the event that demand for a hearing is not made within the prescribed time or in the event that the applicant does not timely appear for the hearing, the Building Inspector's decision shall be final and conclusive.
- (2) The hearing shall commence no later than 30 days after the date on which the request was filed.
- (3) The applicant shall be given an opportunity to present evidence why such denial of application, or such suspension or revocation of the license, shall be modified or withdrawn. The Building Inspector or his or her designated agent may also present evidence. Upon consideration of the evidence presented, the Zoning Board of Appeals shall sustain, modify or reverse the decision of the Building Inspector or his or her designated agent.
- (4) In the event the applicant is not satisfied with the decision of the Zoning Board of Appeals, such aggrieved party may file an Article 78 proceeding under the New York Civil Practice Law and Rules. The Article 78 proceeding must be filed within 30 days of the filing of the Hearing Officer's decision with the City Clerk of the City of Beacon and service of the same upon the applicant.

M. Violations. Any owner who fails to obtain the permit required herein, or otherwise violates any provision of this section, shall be guilty of an offense which shall be punishable by a fine of not more than \$500 per offense. When a person has received written notice from the Building Inspector or has been served with a summons and complaint in an action to enjoin continuance of any violation, each day in excess of 10 days thereafter that he or she continues to be guilty of such violation shall constitute an additional, separate and distinct offense.

SECTION 2. The following definitions listed in Chapter 223, Article VI, Section 63 entitled "Definitions," of the Code of the City of Beacon are hereby amended as follows.

DWELLING

A detached building designed or used exclusively as living quarters for one or more families. The term shall not be deemed to include "automobile court," motel," "boarding- or rooming house," "house trailer," "~~tourist home~~" or "tent."

HOME OCCUPATION

An accessory use of a character customarily conducted entirely within a dwelling by the residents thereof using only customary home and home-scale equipment, including but not limited to typewriters, computers, fax machines, small-scale photocopiers, scanners, small-scale printers, file cabinets, drafting equipment and postage meters, which use is clearly incidental and secondary to the use of the residence for dwelling purposes, does not change the character thereof, does not have any exterior evidence of such secondary use other than a small nameplate not over one square foot in area, and does not involve the keeping of stock-in-trade. Home offices and artist studios meeting the criteria above shall be considered home occupations. However, the conducting of a tattoo and/or body piercing parlor, clinic, hospital, barbershop, beauty parlor, photographer's salon, tearoom, ~~tourist home~~ short-term rental, real estate office, animal hospital, dancing instruction, band instrument instruction in groups, convalescent home, funeral home, stores of any kind or any similar use shall not be deemed to be a home occupation. Any instruction of a musical instrument shall be limited to one pupil at a time. Home occupations are regulated in accordance with § 223-17.1 of this chapter.

HOTEL

A building, or portion thereof, containing rooms occupied primarily by transient guests, who are lodged with or without meals, and in which there may be provided such services as are accessory and incidental to the use thereof as a temporary residence, such as dining, recreational facilities, public rooms and meeting rooms, and gift shops. The term "hotel" shall not include bed-and-breakfast establishment, boardinghouse, rooming house, ~~tourist home~~ short-term rental or single-room-occupancy building for the purposes of this chapter.

SHORT-TERM RENTAL

An entire dwelling unit, or a room or group of rooms or other living or sleeping space, made available to rent, lease or otherwise assigned for a tenancy of less than 30 consecutive days. The term "short-term rental" does not include multifamily dwelling buildings, dormitories, hotel or motel rooms, bed and breakfast inns or lodging houses, as permitted and regulated by the City of Beacon Zoning Ordinance.

~~TOURIST HOME~~

~~A dwelling, except a hotel, boardinghouse or rooming house, as defined elsewhere in this chapter, in which overnight accommodations are provided or offered for transient guests.~~

SECTION 3. Chapter 223 Attachment 1 Code of the City of Beacon, entitled “Section 223-17, City of Beacon Schedule of Use Regulations for Residential Districts” shall be amended to add the following Permitted Accessory Use:

13. Short-Term Rentals on single-family properties, as provided in § 223-26.5.

SECTION 4. Ratification, Readoption and Confirmation

Except as specifically modified by the amendments contained herein, Chapter 223 of the City of Beacon Code is otherwise to remain in full force and effect and is otherwise ratified, readopted and confirmed.

SECTION 5. 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 6. Effective Date

This local law shall take effect immediately upon filing with the Office of the Secretary of State. Any short-term rental, as defined herein, in existence prior to adoption of this local law shall have 45 days to file an application to obtain a short-term rental permit. Any short-term rental existing prior to the effective date that (a) does not meet the definition of short-term rental or (b) is a short-term rental, as defined, and does not file an application within 45 days of the effective date is deemed to be in violation of this local law and subject to enforcement.

MEMORANDUM

TO: Mayor Kyriacou and Members of the City Council
of the City of Beacon

FROM: Keane & Beane, P.C.

RE: Short-Term Rental Local Law- Update

DATE: April 8, 2020

As a follow up to the Council's last workshop meeting, this memorandum outlines questions the City Council considered regarding the regulation of short-term rentals and the City Council's preferences with respect to each question.

A short-term rental is an entire dwelling unit, or a room or group of rooms or other living or sleeping space, made available to rent, lease or otherwise assigned for a tenancy of less than 30 consecutive days. The term "short-term rental" does not include dormitories, hotels or motel rooms, bed and breakfast inns or lodging houses. The questions considered by the Council and the decision reached is set forth below:

1. Is the City satisfied with the definition of owner occupied provided below?
 - ❖ The City Council would like to amend the definition of owner-occupied as follows: A one-family or two-family house ~~or multiple dwelling building~~ used by the owner, or tenant, as his or her or their domicile or principal residence.
2. Does the City want to allow any property owner to obtain short-term rental permits?
 - ❖ Property owners, tenants, corporations, limited-liability companies, partnerships, associations, trustees, mortgagees, and other business entities may obtain short-term rental permits for properties which are owner-occupied. All owners of the business entity must use the premise as his or her or their domicile or principal residence. When a property is titled in the name of a trustee, the owner-occupied requirement shall be satisfied if the grantor or grantee is the occupant of the property.

3. If any property owner can obtain a short-term rental permit (regardless of whether it is owner-occupied), does the City want to set restrictions based on whether a unit is owner-occupied or not owner-occupied?
 - ❖ All short-term rentals must be owner-occupied, therefore it is not necessary for the City to adopt a different set of restrictions based on whether a unit is owner-occupied or non owner-occupied.
4. Does the City want to allow tenants to obtain short-term rental permits for their rented spaces?
 - ❖ The City would like to allow tenants to apply for short-term rental permits for their rented spaces. The landlord and the tenant must both sign the short-term rental application. The City shall not require a copy of the lease agreement.
5. Can corporations register short-term rental units?
 - ❖ Corporations, limited-liability companies, partnerships, associations, trustees, mortgagees, lien holders and other business entities may apply for a short-term rental permit. All owners of the business entity must use the premise as his or her or their domicile or principal residence. When a property is titled in the name of a trustee, the owner-occupied requirement shall be satisfied if the grantor or grantee is the occupant of the property.
6. Does the City Council want to allow short-term rentals in multifamily homes or buildings?
 - ❖ Short-term rentals shall only be permitted in one- or two- family homes.
7. Does the City want to allow short-term rentals in all Zoning Districts?
 - ❖ The City wants to allow short-term rentals in all Zoning Districts.
8. Does the property owner need to be on-site when the short-term rental unit is rented?
 - ❖ The property owner does not need to be on-site when the short-term rental unit is rented. If a property owner or tenant is renting out the entire unit and not just a bedroom, the property owner must engage the services of an agent with the right to enter and maintain possession of the dwelling. This agent must be available twenty-four (24) hours a day to respond to tenant and neighborhood concerns and be capable of responding within two hours of notification from the City.

9. Can property owners make their accessory apartments short-term rentals?

- ❖ Property owners or tenants may make their accessory apartments short-term rentals if the accessory apartment is owner-occupied.

10. Are pets permitted?

- ❖ The City does not want to adopt regulations concerning pets.

11. Does the City want to set up a distance requirement between short-term rentals?

- ❖ No

12. Should notice be provided to adjoining property owners when a short-term rental permit is submitted?

- ❖ The City does not want to require notice be provided to adjoining property owners. However, a list of all short-term rental units located in the City of Beacon shall be maintained on the City's website and a hard copy shall be available for review in the City Building Department. Such list shall be updated every six months.

13. Does the City want to establish a maximum number of occupants per dwelling or a maximum number per bedroom?

- ❖ No.

14. Does the City want to limit how many days in a year a property may be rented for?

- ❖ There shall be no limit to how many days in a year a property owner may rent a bedroom. However, short-term rental of entire units is limited to 180 days in any one calendar year.

15. Does the City want to establish parking regulations for short-term rentals?

- ❖ No.

16. Does the City want to require residents with short-term rental permits to display some sort of plaque or sign on their property?

- ❖ No.

17. How long is a short-term rental permit valid for? Must it be renewed annually or every five years or another period of time?

- ❖ All short-term rental permits issued shall be valid for a period of two years and shall be renewable for subsequent two-year terms upon application. An inspection of the premises must occur prior to any permit renewal.

18. Does the City want to establish a maximum number of short-term rental permits to issue?

- ❖ No.

**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: Proposed Local Law Regulating Short-Term Rentals | | |
| Project Location (describe, and attach a general location map): City of Beacon | | |
| Brief Description of Proposed Action (include purpose or need): The City has prepared a proposed local law to create Chapter 223, Article III, Section 26.5 entitled "Short-Term Rentals." The City Council of the City of Beacon has determined it is in the best interest of the City and its residents to regulate short-term rentals. A short-term rental is an entire dwelling unit, or a room or group of rooms or other living or sleeping space, made available to rent, lease or otherwise assigned for a tenancy of less than 30 consecutive days. The term "short-term rental" does not include multifamily dwelling buildings, dormitories, hotel or motel rooms, bed and breakfast inns or lodging houses, as permitted and regulated by the City of Beacon Zoning Ordinance. Property owners and tenants, including corporations, limited-liability companies, partnerships, associations, trustees or other business entities must obtain a short-term rental permit from the City of Beacon to operate a short-term rental. The practice of renting a home or a room for less than 30 days is growing in popularity with the advent of internet and social-media based programs. The City Council believes that the restrictions and requirements imposed by the local law will protect the City's housing stock and protect the health, safety and welfare of the City and its residents. | | |
| Name of Applicant/Sponsor: City of Beacon | Telephone: 845-838-5000 | E-Mail: Mayor@cityofbeacon.org |
| Address: 1 Municipal Plaza | | |
| City/PO: Beacon | State: NY | Zip Code: 12509 |
| Project Contact (if not same as sponsor; give name and title/role): | Telephone: | |
| | E-Mail: | |
| Address: | | |
| City/PO: | State: | Zip Code: |
| Property Owner (if not same as sponsor): | Telephone: | |
| | E-Mail: | |
| Address: | | |
| 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, <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No or Village Board of Trustees | City Council- Legislative approval of local law. | Public Hearing on June 1 |
| b. City, Town or Village Planning Board or Commission <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| c. City, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| e. County agencies <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| g. State agencies <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| <p>i. Coastal Resources.</p> <p><i>i.</i> Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><i>ii.</i> Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>iii.</i> Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> | | |

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?

The law permits short-term rentals in one-family homes, two-family homes or accessory apartment units in all zoning districts within the City of Beacon.

b. Is the use permitted or allowed by a special or conditional use permit? Yes No

c. Is a zoning change requested as part of the proposed action? Yes No

If Yes,

i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Beacon City School District _____

b. What police or other public protection forces serve the project site?

Beacon Police Department _____

c. Which fire protection and emergency medical services serve the project site?

Dutchess County Emergency Response Unit, Mase Hook and Ladder, BEacon Engine Station 1, and Lewis Tompkins Hose Station 2 _____

d. What parks serve the project site?

The proposed local-law permits short-term rentals in every Zoning District within the City of Beacon. The City maintains six parks that may possibly be used by short-term rental properties. _____

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)?

b. a. Total acreage of the site of the proposed action? _____ acres

b. Total acreage to be physically disturbed? _____ acres

c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ 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.

| | <u>One Family</u> | <u>Two Family</u> | <u>Three Family</u> | <u>Multiple Family (four or more)</u> |
|---------------|-------------------|-------------------|---------------------|---------------------------------------|
| Initial Phase | _____ | _____ | _____ | _____ |
| At completion | _____ | _____ | _____ | _____ |
| of all phases | _____ | _____ | _____ | _____ |

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: _____
 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? Yes No
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
 If Yes:

i. What is the purpose of the excavation or dredging? _____
 ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
 • Volume (specify tons or cubic yards): _____
 • Over what duration of time? _____
 iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

 iv. Will there be onsite dewatering or processing of excavated materials? Yes No
 If yes, describe. _____

 v. What is the total area to be dredged or excavated? _____ acres
 vi. What is the maximum area to be worked at any one time? _____ acres
 vii. What would be the maximum depth of excavation or dredging? _____ feet
 viii. Will the excavation require blasting? Yes No
 ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No
 If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? Yes No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? Yes No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? Yes No

If Yes:

i. Total anticipated water usage/demand per day: _____ 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: _____
- 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: _____ 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): _____

iii. Will the proposed action use any existing public wastewater treatment facilities? Yes No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- 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 _____ 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 (CO₂)
 • _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
 • _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
 • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
 • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflouorocarbons (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 1/2 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: _____
 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: _____
 • Saturday: _____
 • Sunday: _____
 • Holidays: _____
 ii. During Operations:
 • Monday - Friday: _____
 • Saturday: _____
 • Sunday: _____
 • Holidays: _____

| | |
|---|--|
| <p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration:</p> <p>_____</p> <p>_____</p> | |
| <p>ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p> | |
| <p>n. Will the proposed action have outdoor lighting? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:</p> <p>_____</p> <p>_____</p> | |
| <p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p> | |
| <p>o. Does the proposed action have the potential to produce odors for more than one hour per day? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____</p> <p>_____</p> <p>_____</p> | |
| <p>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? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally, describe the proposed storage facilities: _____</p> <p>_____</p> | |
| <p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe proposed treatment(s):</p> <p>_____</p> <p>_____</p> <p>_____</p> | |
| <p>ii. Will the proposed action use Integrated Pest Management Practices? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> | |
| <p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> • Construction: _____ tons per _____ (unit of time) • Operation : _____ tons per _____ (unit of time) <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> • Construction: _____ • Operation: _____ <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> • 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 coverytypes on the project site.

| Land use or Coverytype | Current Acreage | Acreage After Project Completion | Change (Acres +/-) |
|--|-----------------|----------------------------------|--------------------|
| • Roads, buildings, and other paved or impervious surfaces | | | |
| • Forested | | | |
| • 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) | | | |
| • Non-vegetated (bare rock, earth or fill) | | | |
| • 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): _____

| |
|---|
| <p>v. Is the project site subject to an institutional control limiting property uses? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <ul style="list-style-type: none"> • 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? <input type="checkbox"/> Yes <input type="checkbox"/> No • Explain: _____ |
| E.2. Natural Resources On or Near Project Site |
| <p>a. What is the average depth to bedrock on the project site? _____ feet</p> |
| <p>b. Are there bedrock outcroppings on the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %</p> |
| <p>c. Predominant soil type(s) present on project site: _____ % _____ % _____ %</p> |
| <p>d. What is the average depth to the water table on the project site? Average: _____ feet</p> |
| <p>e. Drainage status of project site soils: <input type="checkbox"/> Well Drained: _____ % of site <input type="checkbox"/> Moderately Well Drained: _____ % of site <input type="checkbox"/> Poorly Drained _____ % of site</p> |
| <p>f. Approximate proportion of proposed action site with slopes: <input type="checkbox"/> 0-10%: _____ % of site <input type="checkbox"/> 10-15%: _____ % of site <input type="checkbox"/> 15% or greater: _____ % of site</p> |
| <p>g. Are there any unique geologic features on the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, describe: _____</p> |
| <p>h. Surface water features.</p> <p>i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>ii. Do any wetlands or other waterbodies adjoin the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes to either <i>i</i> or <i>ii</i>, continue. If No, skip to E.2.i.</p> <p>iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>iv. For each identified regulated wetland and waterbody on the project site, provide the following information:</p> <ul style="list-style-type: none"> • Streams: Name _____ Classification _____ • Lakes or Ponds: Name _____ Classification _____ • Wetlands: Name _____ Approximate Size _____ • Wetland No. (if regulated by DEC) _____ |
| <p>v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, name of impaired water body/bodies and basis for listing as impaired: _____</p> |
| <p>i. Is the project site in a designated Floodway? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> |
| <p>j. Is the project site in the 100-year Floodplain? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> |
| <p>k. Is the project site in the 500-year Floodplain? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> |
| <p>l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: i. Name of aquifer: _____</p> |

| | |
|--|--|
| <p>m. Identify the predominant wildlife species that occupy or use the project site: _____ _____ _____</p> | |
| <p>n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Describe the habitat/community (composition, function, and basis for designation): _____ _____ <i>ii.</i> Source(s) of description or evaluation: _____ <i>iii.</i> Extent of community/habitat: • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres</p> | |
| <p>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? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Species and listing (endangered or threatened): _____ _____ _____</p> | |
| <p>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? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Species and listing: _____ _____</p> | |
| <p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, give a brief description of how the proposed action may affect that use: _____ _____</p> | |
| E.3. Designated Public Resources On or Near Project Site | |
| <p>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? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide county plus district name/number: _____</p> | |
| <p>b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>i.</i> If Yes: acreage(s) on project site? _____ <i>ii.</i> Source(s) of soil rating(s): _____</p> | |
| <p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature <i>ii.</i> Provide brief description of landmark, including values behind designation and approximate size/extent: _____ _____ _____</p> | |
| <p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> CEA name: _____ <i>ii.</i> Basis for designation: _____ <i>iii.</i> Designating agency and date: _____</p> | |

| | | |
|--|--|--|
| 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? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| If Yes: | | |
| <i>i.</i> Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District | | |
| <i>ii.</i> Name: _____ | | |
| <i>iii.</i> Brief description of attributes on which listing is based: _____ | | |
| <hr/> | | |
| 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? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| <hr/> | | |
| g. Have additional archaeological or historic site(s) or resources been identified on the project site? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| If Yes: | | |
| <i>i.</i> Describe possible resource(s): _____ | | |
| <i>ii.</i> Basis for identification: _____ | | |
| <hr/> | | |
| h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| If Yes: | | |
| <i>i.</i> Identify resource: _____ | | |
| <i>ii.</i> Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____ | | |
| <i>iii.</i> Distance between project and resource: _____ miles. | | |
| <hr/> | | |
| i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| If Yes: | | |
| <i>i.</i> Identify the name of the river and its designation: _____ | | |
| <i>ii.</i> Is the activity consistent with development restrictions contained in 6NYCRR Part 666? | | <input type="checkbox"/> Yes <input type="checkbox"/> 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 _____ Date _____

Signature _____ Title _____

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

| |
|---|
| Agency Use Only [If applicable] |
| Project : Short-Term Rental Local Law |
| Date : April 16, 2020 |

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer “**Yes**” to a numbered question, please complete all the questions that follow in that section.
- If you answer “**No**” to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box “Moderate to large impact may occur.”
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the “whole action”.
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

| 1. Impact on Land Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1) <i>If “Yes”, answer questions a - j. If “No”, move on to Section 2.</i> | | | |
|---|-----------------------------|---|-------------------------------------|
| | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may involve construction on land where depth to water table is less than 3 feet. | E2d | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may involve construction on slopes of 15% or greater. | E2f | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface. | E2a | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material. | D2a | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may involve construction that continues for more than one year or in multiple phases. | D1e | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides). | D2e, D2q | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed action is, or may be, located within a Coastal Erosion hazard area. | B1i | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g)

NO

YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|-----------------------------|-------------------------------|------------------------------------|
| a. Identify the specific land form(s) attached: _____ _____ | E2g | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____ | E3c | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h)

NO

YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|--|-----------------------------|-------------------------------|------------------------------------|
| a. The proposed action may create a new water body. | D2b, D1h | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water. | D2b | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body. | D2a | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body. | E2h | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments. | D2a, D2h | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water. | D2c | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s). | D2d | <input type="checkbox"/> | <input type="checkbox"/> |
| h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies. | D2e | <input type="checkbox"/> | <input type="checkbox"/> |
| i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action. | E2h | <input type="checkbox"/> | <input type="checkbox"/> |
| j. The proposed action may involve the application of pesticides or herbicides in or around any water body. | D2q, E2h | <input type="checkbox"/> | <input type="checkbox"/> |
| k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities. | D1a, D2d | <input type="checkbox"/> | <input type="checkbox"/> |

| | | | |
|----------------------------------|--|--------------------------|--------------------------|
| I. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |
|----------------------------------|--|--------------------------|--------------------------|

4. Impact on groundwater NO YES

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)
If "Yes", answer questions a - h. If "No", move on to Section 5.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|--|-----------------------------|-------------------------------------|------------------------------------|
| a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells. | D2c | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____ | D2c | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may allow or result in residential uses in areas without water and sewer services. | D1a, D2c | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may include or require wastewater discharged to groundwater. | D2d, E2l | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated. | D2c, E1f, E1g, E1h | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer. | D2p, E2l | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources. | E2h, D2q, E2l, D2c | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h. Other impacts: _____ _____ | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

5. Impact on Flooding NO YES

The proposed action may result in development on lands subject to flooding. (See Part 1. E.2)
If "Yes", answer questions a - g. If "No", move on to Section 6.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|--|-----------------------------|-------------------------------|------------------------------------|
| a. The proposed action may result in development in a designated floodway. | E2i | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in development within a 100 year floodplain. | E2j | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may result in development within a 500 year floodplain. | E2k | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may result in, or require, modification of existing drainage patterns. | D2b, D2e | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may change flood water flows that contribute to flooding. | D2b, E2i, E2j, E2k | <input type="checkbox"/> | <input type="checkbox"/> |
| f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade? | E1e | <input type="checkbox"/> | <input type="checkbox"/> |

| | | | |
|----------------------------------|--|--------------------------|--------------------------|
| g. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |
|----------------------------------|--|--------------------------|--------------------------|

| 6. Impacts on Air | | | |
|---|--|--|--|
| The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2.h, D.2.g) <i>If "Yes", answer questions a - f. If "No", move on to Section 7.</i> | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: i. More than 1000 tons/year of carbon dioxide (CO ₂) ii. More than 3.5 tons/year of nitrous oxide (N ₂ O) iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) iv. More than .045 tons/year of sulfur hexafluoride (SF ₆) v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions vi. 43 tons/year or more of methane | D2g D2g D2g D2g D2g D2h | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants. | D2g | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour. | D2f, D2g | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above. | D2g | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour. | D2s | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

| 7. Impact on Plants and Animals | | | |
|--|-----------------------------|--|------------------------------------|
| The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) <i>If "Yes", answer questions a - j. If "No", move on to Section 8.</i> | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site. | E2o | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government. | E2o | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site. | E2p | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government. | E2p | <input type="checkbox"/> | <input type="checkbox"/> |

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| e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect. | E3c | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____ | E2n | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site. | E2m | <input type="checkbox"/> | <input type="checkbox"/> |
| h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ | E1b | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides. | D2q | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Other impacts: _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

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|--|------------------------------------|--|---|
| 8. Impact on Agricultural Resources | | | |
| The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| <i>If "Yes", answer questions a - h. If "No", move on to Section 9.</i> | | | |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System. | E2c, E3b | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc). | E1a, E1b | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land. | E3b | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District. | E1b, E3a | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may disrupt or prevent installation of an agricultural land management system. | E1 a, E1b | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland. | C2c, C3, D2c, D2d | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan. | C2c | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Other impacts: _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

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| 9. Impact on Aesthetic Resources The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) <i>If "Yes", answer questions a - g. If "No", go to Section 10.</i> | | | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur | | |
| a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource. | E3h | <input type="checkbox"/> | <input type="checkbox"/> | | |
| b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views. | E3h, C2b | <input type="checkbox"/> | <input type="checkbox"/> | | |
| c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round | E3h | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | | |
| d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities | E3h E2q, E1c | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | | |
| e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource. | E3h | <input type="checkbox"/> | <input type="checkbox"/> | | |
| f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 -3 mile 3-5 mile 5+ mile | D1a, E1a, D1f, D1g | <input type="checkbox"/> | <input type="checkbox"/> | | |
| g. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> | | |

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| 10. Impact on Historic and Archeological Resources The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) <i>If "Yes", answer questions a - e. If "No", go to Section 11.</i> | | | | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur | | |
| a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical 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. | E3e | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |
| b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory. | E3f | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |
| c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____ | E3g | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |

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|--|----------------------------|-------------------------------------|--------------------------|
| d. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |
| e. If any of the above (a-d) are answered “Moderate to large impact may occur”, continue with the following questions to help support conclusions in Part 3: | | | |
| i. The proposed action may result in the destruction or alteration of all or part of the site or property. | E3e, E3g, E3f | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ii. The proposed action may result in the alteration of the property’s setting or integrity. | E3e, E3f, E3g, E1a, E1b | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting. | E3e, E3f, E3g, E3h, C2, C3 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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| 11. Impact on Open Space and Recreation | | | |
| The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1. C.2.c, E.1.c., E.2.q.) <i>If “Yes”, answer questions a - e. If “No”, go to Section 12.</i> | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may result in an impairment of natural functions, or “ecosystem services”, provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat. | D2e, E1b E2h, E2m, E2o, E2n, E2p | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in the loss of a current or future recreational resource. | C2a, E1c, C2c, E2q | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may eliminate open space or recreational resource in an area with few such resources. | C2a, C2c E1c, E2q | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may result in loss of an area now used informally by the community as an open space resource. | C2c, E1c | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

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|--|------------------------------------|--|---|
| 12. Impact on Critical Environmental Areas | | | |
| The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) <i>If “Yes”, answer questions a - c. If “No”, go to Section 13.</i> | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA. | E3d | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA. | E3d | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems.

 NO YES

(See Part 1. D.2.j)

If "Yes", answer questions a - f. If "No", go to Section 14.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|-----------------------------|-------------------------------|------------------------------------|
| a. Projected traffic increase may exceed capacity of existing road network. | D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in the construction of paved parking area for 500 or more vehicles. | D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action will degrade existing transit access. | D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action will degrade existing pedestrian or bicycle accommodations. | D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may alter the present pattern of movement of people or goods. | D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy.

 NO YES

(See Part 1. D.2.k)

If "Yes", answer questions a - e. If "No", go to Section 15.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|--|-----------------------------|-------------------------------|------------------------------------|
| a. The proposed action will require a new, or an upgrade to an existing, substation. | D2k | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use. | D1f, D1q, D2k | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may utilize more than 2,500 MWhrs per year of electricity. | D2k | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed. | D1g | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Other Impacts: _____ _____ | | | |

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting.

 NO YES

(See Part 1. D.2.m., n., and o.)

If "Yes", answer questions a - f. If "No", go to Section 16.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|--|-----------------------------|-------------------------------|------------------------------------|
| a. The proposed action may produce sound above noise levels established by local regulation. | D2m | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home. | D2m, E1d | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may result in routine odors for more than one hour per day. | D2o | <input type="checkbox"/> | <input type="checkbox"/> |

| | | | |
|---|----------|--------------------------|--------------------------|
| d. The proposed action may result in light shining onto adjoining properties. | D2n | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions. | D2n, E1a | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.)
If "Yes", answer questions a - m. If "No", go to Section 17.

NO

YES

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|-----------------------------|-------------------------------|------------------------------------|
| a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community. | E1d | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The site of the proposed action is currently undergoing remediation. | E1g, E1h | <input type="checkbox"/> | <input type="checkbox"/> |
| c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action. | E1g, E1h | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction). | E1g, E1h | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health. | E1g, E1h | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health. | D2t | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed action involves construction or modification of a solid waste management facility. | D2q, E1f | <input type="checkbox"/> | <input type="checkbox"/> |
| h. The proposed action may result in the unearthing of solid or hazardous waste. | D2q, E1f | <input type="checkbox"/> | <input type="checkbox"/> |
| i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste. | D2r, D2s | <input type="checkbox"/> | <input type="checkbox"/> |
| j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste. | E1f, E1g E1h | <input type="checkbox"/> | <input type="checkbox"/> |
| k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures. | E1f, E1g | <input type="checkbox"/> | <input type="checkbox"/> |
| l. The proposed action may result in the release of contaminated leachate from the project site. | D2s, E1f, D2r | <input type="checkbox"/> | <input type="checkbox"/> |
| m. Other impacts: _____ _____ | | | |

| 17. Consistency with Community Plans The proposed action is not consistent with adopted land use plans. (See Part 1. C.1, C.2. and C.3.) <i>If “Yes”, answer questions a - h. If “No”, go to Section 18.</i> | | | |
|--|-----------------------------------|--|------------------------------------|
| | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action’s land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s). | C2, C3, D1a E1a, E1b | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%. | C2 | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action is inconsistent with local land use plans or zoning regulations. | C2, C2, C3 | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action is inconsistent with any County plans, or other regional land use plans. | C2, C2 | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure. | C3, D1c, D1d, D1f, D1d, E1b | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure. | C4, D2c, D2d D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action) | C2a | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Other: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

| 18. Consistency with Community Character The proposed project is inconsistent with the existing community character. (See Part 1. C.2, C.3, D.2, E.3) <i>If “Yes”, answer questions a - g. If “No”, proceed to Part 3.</i> | | | |
|--|--------------------------------|--|------------------------------------|
| | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community. | E3e, E3f, E3g | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may create a demand for additional community services (e.g. schools, police and fire) | C4 | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing. | C2, C3, D1f D1g, E1a | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources. | C2, E3 | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action is inconsistent with the predominant architectural scale and character. | C2, C3 | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Proposed action is inconsistent with the character of the existing natural landscape. | C2, C3 E1a, E1b E2g, E2h | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

The City Council of the City of Beacon has determined it is in the best interest of the City and its residents to regulate short-term rentals. Short-term rentals are defined as an entire dwelling unit, or a room or group of rooms or other living or sleeping space, made available to rent, lease or otherwise assigned for a tenancy of less than 30 consecutive days. The term "short-term rental" does not include multifamily dwelling buildings, dormitories, hotel or motel rooms, bed and breakfast inns or lodging houses, as permitted and regulated by the City of Beacon Zoning Ordinance. The City Council recognizes the benefits of short-term rentals to allow home-owners to supplement their income to defray the cost of housing and to provide lodging for visitors to the City. However, in order to protect the health, safety and welfare of the City and its residents, it is necessary to restrict the rental of homes for terms shorter than 30 consecutive days, a practice which is growing in popularity with the advent of internet and social media-based programs that connect property owners and persons seeking short-term rentals. In addition, studies have shown that short-term rentals are linked to increases in rent and housing costs because rental units are taken off the market and used as short-term rentals. Units are going to short-term renters rather than to permanent residents which results in a decrease in available housing stock within the City of Beacon. The City Council believes that the restrictions and requirements imposed herein further those objectives and the protection of the health, safety and welfare of the City and its residents.

Under the proposed local law, it shall be unlawful to use, establish, maintain, operate, occupy, rent or lease any property as a short-term rental without first having obtained a short-term rental permit. Short-term rentals must be owner-occupied whereby the property is the principal residence of the owner, tenant, grantor or grantee at all times during the term of the permit. Only one-family, two-family or accessory apartment units may be used as short-term rentals. Short-term rental permits are permitted in all zoning districts within the City of Beacon.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: Type 1 Unlisted

Identify portions of EAF completed for this Project: Part 1 Part 2 Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information including memorandums and comments from the City's Planning Consultant and City staff, local laws from other municipalities, reports and case law updates.

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the City Council _____ as lead agency that:

- A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.
- B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

- C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: Local Law Regulating Short-Term Rentals

Name of Lead Agency: City Council of the City of Beacon

Name of Responsible Officer in Lead Agency: Lee Kyriacou

Title of Responsible Officer: Mayor

Signature of Responsible Officer in Lead Agency: _____ Date: _____

Signature of Preparer (if different from Responsible Officer) _____ Date: _____

For Further Information:
 Contact Person: Anthony Ruggiero, City Administrator
 Address: 1 Municipal Plaza, NY 12509
 Telephone Number: 845-838-5000
 E-mail: aruggiero@cityofbeacon.org

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:
 Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
 Other involved agencies (if any)
 Applicant (if any)
 Environmental Notice Bulletin: <http://www.dec.ny.gov/enb/enb.html>

City of Beacon Planning Board
5/12/2020

Title:

Local Law Review to Amend Chapters 223 & 210

Subject:

City Council request to review proposed Local Law to amend Chapters 223 and 210 regarding the Schedule of Regulations and associated amendments

Background:

ATTACHMENTS:

| Description | Type |
|--|-----------|
| Local_Law_Amending_Chapters_223_and_210_of_the_Code_of_the_City_of_Beacon_Regarding_Zoning | Local Law |
| Zoning_Dimensional_Table_Draft_4.24.20 | Local Law |
| Zoning_Use_Table_Draft_4.24.20 | Local Law |
| Full Environmental Assessment Form and Negative Declaration | Neg Dec |

LOCAL LAW NO. ____ OF 2020

**CITY COUNCIL
CITY OF BEACON**

**LOCAL LAW AMENDING CHAPTERS 223 AND 210
OF THE CODE OF THE CITY OF BEACON**

A LOCAL LAW to amend Chapters 223 and 210 of the Code of the City of Beacon regarding the Schedule of Regulations and associated amendments.

BE IT ENACTED by the City Council of the City of Beacon as follows:

Section 1. Chapter 223 of the Code of the City of Beacon, Article II, Section 2, entitled “Establishment of Districts” is hereby amended as follows:

§ 223-2 Establishment of districts.

The City of Beacon is hereby divided into the following classes of districts:

A. Residential:

- (1) R1-120 One-Family Residence District, 120,000 square feet per dwelling unit.
- (2) R1-80 One-Family Residence District, 80,000 square feet per dwelling unit.
- (3) R1-40 One-Family Residence District, 40,000 square feet per dwelling unit.
- (4) R1-20 One-Family Residence District, 20,000 square feet per dwelling unit.
- (5) R1-10 One-Family Residence District, 10,000 square feet per dwelling unit.
- (6) R1-7.5 One -Family Residence District, 7,500 square feet per dwelling unit.
- (7) R1-5 One-Family Residence District, 5,000 square feet per dwelling unit.
- (8) RD-7.5 Designed Residence District, 7,500 square feet per dwelling unit (minimum lot size of two acres).

~~[1] Editor's Note: This local law also provided for the renumbering of former Subsections A(8) through (16) as Subsections A(9) through (17).~~

- (9) RD-6 Designed Residence District, 6,000 square feet per dwelling unit (minimum lot size of ~~five~~ two acres).
- (10) RD-5 Designed Residence District, 5,000 square feet per dwelling unit (minimum lot size of 5,000 square feet).
- (11) RD-4 Designed Residence District, 4,000 square feet per dwelling unit (minimum lot size of ~~two acres~~ 5,000 square feet).
- (12) RD-3 Designed Residence District, 3,000 square feet per dwelling unit (minimum lot size of 5,000 square feet).
- (13) RD-1.8 Designed Residence District, 1,800 square feet per dwelling unit (minimum lot size of 5,000 square feet).
- (14) RD-1.7 Designed Residence District, 1,700 square feet per dwelling unit (minimum lot size of 5,000 square feet).

~~{2} Editor's Note: This local law also provided for the redesignation of former subsection A(13) and (14) as A(14) and (15), respectively.~~

- ~~(15) RMF-1.5 Multifamily Residence District, 1,500 square feet per dwelling unit (minimum lot size of 5,000 square feet).~~
- ~~(16) RMF-8 Multifamily Residence District, 800 square feet per dwelling unit (minimum lot size of 5,000 square feet).~~
- ~~(15)-(17) Senior Affordable Housing Overlay (SAHO) District.~~

B. Commercial:

(1) ~~PB Business Off-Street Parking~~ T Transitional District.

~~(2){3} OB Office Business District.~~

~~{3} Editor's Note: Former Subsection B(2), HB Hotel Business District, was repealed 6-17-2013 by L.L. No. 11-2013. This local law also provided for the renumbering of former Subsection B(3) through (8) as Subsection B(2) through (7), respectively.~~

~~(3) LB Local Business District.~~

~~(4) CB Central Business District.~~

(2) GB General Business District.

(3) CMS Central Main Street District.

(4) L Linkage District.

C. Industrial:

(1) LI Light Industrial District.

(2) HI Heavy Industrial District.

D. POD Parking Overlay District.

E. WP Waterfront Park Zone.

F. WD Waterfront Development Zone.

G. FCD Fishkill Creek Development District.

Section 2. Chapter 223 of the Code of the City of Beacon, Article III, Section 10, entitled “Non-conforming uses and structures,” Subsections H-L are hereby amended as follows:

§ 223-10 Non-conforming uses and structures

...

~~H. Residential uses on Main Street. [Added 12-29-1997 by L.L. No. 14-1997]~~

- ~~(1) Legislative intent. The Central Business (CB) and General Business (GB) Districts along Main Street have traditionally been and will continue in the future to essentially be retail/service in nature. In order for the Main Street business district to be healthy and vital, it must compete successfully with other business districts. One of the essential characteristics of a healthy downtown business district is a high degree of continuity between adjacent retail and service uses, so that consumers can conveniently walk from one storefront to the next without frequently being interrupted by gaps between the retail and service uses. These gaps are the result of uses which are not open to the general public such as, in this case, residential uses. Residences which are located at the front of the ground floor of the buildings on Main Street are believed to be more injurious to the health and vitality of this business district than residences located at the rear of the ground floor of said buildings because the shopping portion of the business district is primarily, but not exclusively, at the front of said buildings. It is recognized, however, that there are currently several vacant storefronts on Main Street. The City Council has determined that the residential units affected by this subsection should not be converted to retail space unless the vacancy rate for such retail space has declined to an acceptable level in the discretion of the City Council. As a result, the special permit procedure outlined herein will specifically take into consideration the vacancy rate on Main Street at the time this subsection is implemented.~~
- ~~(2) Discontinuance. The following provisions pertain to buildings located on Main Street in the Central Business and General Business Zoning Districts: residential uses which are neither located on the upper floors nor in the rear of the first floor of said buildings shall be discontinued effective October 1, 2002. The City of Beacon shall notify all affected property~~

~~owners no later than October 1, 2001, that all residential units so situated in the Central Business (CB) and General Business (GB) Zoning Districts must be converted no later than October 1, 2002, pursuant to the terms of this subsection.~~

~~(3) Special use permit. Any property owner affected by this section shall be eligible to apply to the City Council for a special use permit to continue said residential occupancy for a period of two years. There shall be no further permits issued after the aforementioned permit has expired. Such application must be made no later than April 1, 2002, in order to maintain eligibility for the special use permit. The general provisions regarding the issuance of special use permits set forth in this chapter shall also apply to this application. In addition, the City Council shall take the vacancy rate for storefronts on Main Street into consideration when determining whether to issue such a permit.~~

~~I. I. Variance procedure. Any person or persons jointly or severally aggrieved by the terms of this chapter shall have the right to review a special permit determination by the City Council by a public hearing before the Zoning Board of Appeals and by a proceeding under Article 78 of the Civil Practice Law and Rules, which proceedings must be commenced within 30 days of the filing of such determination with the City Clerk.~~

~~J. Exemption. This local law shall not apply to the residence located at 317 Main Street. This use as a single family dwelling shall be continued as a nonconforming use notwithstanding the remaining provisions of this local law. However, the existing commercial portion of these premises which front on Main Street, may not be converted to a residential use.~~

~~H. H. General nuisances. Upon a complaint registered by the Building Inspector or 50% of the property owners within 250 feet of a nonconforming use which is considered to be a general nuisance or hazard to the health, safety, welfare and morals of uses or structures within 250 feet of such nonconforming use or uses, the Zoning Board of Appeals shall hold a public hearing and make a finding with respect to the nuisance or hazardous condition which exists and shall determine the necessity of terminating such nonconforming use. Such uses shall be terminated within such reasonable time as shall be determined by the Zoning Board of Appeals as related to the reasonable amortization of the capital investment in such uses.~~

Section 3. Chapter 223 of the Code of the City of Beacon, Article III, Section 13, entitled “Yards; building projections,” Subsections I-O are hereby amended and added as follows:

§223-13 Yards, building projections, heights, and accessory structures

...

I. Visibility at intersections. On a corner lot in any residence district, no fence wall, hedge or other structure or planting more than ~~three~~ 3.5 feet in height shall be erected, placed or maintained within the triangular area formed by ~~the intersecting street center lines and~~ a straight line joining ~~said street center lines at~~ points which are ~~100~~ 25 feet distant from ~~the point of intersection,~~ measured along said street center lines intersecting lines of the curb or edge of pavement. The height of ~~three~~ 3.5 feet shall be measured above the road surface at the center line edge of the road

having the lesser elevation. This subsection shall not apply to existing trees, provided that no branches are closer than six feet to the ground and they are not obstructing street views from the corner.

- J. Corner lots. On a corner lot in any residence district, there shall be provided a side yard on the side street equal in depth to the required front yard on said lot, or, if the lot is to be occupied by a one-family home, such side yard may be reduced to 25% of actual lot width.
- K. Exception for existing alignment of buildings. If on one side of a street within 250 feet of any lot there is pronounced uniformity of alignment of the fronts of existing buildings and of the depths of front yards greater or less than the depth specified in the Schedules of Regulations,[1] a front yard shall be required in connection with any new building which shall conform as nearly as practicable to those existing on the adjacent lots, except that no such building shall be required to set back from the street a distance greater than 40 feet.
- L. Awnings. No awning, or similar weather shielding feature, projecting beyond the property line of any lot into the sidewalk portion of a street shall be erected or maintained on any building, unless such awning or feature shall be firmly attached to the building and is at all points at least eight feet above the sidewalk area.
- M. Swimming pools. All swimming pools shall be considered structures and shall set back from lot lines at least the minimum distance required for other principal buildings and structures in that district.

(1) If a swimming pool, as located, is within 100 feet from a dwelling other than the owner's or within 50 feet from any street or property line, the same must be completely surrounded by a fence or wall enclosure not less than four feet in height with openings, holes or gaps (exclusive of gates or doors) therein not more than four inches in one dimension, a part of which enclosure may consist of a dwelling house or accessory building. A wall or fence or other enclosure wholly enclosing a dwelling house shall constitute compliance with this requirement.

(2) Each and every swimming pool gate or door opening through such enclosure shall be equipped and maintained with effective self-closing and self-latching devices, except that the floor of any occupied dwelling house forming a part of such enclosure need not be so equipped. The use of a natural barrier, hedge or pool cover will be deemed to satisfy the requirement of a fence or wall as specified above when approved by the Building Inspector.

N. The minimum height of any principal building on a lot shall be one-story and 12 feet.

Section 4. Chapter 223 of the Code of the City of Beacon, Article III, Section 14, entitled “Landscaping, lighting, and miscellaneous regulations,” Subsection E is hereby amended as follows:

§223-14 Landscaping, lighting, and miscellaneous regulations

...

E. Accessory buildings on residential lots. [Added 1-19-2016 by L.L. No. 2-2016]

(1) General. No detached accessory building, including a garage, utility shed, storage shed or other outbuilding, but not including construction sheds, is permitted, until such time as the principal building has been substantially completed in conformance with all applicable provisions of this chapter. All accessory buildings shall comply with the dimensional and bulk requirements set forth on the accompanying Schedules of Regulations constituting § 223-17 ~~C and E~~ of this chapter unless specifically provided otherwise herein. For the purpose of this section, "residential lots" shall mean any lot containing a permitted residential use.

(2) Sheds. A shed may be erected, provided that it is used for storage and utility purposes that are customary and incidental to the existing residence. Notwithstanding any requirement in the Schedules of Regulations ~~for Residential Districts~~[1] to the contrary, the shed shall be no larger than 144 square feet in floor area and a maximum of 10 feet in height at its highest point.

[1] Editor's Note: The Schedules of Regulations ~~for Residential Districts~~ is ~~is~~ are included as an attachment to this chapter.

(3) Detached garages and other accessory buildings. Detached garages and other accessory buildings are permitted, provided that they comply with the accompanying Schedules of Regulations[2] and meet the following additional requirements:

(a) The building shall be located behind the front line of the primary building.

(b) The building shall be permanent, except that fabric-covered frames or structures are permitted, provided that the structure and the fabric are appropriately maintained in good condition.

(c) The building shall not be equipped with showers or bathing fixtures and equipment.

(d) In no case shall the total square footage of all accessory buildings exceed the limits established in the Schedules of Regulations.

(e) Space provided above the grade story shall be utilized for storage only.

[2] Editor's Note: The Schedules of Regulations are included as attachments to this chapter.

Section 5. Chapter 223 of the Code of the City of Beacon, Article III, Section 17, entitled "Schedule of Regulations" is hereby amended as follows:

§ 223-17 Schedules of Regulations.

A. The accompanying Schedules of Regulations constituting § 223-17C and D herein list and define the use of land and buildings, the height of buildings, the yards and other open space to be provided in connection with buildings, the area of lots, off-street parking space and other matters.

The regulations listed for each district as designated are hereby adopted and prescribed for each such district, subject to the provisions of this section, and, unless otherwise indicated, shall be deemed to be the minimum requirements in every instance of their application.

B. It is the intention that the uses set forth for each district shall not be permitted uses in any other district in the schedules, unless allowed specifically or by reference as permitted uses in said district.

C. Schedule of Use Regulations ~~for Residential Districts~~.^[1]

[1] Editor's Note: The Schedule of Use Regulations ~~for Residential Districts~~ is included as an attachment to this chapter.

D. Schedule of Dimensional Regulations ~~for Nonresidential Districts~~.^[2]

[2] Editor's Note: The Schedule of Dimensional Regulations ~~for Nonresidential Districts~~ is included as an attachment to this chapter.

E. Schedule of Regulations for Accessory Buildings on Residential Lots.^[3]

[3] Editor's Note: The Schedule of Regulations for Accessory Buildings on Residential Lots is included as an attachment to this chapter.

Section 6. Chapter 223 of the Code of the City of Beacon, Article III, Section 18, entitled “Special permit uses,” Subsection B is hereby amended as follows:

§ 223-18 Special permit uses.

...

B. Application for a special permit.

(1) Application for required special permits shall be made to the City Council or Planning Board as indicated in §223-17, Schedule of Use Regulations. If the approval authority is the City Council, the application shall be first submitted to the Planning Board as agent for the City Council, and the applicant shall appear before the Planning Board prior to appearing before the City Council. All application materials, including plans, shall be submitted in electronic file format acceptable to the Building Department, in addition to at least five paper copies (or such other format or amount as determined by the Building Department), at least two weeks prior to the regular Planning Board meeting at which it will be considered. The Planning Board shall, upon receiving ~~such an~~ application for the City Council, forward a copy of the application to the City Council for the Council's use in initiating the state environmental quality review process and for otherwise processing the application. The Planning Board shall render a report to the City Council on each such application, which report shall be rendered within 45 days of the date such application is received by the Board. Each report shall be submitted to both the Building Inspector and the City Engineer. The City Council or Planning Board shall conduct a public hearing within 62 days from the day on which a complete application is received. Public notice

of said hearing shall be provided by the applicant in accordance with § 223-61.3 of this chapter. The City Council or Planning Board shall decide upon the application within 62 days after the hearing, provided that the SEQR process has been concluded. The time in which the City Council or Planning Board must render its decision may be extended by mutual consent of the applicant and the ~~Board~~ approving authority. The City Council or Planning Board may authorize the issuance of a permit, provided that it shall find that all of the following conditions and standards have been met:

- (a) The location and size of the use, the nature, hours, and intensity of the operations involved in or conducted in connection with it, the size of the site in relation to it and the location of the site with respect to streets giving access to it are such that it will ~~be in harmony~~ not conflict with the appropriate and orderly development of the ~~district in which it is located~~ site and the existing permitted uses on adjacent blocks.
 - (b) The location, nature and height of buildings, walls and fences and the nature and extent of the landscaping on the site are such that the use will not conflict with the existing permitted uses on adjacent blocks and will not hinder or discourage the appropriate development use of adjacent land and buildings.
 - (c) Operations in connection with any special use will not be more objectionable to nearby properties by reason of noise, fumes, vibration or other characteristic in Article IV than would be the operations of any permitted use, not requiring a special permit.
 - (d) Parking areas will be of adequate size for the particular use and properly located and suitably screened from adjoining residential uses, ~~and~~ the entrance and exit drives shall be laid out so as to achieve maximum safety, and uses will not cause unreasonable traffic congestion or create a traffic hazard.
 - (e) Uses, buildings, and operations will be accessible for emergency services and appropriately located for water, sewer, and other infrastructure requirements.
 - (f) The use will comply with other regulations in the Code and will be compatible with the recommendations in the City's Comprehensive Plan and Local Waterfront Revitalization Program.
- (2) The decision of the City Council or Planning Board on the application, after the holding of the public hearing, shall be filed in the office of the City Clerk within five business days after such decision is rendered and a copy thereof mailed to the applicant.

Section 7. Chapter 223 of the Code of the City of Beacon, Article III, Section 20, entitled “Hotels” in its entirety is hereby renumbered as follows:

§ 223-14.1 Hotels.

Section 8. Chapter 223 of the Code of the City of Beacon, Article III, Section 20.1, entitled “Adult uses,” Subsection C is hereby amended as follows:

§ 223-20.1 Adult uses.

...

C. Location. Adult uses are to be restricted as to location in the following manner in addition to any other requirements of this code:

- (1) Adult uses shall not be located within a five-hundred-foot radius of the following zoning districts which permit residential development: R1-120, R1-80, R1-40, R1-20, R1-10, R1-7.5, R1-5, RD-7.5, RD-6, RD-5, RD-4, RD-3, RD-1.8, RD-1.7, ~~RMF-1.5 and RMF-8.~~ and Senior Affordable Housing Overlay District.
- (2) Adult uses shall not be located within a one-half-mile radius of another such use.
- (3) Adult uses shall not be located within a five-hundred-foot radius of the property lines of any school, church or other religious institution or place of religious worship, park, playground or playing field.
- (4) Adult uses shall not be located in or within 500 feet of any Historic District and Landmark Overlay Zone.

Section 9. Chapter 223 of the Code of the City of Beacon, Article III, Section 22, entitled “Nursing homes,” Subsection B is hereby amended as follows:

§ 223-22 Nursing homes.

...

B. Site.

- (1) In any R1-40 or R1-20 District, the minimum lot area shall be 40,000 square feet, plus 2,500 square feet for each additional resident person over 10 in number.
- (2) In any R1-10, R1-7.5, R1-5, RD-7.5, RD-6, RD-5, RD-4, RD-3, RD-1.8 or RD-1.7 District, the minimum lot area shall be 20,000 square feet, plus 1,500 square feet for each additional resident person over 10 in number.
- (3) ~~In any other district, where permitted~~ In any FCD, LI, or HI district, the minimum lot area shall be 10,000 square feet, plus 1,000 square feet for each additional resident person over 10 in number.

Section 10. Chapter 223 of the Code of the City of Beacon, Article III, Section 24.1, entitled “Accessory apartments,” Subsections D and F are hereby amended as follows:

§ 223-24.1 Accessory apartments.

...

D. Apartment size. The minimum floor area for an accessory apartment within a detached single-family dwelling shall be 400 square feet. The maximum floor area shall be 650 square feet, but in no case shall the floor area of the apartment exceed 30% of the total floor area of the dwelling building in which it is located. For an accessory apartment located in an accessory building, the minimum floor area shall ~~also~~ be 300 square feet, and the maximum shall be 600 square feet, except that the City Council Planning Board may permit a smaller or larger accessory apartment where appropriate in an existing accessory building constructed prior to August 1, 1989. There shall be no more than one accessory apartment permitted per single-family lot. However, in the case of a lot which contains an existing accessory building or buildings that comply with the minimum required setbacks required for a principal building in the zoning district in which the lot is located and that were constructed prior to August 1, 1989, one accessory apartment shall be permitted in each such accessory building in addition to the one permitted in the detached single-family dwelling; the area of such lot shall be at least 100% larger than the minimum lot area required in the district in which the lot is located for each accessory apartment in excess of the first one.

...

F. Off-street parking. A minimum of ~~two~~ one off-street parking spaces shall be provided for each accessory apartment in addition to the off-street parking required for other uses existing on the lot.

...

Section 11. Chapter 223 of the Code of the City of Beacon, Article III, Section 24.3, entitled “Artist live/work spaces” is hereby renumbered in its entirety as follows:

§ 223-14.2 Artist live/work spaces.

Section 12. Chapter 223 of the Code of the City of Beacon, Article III, Section 24.5, entitled “Wireless telecommunications services facilities,” Subsection H(3) is hereby amended as follows:

§ 223-24.5 Wireless telecommunications services facilities.

...

H. Location and access

(3) Applications for all non-small cell wireless facilities shall locate, site and erect said facility in accordance with the following priorities, Subsection H(3)(a) being the highest priority and Subsection H(3)(g) being the lowest priority:

- (a) Collocation on existing wireless telecommunication services facilities on lands owned or controlled by the City.
- (b) Collocation on a site with existing wireless telecommunication services facilities in the City.

- (c) On sites, buildings and structures located in the HI and LI Zoning Districts.
- (d) On sites, buildings and structures in the ~~PB, OB, LB~~ and GB Zoning Districts.
- (e) On sites, buildings and structures in the L, T, and CMS Zoning Districts.
- (f) On sites, buildings and structures in Residential Zoning Districts.
- (g) On sites, buildings and structures in the FCD, WD, WP, or Historic District and Landmark Overlay Zone.

Section 13. Chapter 223 of the Code of the City of Beacon, Article III, Section 24.6, entitled “Artist studio as an accessory special permit use” is deleted in its entirety.

Section 14. Chapter 223 of the Code of the City of Beacon, Article III, Section 223-24.7, entitled “Uses permitted by special permit in the Historic District and Landmark Overlay Zone” is hereby amended as follows:

§ 223-24.7 Uses permitted by special permit in the Historic District and Landmark Overlay Zone.

The following uses may be permitted by special permit, issued by the City Council, in the Historic District and Landmark Overlay Zone:

- A. Specialized business uses of low traffic volume, normally associated with history, the arts or cultural uses, appropriate to the structure and compatible with the neighborhood. Such uses may include:
 - (1) Artists' or artisans' studios.
 - (2) Antique shops.
 - (3) Rare book, coin or stamp shops or similar type uses as determined by the City Council.
- B. Residential, hotel, or professional uses, provided that they are appropriate to the structure, compatible with the neighborhood and are located on a road that can accommodate increased traffic as determined by the City Council. These uses may include the following:
 - (1) Sit-down restaurants not to exceed a seating capacity of 50.
 - (2) Bed-and-breakfast establishments not to exceed 10 guest bedrooms, subject to the requirements of § 223-24.4B, C and E.
 - (3) Professional offices not to exceed 10 employees.

(4) Multifamily residential use not to exceed four units.

(5) Artist live/work spaces not to exceed four units.

(6) Hotel and hotel-related accessory uses and structures with adequate screening of any new structures from surrounding public street views.

C. Special permits warranted under certain conditions.

(1) Notwithstanding the limitations in Subsection B above, and with the exception of Subsection B(2), the City Council may approve a special permit for any of the uses listed in said section, and may allow a larger number of seats, employees, dwelling units, or artist live/work spaces, when it determines that such larger number is warranted by one or more of the following:

(a) Building(s) size.

(b) Building(s) configuration.

(c) The nature of the proposed preservation and/or adaptive reuse of the building(s).

(d) The historic nature and context of the building(s) and the need for preservation and/or adaptive reuse.

(2) In approving any such special permit, the City Council shall establish such limitations on the number of seats, employees, dwelling units, ~~or~~ artist live/work spaces, or accessory uses and structures, as the case may be, as it deems warranted.

Section 15. Chapter 223 of the Code of the City of Beacon, Article III, Section 26, entitled “Off-street parking, loading, and vehicular access,” Subsections C, E and F are hereby amended as follows:

§ 223-26 Off-street parking, loading, and vehicular access.

...

C. Location, use, design, construction and maintenance.

(1) Location. The off-street parking facilities which are required by this section shall be provided on the same lot or premises with such structure or land use; except that off-street parking spaces required for structures or land uses on two or more adjoining lots may be provided in a single common facility on one or more of said lots, provided that a binding agreement, in a form approved by the Corporation Counsel, assuring the continued operation of said parking facility during the life of the structure or the land use the parking is designed to serve, is filed on the land records prior to approval of the plans for said parking facility. In any residence district, no off-street parking facility shall be developed in any required front yard or in any required side or rear yard adjacent to a street line or in any other side or rear yard within five

feet of the lot line. However, off-street parking spaces shall be permitted in residential districts as indicated in § 223-17C.

(2) Parking specifications.

- (a) Each parking space provided in an unenclosed area shall be at least nine feet wide and at least 18 feet long, except that the Planning Board, in approving a plan under § 223-25, may permit that portion of the total required parking which is specifically set aside for and limited to employee parking to have a width of at least 8 1/2 feet and a depth of at least 18 feet. This possible exception shall not be permitted in the ~~EB~~ CMS District.
- (b) Each parking space which is bordered by walls or columns on two or more sides shall be not less than 10 feet wide nor less than 18 feet long. Enclosed or garaged parking areas shall not contain any columns, walls or other obstacles which would prevent or obstruct the use of any parking space.
- (c) The maneuvering area needed to permit parked vehicles to enter and exit off-street parking spaces shall have a width of at least 24 feet, except where the Planning Board approves a lesser distance as adequate for areas with parallel or angled parking spaces.

(3) Landscaping. Except for parking spaces accessory to a one-family dwelling, all off-street parking areas shall be landscaped with appropriate trees, shrubs and other plant materials and ground cover, as approved by the Planning Board based upon consideration of the adequacy of the proposed landscaping to assure the establishment of a safe, convenient and attractive parking facility with a minimum amount of maintenance, including plant care, snowplowing and the removal of leaves and other debris. At least one tree with a minimum caliper of three inches at a height of four feet above ground level shall be provided within such parking area for each 10 parking spaces.

- (a) Wherever possible, planting islands, at least eight feet in width, shall be provided to guide vehicle movement and to separate opposing rows of parking spaces so as to provide adequate space for plant growth, pedestrian circulation and vehicle overhang. Such planting islands and the landscaping within them shall be designed and arranged in such a way as to provide vertical definition to major traffic circulation aisles, entrances and exits, to channel internal traffic flow and prevent indiscriminate diagonal movement of vehicles and to provide relief from the visual monotony and shadeless expanse of a large parking area.
- (b) The Planning Board may require curbing to facilitate surface drainage and prevent vehicles from overlapping sidewalks and damaging landscaping materials.
- (c) No obstruction to driver vision shall be erected or maintained on any lot within the triangle formed by the street line of such lot, the outer edge of the access driveway to the parking area and a line drawn between points along such street line and access drive 30 feet distant from their point of intersection.

(4) Grades, drainage, paving and marking. All proposed and required parking facilities, regardless of size, shall be graded, surfaced, drained and maintained throughout the duration of their use so as to comply with the New York State Stormwater Management Design Manual, as amended

from time to time, and/or Chapter 190, Stormwater Management and Erosion and Sediment Control, of this Code, or other acceptable stormwater management practice(s), as deemed suitable to the City Engineer to the extent necessary to avoid nuisances of dust, erosion or excessive water flow across public ways or adjacent lands. The drainage analysis for said parking facilities shall include pre- and post-development conditions as well as remediation and/or mitigation of stormwater runoff. The maximum slope within a parking area shall not exceed 5%. In RD ~~and RMF~~ Districts and in nonresidential developments, the Planning Board shall require the provision of suitable markings to indicate individual parking spaces, maneuvering area, entrances and exits.

- (5) Traffic circulation. In order to encourage safe and convenient traffic circulation, the Planning Board may require the interconnection of parking areas via access drives within and between adjacent lots. The Board shall require written assurance and/or deed restrictions, satisfactory to the Corporation Counsel, binding the owner and his heirs and assignees to permit and maintain such internal access and circulation and inter-use of parking facilities.
- (6) Two or more uses on same lot. Where two or more different uses occur on a single lot, the total amount of parking facilities to be provided shall be the sum of the requirements of each individual use on the lot, except that the Planning Board may approve the joint use of parking space by two or more establishments on the same lot or on contiguous lots, the total capacity of which is less than the sum of the spaces required for each, provided that said Board finds that the capacity to be provided will substantially meet the intent of this article by reason of variation in the probable time of maximum use by patrons or employees at such establishments and provided that such approval of such joint use shall be automatically terminated upon a change of use at any such establishment.
- (7) Designed residence and multifamily residence districts.
 - (a) In RD ~~and RMF~~ Districts, in order that some of the required parking spaces may be convenient for use by visitors as well as by occupants, 2/3 of the required car spaces for a residential building shall, whenever possible, be directly accessible to a main entrance to that building and within 100 feet of that entrance.
 - (b) In RD ~~or RMF~~ Districts, off-street parking lots shall be located behind, underneath, or to the side of the building, whenever possible. Any parking to the side of the building shall be screened from street views by a low wall, hedge, fence, and/or other landscaping and, whenever possible, it shall be located at least 40 feet from any property line that fronts on a street.

...

- E. Waiver of improvement. Except within ~~the Central Business District and~~ the Central Main Street District, and notwithstanding any other provision of this chapter, the City Council or Planning Board, in reviewing plans submitted in accordance with the provisions of this section or § 223-18 or 223-25, may waive the initial improvement of up to 50% of the required off-street parking spaces, provided that all of the required spaces are shown on the proposed plan and further provided that suitable agreements, satisfactory to the City Council or Planning Board, are obtained

assuring the City that the property owner(s) will be responsible for the construction of such waived spaces, or any portion thereof, within six months of the date such spaces may be deemed necessary by the City Council or Planning Board.

F. Schedule of Off-Street Parking Requirements. Off-street parking spaces shall be provided as follows, except that the Board of Appeals may modify these provisions as a condition of the issuance of a special permit according to the provisions of § 223-19.

| | |
|---|---|
| 1- and 2-family dwelling | 2 spaces for each dwelling unit |
| Multifamily dwelling and/or apartment or artist live/work space | 1 space for each dwelling unit, plus 1/4 space for each bedroom, plus 1/2 space for each live/work space containing retail area |
| Professional <u>home</u> office or home occupation permitted in a residential district | 2 spaces in addition to spaces required for the residential use, except that there shall be 4 spaces for each medical or dental practitioner in addition to spaces required for the residential use |
| Bed-and-breakfast establishment, rooming house or boardinghouse | 1 space for each guest sleeping room, plus 2 spaces for the dwelling unit, plus 1 space for each nonresident employee |
| Hotel <u>or inn</u> | Subject to § 223- 20L <u>14.1 C</u> |
| Place of worship, theater, auditorium, athletic field or other place of assembly | 1 space for each 4 seats or pew spaces or, in places or, in places without seats, 1 space for each 100 square feet of floor space used for public assembly |
| Nursery school or day-care center | 1 per employee plus 1 per classroom |
| Primary or secondary school | 1 per employee plus 1 per 5 students in the 11th grade or above, or 1 per 4 assembly seats, whichever is greater |
| Dance, art, tutorial, martial arts or similar instructional school | 1 space for each 150 square feet of gross floor space |
| Hospital, nursing home, convalescent home or home for the aged | 1 space for each 3 resident persons, plus space for each employee, including medical, nursing and service staff employed at the same time when the building is operating at full capacity |
| Golf and country club | 1 space for each 2 memberships |
| Bowling alley or other place of <u>indoor</u> commercial recreation or public amusement | 5 spaces for each bowling lane; all others, 1 space for each 4 persons of maximum occupancy or 1 space for each 200 square feet of gross floor area, whichever is greater |
| Retail or service business, including auction gallery | 1 space for each 200 square feet of gross floor area, excluding utility areas |
| Restaurant or coffee house | 1 space for each 3 patron seats or 1 space for each 150 square feet of gross floor area, |

| | |
|---|--|
| Office for business or professional use (other than accessory to residential use) | excluding kitchen and storage areas, whichever is greater |
| Banking office | 1 space for each 200 square feet of gross floor area, excluding utility areas |
| Funeral parlor <u>home</u> or under-taking establishment | 1 space for each 200 square feet of gross floor area, excluding utility areas |
| Motor vehicle sales and service | 10 spaces per establishment, plus 1 space per employee |
| Veterinary office <u>Animal care facility</u> | 1 space per employee, plus 1 space per 150 square feet of gross floor space |
| Car washing establishment | 1 space per employee, plus 1 space per 300 square feet of gross floor space |
| Research or development laboratory | Subject to § 223-21F |
| Manufacturing or industrial use | 1 space per employee, but not less than 1 space per 600 square feet of gross floor space |
| Wholesale, storage, utility or other similar commercial use | 1 space per 2 employees but not less than 1 space per 400 square feet of gross floor space |
| Senior citizen-use <u>housing</u> | 1 space per employee but not less than 1 space per 1,000 square feet of gross floor space |
| Museums in LI and/or LB Zone located within walking distance (3,000 feet) of entrance to train station | 2 spaces for each 3 dwelling units |
| Artist studio | 1 parking space per 3,000 feet of gross floor space |
| Art gallery/exhibit space | 1 space for each 500 square feet of gross floor space |
| Bar or brew pub | 1 space for each 250 square feet of gross floor area |
| Microbrewery or microdistillery | 1 space for each 3 patron seats or 1 space for each 50 square feet of gross floor area, excluding kitchen and storage areas, whichever is greater |
| Museum | 1 space for each employee on the largest shift, plus 1 space for each 3 patron sitting or standing spaces in any tasting room or other visitor facility open to the general public |
| Other uses not listed | 1 space for each 300 square feet of gross floor area |
| | Off-street parking requirements for types of uses which do not fall within the categories listed above shall be determined by the Planning Board upon consideration of relevant factors entering into the parking needs of each such use |

(1) Notwithstanding § 223-26F above, with respect to lots which, on the effective date of this section, are located wholly or partially within 2,500 feet of the train station platform, the City

Council shall have the authority to limit the amount of parking to be provided for multifamily and nonresidential development projects on said lots having a parking requirement in accordance with § 223-26F of 25 spaces or more, in the interest of appropriately and reasonably minimizing the environmental impact of the project's vehicular traffic accessing the train station. In such cases, the City Council shall ensure that convenient pedestrian access is provided by the project, or is otherwise available between the project and the train station. Where a substantial change in elevation exists between the project and the train station, the City Council may require the project to provide, if deemed feasible by the Council, an elevator, escalator, stairs and/or other similar pedestrian conveyance or access for such purpose.

...

Section 16. Chapter 223 of the Code of the City of Beacon, Article III, Section 26.2, entitled “Tattoo parlors” is deleted in its entirety.

Section 17. Chapter 223 of the Code of the City of Beacon, Article III, Section 26.3, entitled “Retail sales from a truck or trailer” is deleted in its entirety.

Section 18. Chapter 223 of the Code of the City of Beacon, Article IVA, Section 41.4, entitled “Waterfront Development (WD) Zone,” Subsections B, C, G(2), G(6), H, J(7) and J(11)(b) are hereby amended as follows:

§ 223-41.4 Waterfront Development (WD) Zone.

...

B. Permitted principal uses. Permitted principal uses shall be as follows:

- (1) Any principal use permitted in the WP Zone.
- (2) Residential multifamily ~~and/or attached~~ dwelling units.
- (3) Convenience retail and personal service shops designed to serve the needs of area residents and commuters.
- (4) Restaurants, bars or brew pubs.
- (5) Inns, hotels, fitness centers, spas ~~and~~ or day care centers.
- (6) Art, craft or fine arts galleries.
- (7) ~~Professional or small business offices in a mixed-use buildings, and not to exceed 40% of the total floor area in a mixed-use buildings~~ Office. The Planning Board may limit the extent of office uses on the first floor, depending on the building location within the overall development.

- (8) Professional, small business and service facilities in the lower floors of a multistory residential buildings.
- (9) Artist live/work spaces.
- (10) Public square, plaza, promenade or pocket park.
- (11) Public or semipublic use; live theater, concert hall, museum or meeting room suitable for social, civic, cultural or education activity.
- (12) Conference space or conference center.
- (13) Microbrewery or microdistillery
- (14) Other use similar to the above uses as determined by resolution of the City Council.

C. Special permit uses. The following uses may require a special permit ~~from the Planning Board, pursuant to the provisions set forth in Subsection F:~~

- (1) ~~Public or semipublic uses; live theaters, concert halls, museums or meeting rooms suitable for social, civic, cultural or education activities~~ Wireless telecommunication services facility, subject to §223-24.5.
- ~~(2) Conference centers. Small cell wireless telecommunications facility, subject to §223-26.4.~~
- ~~(3) Other uses similar to the above uses as determined by resolution of the City Council.~~

...

G. Procedure for special permit and waterfront development concept plan review.

- (2) Planning Board review of special permit and waterfront development concept plan application.
 - (a) Environmental compliance.
 - [1] The approval of a waterfront development project is an action under the State Environmental Quality Review Act, and all proceedings to review such project shall comply with applicable requirements of SEQR.
 - [2] Upon receipt of an application for a special permit and waterfront development concept plan, the Planning Board shall commence a coordinated review under SEQR and institute lead agency procedures after identifying all involved and interested agencies, as provided by law.
 - [3] Because any waterfront development will constitute an important element in the implementation of the City's Local Waterfront Revitalization Plan, the preparation of a Draft Environmental Impact Statement shall be required by the lead agency. Such DEIS shall comply with all requirements of law. To the extent possible in accordance with law, the DEIS submitted in connection with the special permit and waterfront development

concept plan approval shall be sufficiently specific so as to eliminate the need for additional and/or supplemental DEIS's during the site plan stage of the approval process.

[4] To the extent possible in accordance with law, the preparation of the DEIS shall be integrated into the existing agency review processes and should occur at the same time as the other agency reviews, including the special permit and waterfront development concept plan review. When a SEQR hearing is to be held, it should be conducted jointly with other public hearings on the proposed action, whenever practicable.

[5] Notwithstanding Subsection ~~F~~G(2)(a)[1] through [4] immediately above, where a waterfront development project includes a phase (or phases) comprised solely of uses permitted in the Waterfront Park District, and where a lead agency has been established and has scoped a DEIS for the overall waterfront development project, said phase (or phases) may be segmented for the purposes of environmental review in accordance with the provisions of SEQR. In such case, the lead agency shall require the preparation of a full environmental assessment form (EAF) for its use in rendering a determination of significance regarding said phase(s). Further, the lead agency shall notify all involved and interested agencies that the phase(s) will be segmented and shall send a copy of the EAF with said notification.

(b) Special permit approval. The Planning Board may authorize the issuance of a special permit for a waterfront development project, provided that it shall find that the following conditions and standards have been met:

[1] The proposed waterfront development project will fulfill the purposes of the waterfront development zone.

[2] The proposed waterfront development project meets the Waterfront Development Design Standards set forth in § 223-41.4], to the extent applicable at the special permit stage.

[3] The proposed waterfront development project will be in harmony with the appropriate and orderly development of the City's waterfront area.

[4] The proposed waterfront development project will not hinder or discourage the appropriate development and use of adjacent lands.

[5] The proposed land uses will be in accordance with the approved waterfront development concept plan.

[6] The proposed waterfront development uses meet the standards of § 223-41.4B.

[7] The proposed project is otherwise in the public interest.

(c) Conditions. In approving any waterfront development concept plan and special permit, the Planning Board may attach such conditions, safeguards and mitigation measures as it deems

necessary or appropriate to assure continual conformance to all applicable standards and requirements and to fulfill the intent and purposes of this law.

...

- (6) Processing of phases comprised of Waterfront Park District uses. Notwithstanding other provisions of the waterfront development review and approval process, where a waterfront development project includes a phase (or phases) comprised solely of uses permitted in the Waterfront Park District, the Planning Board may process and grant special permit approval to said phase(s) in advance of the complete processing of the overall project so long as the SEQR process has been complied with in accordance with the provisions of § 223-41.4 ~~F(2)(a)~~^G [5] herein; said phase is an integral part of an appropriate waterfront development concept plan, as determined by the Planning Board; and the overall review and approval process for waterfront development special permits as outlined herein, including all referrals and hearings, has been complied with for said phase(s). After the granting of special permit approval, said phase(s) may proceed to site development plan review and approval for said phase(s) in accordance with Subsection H immediately below.

H. Site development plan review. After approval of the waterfront development special permit the Planning Board may grant site plan approval to a waterfront development project.

- (1) Application for site plan approval. The application for site development plan approval shall contain all the material set forth in § 223-25B of this Zoning Ordinance. In addition, the applicant shall submit the following:

- (a) Information to establish that the proposed site plan meets the waterfront development standards set forth in Subsection ~~H~~^I ~~J~~.
- (b) Information to establish that the proposed site plan is in substantial conformance with the approved waterfront development concept plan.
- (c) Preliminary elevations showing the general architectural and design treatment of all buildings, public and open spaces and other site plan elements.
- (d) Information to establish the relationship of the proposed project to later elements of the development of the site, including any other adjacent and nearby lands that are not part of the applicant's planned waterfront development projects.
- (e) Such other information as the Planning Board may reasonably require in order to evaluate the site plan application.
- (f) Application fees as may be required pursuant to Subsection ~~F~~^E ~~F~~.

- (2) Planning Board review of site plan.

- (a) The Planning Board shall conduct a detailed review of the adequacy, location, arrangement, design and appearance of each aspect of the proposed development. While the scope of the Planning Board's review of the site plan will generally relate to the

waterfront project at issue, the Planning Board shall have the authority to assure that aspects of the overall development of the site (e.g., stormwater management, domestic water and fire protection, sanitary sewer, all utilities, streets, etc.) shall be adequate to suit the purposes and needs of the entire ~~peninsula~~ waterfront area, as it is finally developed.

- (b) In acting on any site development plan application, the Planning Board shall take into consideration any approved special permits and waterfront development concept plans, the proposed design and layout of the entire waterfront area, including the proposed location, height and buffer of buildings, traffic circulation within and without the site, provision of off-street parking, exterior lighting, display of signs, landscaping, buffer areas and open spaces and architecture and design, so that any development will have a harmonious relationship with the existing or permitted development of contiguous land and of adjacent neighborhoods, and so that pedestrian and vehicular traffic will be handled adequately and safely within the site and in relation to the adjoining street system. Particularly, the Planning Board shall assure that the proposed site plan meets the waterfront development standards set forth in Subsection ~~H~~ I.
 - (c) The proposed site development plan shall be in general conformance with the waterfront development concept plan. While the waterfront development concept plan approval will approve a general layout on the site, the individual site plans for particular waterfront development projects will provide detailed building envelopes, elevations and site design details regarding proposals for various projects within the site. The Planning Board may exercise its discretion in allowing minor variations from the waterfront development concept plan so long as the site plan is, in the Planning Board's judgment, generally in keeping with the waterfront development concept plan. In no case, however, shall the Planning Board have the authority to approve a total number of dwelling units or total density in the waterfront development which exceeds the number approved as part of the special permit and waterfront development concept plan. Nor shall the Planning Board have the authority to approve the total square footage of nonresidential space above that approved in the special permit.
- (3) Time period for construction. At the time of approving the site plan, the Planning Board may set forth the time period in which construction is to begin and be completed. The Planning Board may, in its discretion, extend any time period it has previously set where it finds that changing market conditions or other circumstances have acted to prevent the timely commencement or completion of work, and that the developer has proceeded with reasonable diligence in an effort to assure completion of the work within the permitted time period. The extension of these time periods shall not require the holding of a new public hearing.
 - (4) Adjustments to site plan during construction. During the construction of an approved site plan, the Building Inspector or the City Engineer may authorize minor adjustments to the approved plans which are consistent with the overall approved site plan, when such adjustments appear necessary in the light of technical or engineering considerations which develop during actual construction, or when such adjustments are required in order to comply with law, rules or regulations made applicable to the subject property by any agency or instrumentality of the United States, New York State, Dutchess County or City government. The Building Inspector or City Engineer may, in his discretion, refer any such proposed change to the Planning Board

for review. The Planning Board may determine to treat the modification as a minor site plan adjustment under this section or to treat it as a site plan amendment under Subsection G(5). If treated as a minor site plan adjustment, the Planning Board may authorize the Engineer or Building Inspector to approve the requested change.

- (5) Site plan amendments. If the Planning Board determines that the character of the proposed changes requires a site plan amendment, the Planning Board shall process the application as an amended site plan under this Subsection G(5) and shall have discretion to determine the extent of further environmental analysis and project review that is required. After appropriate review, the Planning Board shall approve the site plan amendment by resolution.

J. Development standards for Waterfront Development District. It is essential that development in this district meet the following development standards:

...

- (7) Lighting. Streets, drives, walks and other outdoor areas shall be properly lighted to promote safety and encourage pedestrian use. All exterior lighting for the project shall be directed downward or otherwise appropriately shielded and designed to minimize excessive light. It shall have an attractive appearance compatible with the overall project design and waterfront character. Lighting type, number and locations shall be subject to Planning Board review and approval as part of the site plan review.

- (a) Lighting fixtures shall be a maximum of 15 feet in height, except pole lights in rear parking lots shall be a maximum of 20 feet high. ~~Lighting shall be energy efficient, have full spectrum color quality, and shall prevent any lighting above 60 watts that directly projects above the horizontal level into the night sky.~~

- (b) All exterior lighting shall comply with the standards in §223-14B.

...

- (11) Off-street parking and loading.

- (b) Parking requirements.

- [1] Multifamily dwelling: one space per unit.

- [2] Retail or service business: one space for each 333 square feet of gross floor, excluding basement storage utility areas.

- [3] Restaurant: one space for each ~~two~~ three patron seats or one space for each 300 square feet of gross floor area, excluding kitchen and storage areas, whichever is greater.

- [4] Office for business or professional use: one space for each ~~350~~ 400 square feet of gross floor area.

[5] Hotel: 0.75 space for each hotel guest room.

Section 19. Chapter 223 of the Code of the City of Beacon, Article IVA, Waterfront Zones, Section 41.6, entitled “Bulk regulations applicable to Waterfront Park Zone” is hereby amended as follows:

§ 223-41.6 Bulk regulations applicable to Waterfront Park Zone.

A. Minimum lot size: one acre. (NOTE: The minimum lot size shall be two acres for those uses requiring a special permit from the City Council.)

B. Maximum building coverage: 20%.

~~C. Maximum floor area ratio: 0.5.~~

~~D. C.~~ Minimum building setback from mean high water line: 10 feet.

~~E. D.~~ Maximum building height: 2 1/2 stories/35 feet. (NOTE: All habitable stories must be elevated above the one-hundred- year floodplain. The area below the elevated first habitable story may, but need not, be used for parking. When story heights are provided in these regulations, they are deemed to be habitable or occupiable stories over a parking level or as otherwise elevated above the one-hundred-year floodplain. A basement level used only for parking and not used for business purposes shall not be counted as a story.)

Section 20. Chapter 223 of the Code of the City of Beacon, Article IVA, Waterfront Zones, Section 41.7, entitled “Bulk regulations applicable to Waterfront Development Zone” is hereby amended as follows:

§ 223-41.7 Bulk regulations applicable to Waterfront Development Zone.

A. Minimum site size: five acres.

B. Maximum height.

(1) Area north of West Main Street (see illustration [1]): Average of four stories of residential/mixed use over parking. Height may not exceed average of 75 feet from average ground level of the existing Metro-North parking.

[1] Editor's Note: Said illustration is included as an attachment to this chapter.

(2) Area south of Light Industry (LI) zone (see illustration [2]): Average of three stories of residential/mixed use over parking. Height may not exceed average of 32 feet at Beekman Street, nor more than average of 70 feet above the average ground level of the existing Metro-North parking.

[2] Editor's Note: Said illustration is included as an attachment to this chapter.

(3) The illustrations of height attached in this subsection shall not be exceeded so that the public views to the east are adequately protected.

~~C. Maximum floor area ratio (excluding parking):~~

~~(1) Area north of West Main Street: 3.0.~~

~~(2) Area south of Light Industry (LI) zone: 2.0.~~

~~D C.~~ Minimum open space: 15% of the site area, 10% of which must be publicly accessible.

Section 21. Chapter 223 of the Code of the City of Beacon, Article IVC, Fishkill Creek Development (FCD) District, Section 41.12, entitled “Purposes,” is hereby amended as follows:

§ 223-41.12 Purposes.

Purposes of the Fishkill Creek Development (FCD) District are to:

- A. Encourage the development and/or redevelopment of undeveloped or underutilized industrial properties along the Fishkill Creek in a manner that provides a mix of residential and nonresidential uses. Properties in this category are generally more remote from the Central ~~Business~~ Main Street District, but offer larger sites for a flexible range of compatible nonresidential uses.
- B. Establish and preserve open space corridors along Fishkill Creek and the Hudson River, and seek open space linkages to the large areas of open space in the Hudson Highlands on the slopes of Mount Beacon.
- C. Continue to develop greenways along the Hudson River and Fishkill Creek for public recreation, and provide linkages to trails towards the Hudson Highlands and the slopes of Mount Beacon. Improve boat access to Fishkill Creek and the Hudson River. Determine the future use of the railroad tracks along Fishkill Creek for vehicles capable of utilizing the tracks or for a bicycle and pedestrian path, and implement the decision.

Section 22. Chapter 223 of the Code of the City of Beacon, Article IVC, Fishkill Creek Development (FCD) District, Section 41.13, entitled “Uses; plan review; design standards,” Subsections B, C, and I(7) are hereby amended as follows:

§ 223-41.13 Uses; plan review; design standards.

...

B. Principal uses permitted. A Fishkill Creek development may be a single use, or a mixed use which incorporates various permitted land use elements as part of a comprehensive development plan. These elements may include:

- (1) Apartment, attached ~~and or~~ multifamily dwellings.
- (2) Artist live/work spaces, artist studios ~~and or~~ workshops of artisans.
- (3) Bed-and-breakfast establishments ~~and or~~ inns.
- (4) Spas, fitness centers~~/~~, noncommercial swimming pools, exercise studios, day-care centers, ~~and or~~ similar uses as determined by resolution of the City Council. Such uses shall be permitted in buildings that face a streets.
- (5) Restaurants, bar, brew pub, and or other eating and drinking establishments. Such restaurants and other eating and drinking establishments shall be permitted in buildings that face a streets. No such individual ~~restaurant~~ use shall contain more than 5,000 square feet of gross floor area.
- (6) Professional and business offices in buildings that face a streets.
- (7) Galleries~~y~~, exhibit spaces ~~and or~~ museums.
- (8) Community facilities~~y~~ that complements residential and commercial uses, such as a public or semipublic performance and cultural centers, live theaters, concert halls, meeting rooms suitable for social, civic, cultural or education activities, bandshells, kiosks ~~and or~~ gazebos.
- (9) Assembly, manufacturing, workshop, and or other light industrial uses, as determined by the City Council, in a fully enclosed buildings and not including any form of outdoor storage.
- (10) Day care center.
- (11) Trade school or training program, college, private school, or nursery school.
- (12) ~~(10)~~ Other nonresidential uses similar to the above uses as determined by resolution of the City Council.

C. Permitted accessory uses. Permitted accessory uses may include:

- (1) Uses which are clearly incidental to, and customarily found in connection with, the permitted principal uses. Exterior display of goods on special event days/weeks may be permitted, subject to the issuance of a permit by the City. Exterior storage is not allowed. Outdoor seating for restaurants and pedestrian-oriented accessory uses, such as flower, food or drink stands, are permitted.
- (2) Parking and bicycle facilities~~y~~, including parking structures.
- (3) Solar collector, roof garden, or greenhouse.

...

I. Fishkill Creek Development design standards.

- (7) Lighting. A comprehensive lighting plan with photometric measurements and fixture specifications shall be submitted for the project. Streets, drives, walks and other outdoor areas shall be properly lighted to promote safety and encourage pedestrian use.
 - (a) Lighting fixtures shall be a maximum of 15 feet in height, except pole lights in parking lots shall be a maximum of 20 feet high.
 - (b) ~~Lighting shall be energy efficient, have full spectrum color quality, and, except for short-term event lighting, shall use full cut-off fixtures to prevent any lighting that directly projects above the horizontal level into the night sky. All exterior lighting shall comply with the standards in §223-14B.~~

Section 23. Chapter 223 of Code of the City of Beacon, Article IVD, Central Main Street (CMS) District, Section 41.18, entitled “Regulations,” Subsections A, B, C, G(1), J(13), J(16) are hereby amended as follows:

§ 223-41.18 Regulations.

A. Uses by right. The uses listed below are permitted by right in the CMS District, in the manner and under the conditions specified below. Unless otherwise indicated in this § 223-41.18, all such uses require site plan review and approval. Site plan review shall not be required for a change of use in an existing building where the new use is allowed by right, the building will not be expanded, and the minimum number of off-street parking spaces required for the new use in § 223-41.18G(2) is not more than 25% greater than the requirement for the existing use in § 223-26F herein.

- (1) Apartments, provided that for parcels fronting on Main Street or East Main Street they shall only be located on upper stories or at least 50 feet behind the facade in the rear portion of a ground floor. ~~The nonconforming residential uses on Main Street in § 223-10H shall not apply in the CMS District.~~
- (2) ~~One-family, two-family, attached, and~~ Multifamily dwellings, provided that for parcels fronting on Main Street or East Main Street such uses are not permitted on the ground floor in the first 50 feet from the facade.
- (3) Hotel, subject to § 223- ~~20 14.1; or~~ inn, ~~or bed and breakfast establishment, subject to § 223-24.4.~~
- (4) Offices of any kind, including professional, medical, business, ~~and~~ banks or other financial institutions.
- (5) Artist studio.
- (6) Art gallery or exhibit space.
- (7) Restaurant, coffee house, brew pub, bar, and or other establishments that serves food with or without alcoholic beverages, ~~and are not a bar.~~

~~(8) Food preparation business.~~

~~(8) (9) Retail and or personal services.~~

~~(10) Funeral home.~~

~~(11) Off-street parking facilities, provided that they are set back at least 40 feet from the Main Street or East Main Street property line and screened from the street by buildings and/or landscaping.~~

~~(12) Public garage, as defined in this chapter, without motor vehicle repair, vehicle sales, or fuel sales, provided that it is set back at least 40 feet and screened from the street by buildings and/or landscaping.~~

~~(9) (13) School, public or not-for-profit educational institution, college or university, trade or vocational school, job placement or training program, continuing education program or instructional school such as karate school, dance school or studio, language school or vehicular driving school, but not an elementary or nursery school.~~

~~(10) (14) Indoor commercial recreation.~~

~~(11) (15) Park, plaza, green, preserve, or community garden, and other forms of outdoor plant cultivation.~~

~~(12) (16) Artist live/work space subject to § 223-24.3, provided that they may only be located on upper stories or at least 50 feet behind the facade, in the rear portion of a ground floor, along Main Street or East Main Street, unless the space in the 50 feet behind the facade is used for the retail sale of the artist's wares.~~

~~(13) (17) Theater, museum, library, concert hall and other music venues, and other similar kinds of cultural facilities.~~

~~(18) Auction gallery.~~

~~(19) Wireless telecommunications services facilities, provided that they are consistent with § 223-24.5 and, if mounted on a building, they do not increase its height by more than 15 feet above applicable height limits.~~

~~(15) (20) Government facilities, including buildings, structures and uses owned or operated by the City of Beacon or any department or agency thereof.~~

~~(16) (21) Spa, health club, gym, yoga and pilates studio, and similar kinds of fitness centers.~~

~~(17) (22) Microbrewery or microdistillery, which has a retail or tasting room component of at least 200 square feet of floor area.~~

~~(23) Retail sales from a truck or trailer, subject to § 223-26.3.~~

~~(18) (24) Workshop for the making or repair of clocks, watches, jewelry, musical instruments or similar artisan workshops, having a retail component of at least 200 square feet.~~

~~(25) Tattoo parlor, subject to § 223-26.2.~~

~~(19) (26) Club, civic or fraternal, subject to § 223-24.2, provided that for parcels fronting on Main Street or East Main Street such uses are not permitted on the ground floor in the first 50 feet from the facade.~~

B. Uses by special permit.

(1) The following uses are allowed by special permit from the City Council or Planning Board as indicated in §223-17, upon a finding that the proposed use is consistent with the City of Beacon Comprehensive Plan Update, will enhance the architectural character of the street and will benefit the urban, pedestrian-friendly qualities of Main Street and East Main Street, and that the conditions and standards in § 223-18B(1)(a) through ~~(d) (f)~~ have been met:

~~(a) Food preparation business. A public garage, as defined in this chapter, containing facilities used for repair of motor vehicles, but not for the sales of motor fuel. Such repair facilities shall not front on or be visible from Main Street or East Main Street.~~

~~(b) Off-street parking lot or parking structure as principal uses, in accordance with § 223-41.18G. A bar in which the primary product is alcoholic beverages and food service is incidental. Any establishment that serves alcoholic beverages and is open later than 1:00 a.m. on any night shall be presumed to be a bar for purposes of this section.~~

~~(c) Wireless telecommunications facilities, subject to §223-24.5 and §223-26.4, provided that if mounted on a building, it does not increase its height by more than 15 feet above applicable height limits.~~

~~(d) Historic District or Landmark Overlay use, subject to §223-24.7.~~

(2) In considering the appropriateness of the proposed use, the City Council or Planning Board shall consider impacts on shadows, traffic, and parking and may impose traffic and parking mitigation measures. When making a decision on a special permit, the City Council or Planning Board shall follow the regulations in § 223-18 of this chapter.

C. Accessory uses. The following are permitted accessory uses in the CMS District:

(1) Any accessory building or use customarily incident to a permitted use, except outside storage.

(2) Signs, in accordance with the provisions of § 223-15, as applicable.

(3) Off-street parking areas or parking structure, in accordance with § 223-41.18G.

(4) Exterior lighting, in accordance with the provisions of § 223-41.18J(13) and § 223-14B.

(5) Home occupation, subject to § 223-17.1.

(6) Roof garden or solar collector.

(7) Greenhouse.

...

G. Parking location and quantity.

(1) All off-street parking shall be located behind, under the ground floor, or to the side of a building. If on the side, the parking area shall be located at least 40 feet from the Main Street or East Main Street property line and be screened by a low brick or stone wall, hedge, ornamental fence, and/or other landscaping that maintains the continuity of the street wall in compliance with frontage occupancy requirements, and that screens parked cars from view from the street. A ~~public garage parking structure~~ shall have a storefront "liner building" at least 40 feet deep and one story high between the parking structure and the main street, but may have a zero-foot setback on the upper floors of the parking structure (over the storefront) and along any street that intersects the main street. Parking areas fronting on side streets shall have a minimum setback of five feet in which ornamental and/or buffer landscaping is planted.

(2) The minimum quantity of required on-site parking spaces shall be as follows:

(a) Residential: one space per unit.

(b) Office and nonretail commercial: two spaces per 1,000 square feet of floor area.

(c) Retail commercial and personal services: two spaces per 1,000 square feet of floor area.

(d) Other uses: as determined to be appropriate by the Planning Board in the course of site plan review, or in the case of a new use where site plan review is not required under § 223-41.18A, as determined by the Building Inspector in consultation with the City Planner.

(3) The requirements in Subsection G(2) above may be modified by the Planning Board, in its discretion, based upon information submitted by the applicant or otherwise made available in the public record, demonstrating one or more of the following:

(a) That the projected operational characteristics of the proposed use require a different amount of parking.

(b) That adequate shared parking, contractually obligated for the duration of the proposed use, is available within 500 feet of the site and within the CMS or ~~PB~~ T Districts.

(c) That the applicant has provided sufficient bicycle parking to reduce anticipated vehicular travel demand.

(d) That there is sufficient public parking available within 800 feet of the site and within the CMS or ~~PB~~ T Districts to meet foreseeable parking needs of the proposed use and surrounding uses for the duration of the proposed use.

(e) That the applicant will voluntarily dedicate land for public parking on site or will acquire land by purchase or long-term lease (for the duration of the proposed use) within 800 feet of the site and within the CMS or ~~PB~~ T Districts and voluntarily dedicate such land to the

City for public parking.

- (f) That a professional parking study of the proposed use and the surrounding area demonstrates that a different amount of parking would be appropriate for the use in its particular location and/or that existing and/or proposed off-site parking is sufficient.
- (4) 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.
- (5) Section 223-26B of this chapter shall apply in the CMS District.

...

J. Design standards

...

- (13) Lighting fixtures shall be a maximum of 15 feet in height, except pole lights in rear parking lots shall be a maximum of 20 feet high. ~~Lighting shall be energy efficient, have full spectrum color quality, and, except for short-term event lighting, shall prevent any lighting above 500 lumens that directly projects above the horizontal level into the night sky with full cut-off fixtures. All exterior lighting shall comply with the standards in §223-14B.~~

...

- (16) The following Figure 18-7 provides annotated photographs to illustrate design standards in this section:

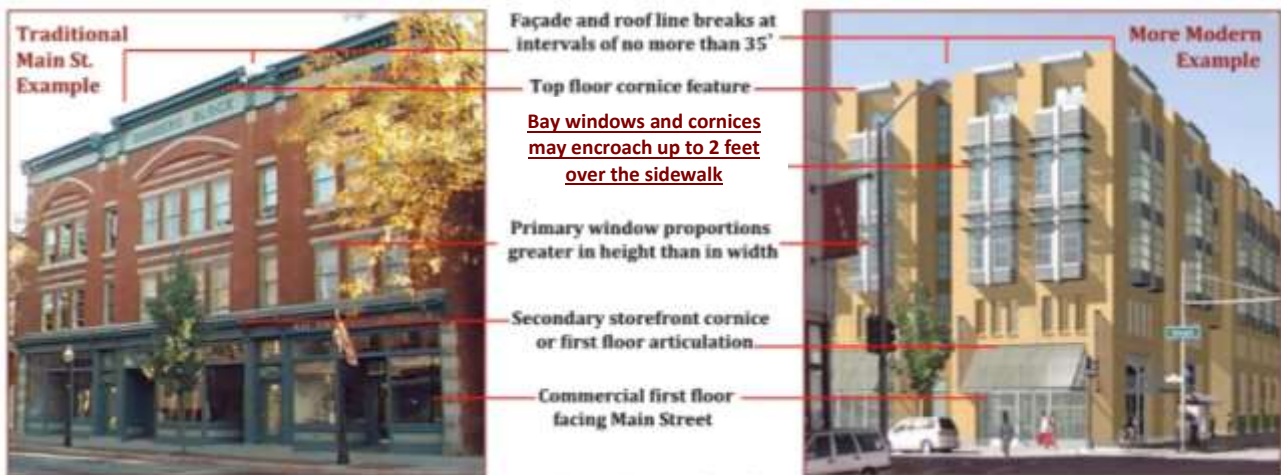


Figure 18-7: Design Illustrations

Bay windows, balconies, and open porches cornices may encroach up to 4 2 feet over the sidewalk

...

Section 24. Chapter 223 of the Code of the City of Beacon, Article IVE, Linkage District (L), Section 41.19, entitled “Purpose” is hereby amended as follows:

§ 223-41.19 Purpose.

The purpose of this Article IVE is to increase the vitality, attractiveness and marketability of the part of the City of Beacon lying between Main Street and the Metro North Train Station (the "Linkage District") by providing more residential development along with flexibility of land use, while enhancing urban form as recommended in the City of Beacon Comprehensive Plan adopted on December 17, 2007 and the Comprehensive Plan Update adopted on April 3, 2017. This article is intended to encourage residential development to help support Main Street businesses and to create a vibrant, economically successful, walkable, and environmentally sustainable connection between Beacon's Central ~~Business~~ Main Street District and the train station and riverfront. It is intended to implement the general intent of the plan entitled "Connecting Beacon's Main Street with the Hudson River and Railroad Station," dated March 6, 2007 (hereinafter the "Linkage Plan"), prepared by the Dutchess County Department of Planning and Development and contained in the Appendix of the Comprehensive Plan (see Figure 21-21).[1] This article is also intended to provide a simplified and streamlined review process that facilitates redevelopment in accordance with its provisions and the intent of the Comprehensive Plan. [1] Editor's Note: See § 223-41.21L.

Section 25. Chapter 223 of the Code of the City of Beacon, Article IVE, Linkage District (L), Section 41.21, entitled “Regulations,” Subsections A, B, B.1, H and K(12) are hereby amended as follows:

§ 223-41.21 Regulations.

A. Uses by right. Uses listed below in this Subsection A are permitted by right subject to site plan review, except as otherwise noted, ~~to be conducted in an expedited fashion pursuant to Subsection H below in this §223-41.21~~. Site plan review shall not be required for a change of use in an existing building where the new use is allowed by right, the building will not be expanded, and the minimum number of off-street parking spaces required for the new use in § 223-41.21F(2) is not more than 25% greater than the requirement for the existing use in § 223-26F herein. The following uses are allowed by right subject to ~~site plan review~~ a requirement that the first floor shall have a commercial or other non-residential use or uses for the entire building frontage facing the north side of Beekman Street between Route 9D and West Main Street, facing the north side of West Main Street between Beekman Street and River Street, or if the parcel is within 400 feet to the Route 9D–Beekman Street intersection:

- (1) Multifamily dwelling ~~Two-family dwelling~~.
- (2) Attached or semidetached dwelling units.
- (3) Apartment building.
- (4) Inn.

- (5) Bed-and-breakfast establishment.
- (6) Artist studio, art gallery, or exhibit space.
- (7) Hotel.
- (8) Park, plaza, green, preserve, or community garden, ~~greenhouse and commercial plant cultivation.~~
- (9) Retail, personal services business, bank, or restaurant, coffee house, bar, brew pub or other establishment that serves food, with or without alcoholic beverages, provided that:

(a) The floor area of each such establishment is not greater than 5,000 square feet;

(b) The parcel is within 400 feet of the Route 9D-Beekman Street intersection, located along the north side of Beekman Street between Route 9D and West Main Street, or located along the north side of West Main Street between Beekman Street and River Street, as identified on the Zoning Map;

~~(Reserved)[1][1] Editor's Note: Former Subsection A(9), Home occupation, was repealed 7-21-2014 by L.L. No. 11-2014.~~

- (10) Office, trade school, training program, microbrewery, or microdistillery, provided that:

(a) The total floor area of each such establishment is no greater than 25,000 square feet;

(b) The parcel is within 400 feet of the Route 9D-Beekman Street intersection, located along the north side of Beekman Street between Route 9D and West Main Street, or located along the north side of West Main Street between Beekman Street and River Street, as identified on the Zoning Map;

~~Wireless telecommunications services facilities, provided that they are mounted on a building and do not increase its height by more than 15 feet above applicable height limits and are consistent with § 223-24.5.~~

- (11) Government facilities, including buildings, structures and uses owned or operated by the City of Beacon or any department or agency thereof.

(12) Day care center.

(13) Museum, theater, concert or conference space.

(14) College, university, private school, or nursery school.

(15) Workshop.

(16) Artist live/work space.

(17) Spa, fitness center, or exercise studio.

B. Uses by special permit.

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(1) The following uses are allowed in existing buildings as permitted uses. For newly constructed buildings, the following uses are allowed by special permit from the Planning Board, upon a finding that the proposed use is consistent with the City of Beacon Comprehensive Plan, will enhance the architectural character of the street, and will contribute to creating a more urban, pedestrian-friendly quality in the L District, and that the conditions and standards in § 223-18 B(1)(a) through ~~(d)~~ (f) have been met:

~~(a) Retail, personal services business, or restaurant, coffee house, retail sales from trucks or trailers in accordance with § 223-26.3 or other establishment that serves food, with or without alcoholic beverages, provided that:~~

~~[1] The floor area of each such establishment is not greater than 5,000 square feet;~~

~~[2] The use is within 400 feet of the Route 9D-Beekman Street intersection, as identified on the Zoning Map, or located along the north side of West Main Street between Beekman Street and River Street; and~~

~~[3] The Planning Board finds that there are no substantial detrimental effects on parking, traffic or on the character of surrounding neighborhoods or the community.~~

~~(a) (b) Office and m~~Manufacturing uses, including but not limited to microbreweries, microdistilleries, wineries and other or food preparation businesses, with or without tasting rooms, that may also sell goods made on the site for consumption off the premises, provided that:

[1] The total ~~office or~~ manufacturing or food preparation business floor area of the building is no greater than 25,000 square feet;

[2] ~~The use is on West Main Street or the use is within 400 feet of the Route 9D-Beekman Street intersection, as identified on the Zoning Map; The parcel is within 400 feet of the~~ Route 9D-Beekman Street intersection, located along the north side of Beekman Street between Route 9D and West Main Street, or located along the north side of West Main Street between Beekman Street and River Street, as identified on the Zoning Map; and

[3] The Planning Board finds that there are no substantial detrimental effects on parking, traffic or on the character of surrounding neighborhoods or the community.

~~(b) Wireless telecommunications services facility, subject to §223-24.5 and §223-26.4, provided that if mounted on a building, it does not increase the height by more than 15 feet above applicable height limits.~~

~~(c) Historic District and Landmark Overlay use, subject to §23-24.7.~~

(2) In considering the appropriateness of the proposed use, the Planning Board shall consider impacts on shadows, traffic, and parking and may impose traffic and parking mitigation measures, including but not limited to provision of pedestrian walkways and stairways on site. ~~When making a decision on a special permit, the Planning Board shall follow the procedures indicated in § 223-41.21H(2) of this chapter.~~

B.1. Accessory uses. The following are permitted accessory uses in the L District:

- (1) Any accessory building or use customarily incident to a permitted use, except outside storage.
- (2) Signs, in accordance with the provisions of § 223-15, as applicable.
- (3) Off-street parking areas, in accordance with § 223-41.21F.
- (4) Exterior lighting, in accordance with the provisions of § 223-41.21K(12) and § 223-14B.
- (5) Parking structure ~~Home occupation, site plan review not required.~~
- (6) Roof garden or solar collector, site plan review not required.
- (7) Greenhouse.

H. ~~(Reserved) Site plan review/special permit procedures and criteria.~~

~~(1) In order to ensure an expedited review of site plans, this article contains a streamlined site plan review procedure for any proposed building or group buildings with 10,000 square feet or less in footprint area, as follows:~~

~~(a) The applicant shall meet with the Building Inspector, who shall provide a site plan application and instruction sheet describing the requirements for site plan approval and who may recommend that the applicant have a preapplication meeting with the Planning Board to determine application submission requirements.~~

~~(b) The applicant shall prepare a site plan with sufficient information for the Planning Board to determine whether or not it complies with the provisions of this article and is consistent with the general intent of the Linkage Plan.~~

~~(c) If no special permit is required, the applicant shall then meet with the Planning Board to discuss the proposal. No public hearing will be required, unless the Planning Board determines that the proposal may have substantial detrimental effects or may cause public controversy.~~

~~(d) Within 45 days after such meeting, or if there is a public hearing, within 45 days after the closing of the public hearing, the Planning Board shall issue an approval, approval with modifications, or denial of the application, stating the reasons for any modifications or denial. The Planning Board shall also issue a required schedule for initiation and completion of the project. Such approval shall lapse within two years if the applicant does not diligently pursue construction of the project, unless the applicant requests an extension, which may only be granted for good cause by the Planning Board.~~

~~(2) For projects with over 20,000 square feet in building footprint area, or projects that require a special permit, the applicant shall follow the procedures in §§ 223-18 and 223-25, except that the Planning Board shall take the place of the City Council in § 223-18. Such applications shall comply with those sections to the extent that such sections do not contain standards that conflict with this article. In case of a conflict, this article shall control.~~

~~(3) The Planning Board may require a performance guarantee for the construction of public improvements in connection with any project of 10,000 square feet or more in floor area.~~

~~(4) After completion of construction for a new building, the applicant shall submit as-built plans to the Building Inspector showing the exact location of all site alterations and construction.~~

K. Design standards.

(12) Lighting fixtures shall be a maximum of 15 feet in height, except pole lights in rear parking lots shall be a maximum of 20 feet high. ~~Lighting shall be energy efficient, have full spectrum color quality, and shall prevent any lighting above 60 watts that directly projects above the horizontal level into the night sky.~~ All exterior lighting shall comply with the standards in §223-14B.

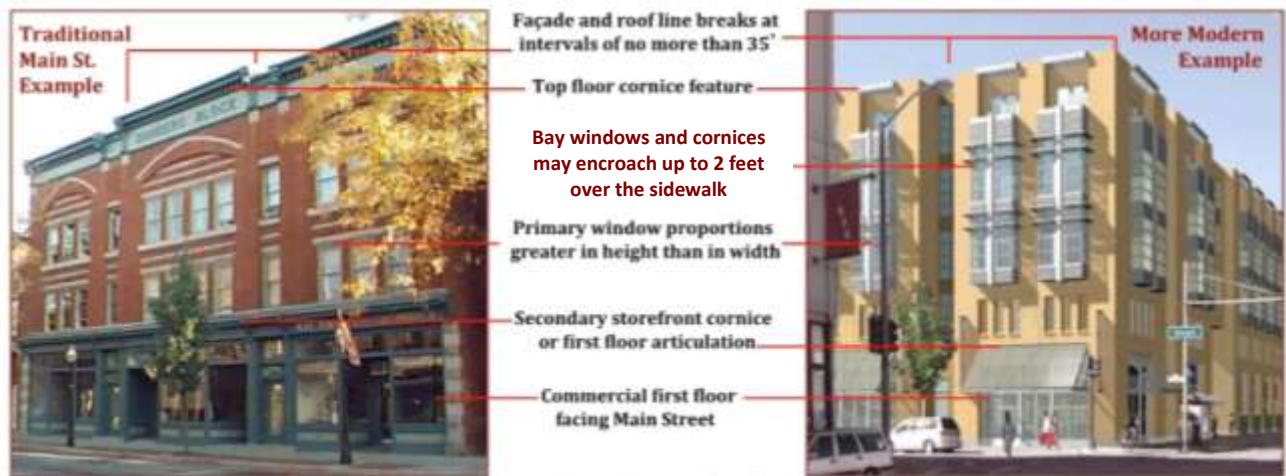


Figure 21-18: Design Standards

Examples A

Bay windows, balconies, and open porches cornices may encroach up to 4' 2 feet over the sidewalk

Section 26. Chapter 223 of the Code of the City of Beacon, Article VI, Definitions and Word Usage, Section 63, entitled “Definitions” is hereby amended to add or amend the following definitions

§223-63 Definitions

ACCESSORY APARTMENT

A small rental housing unit, subject to the conditions in §223-24.1, allowed on single-family properties in residential districts and designed to meet the special housing needs of single persons, couples, other small households, the young, the elderly, persons of low and moderate income, or property owner relatives.

AMUSEMENT CENTER

Any place in which there are maintained or operated for the patronage or recreation of the public three or more coin-, token- or otherwise controlled amusement devices of any description, including but not

necessarily limited to the types commonly known as video, gaming, pinball, baseball and football amusement games, where the use of such devices is a primary use of the premises.

ANIMAL CARE FACILITY

A facility used to temporarily house or give health care to domesticated household animals, such as cats and dogs, which is devoted to the welfare, protection, and humane treatment of animals. An animal care facility may or may not contain outdoor exercise areas or boarding kennels, as determined in the special permit review process under §223-18.

ARTIST STUDIO

The working and/or teaching space for one or more painters, print makers, photographers, jewelry makers, sculptors or artisans working with paper, ceramics, clay and/or other fine art or craft materials, persons working in the graphic or computer arts, or performing artists such as musicians, dancers or theater artists. Tattoo appliers, body piercers and similar businesses shall not be considered artists for the purposes of this definition. An artist studio as an accessory use is considered a home occupation, subject to §223-17.1. See also “Home Occupation”

AUCTION GALLERY

An establishment for the sale of goods or property to the highest bidder.

BANK

An establishment in which financial transactions are conducted and may include professionals administering advice related to financial matters.

CONCERT HALL

A building or part thereof devoted to the showing of live theatrical, musical, dance, or other performances.

CONFERENCE CENTER OR CONFERENCE SPACE

A facility used for business meetings, cultural, educational, or professional programs, conferences, retreats, and seminars, which may have accommodations for eating and recreation.

DAY CARE CENTER

A program or facility, which is not a residence, in which child day care is provided to more than six children for more than three hours but less than 24 hours per day per child for compensation or otherwise, as certified under the laws of the State of New York.

DWELLING UNIT, ONE-FAMILY

A dwelling containing one dwelling unit only, not to include house trailer or mobile home.

DWELLING UNIT, ATTACHED

A dwelling unit having common walls with two or more other dwelling units. See also “Townhouse.”

FAÇADE OR FRONT WALL

The front wall of a building ~~is the wall~~ nearest to and facing the street on which the lot fronts.

FARM

Land and on-farm buildings, equipment and practices which contribute to the production, preparation and marketing of crops, livestock and livestock products as a commercial enterprise. For the purposes of this chapter, a “farm” specifically excludes the display of farm products for sale, on-site advertising, and the raising of animals for fur-bearing purposes.

HOME OFFICE, PROFESSIONAL

Home office of a properly certified physician; psychologist; physical, occupational or speech therapist; licensed social worker; dentist; lawyer; engineer; architect; accountant; teacher or other similar professional person, when conducted entirely within a dwelling by the residents thereof, at least one of whom is said professional person, provided that no more than two nonresident persons are employed therein, and where there is no external evidence of such office, except for a sign and off-street parking facilities as respectively permitted and required in this chapter. A home professional office shall be clearly incidental and secondary to the use of the residence for dwelling purposes and shall be regulated in accordance with the requirements of §223-17.1 of this chapter. See also “Home Occupation”

HORTICULTURAL NURSERY

Any place used as a garden for the open cultivation and growing of trees, shrubs and other plants, including the replanting of said plants grown at places other than the nursery.

LOT WIDTH

The mean horizontal distance between the side lot lines, measured at right angles to the lot depth.

OFFICE

A building or part thereof used primarily for the conduct of business relating to administrative, clerical, financial, social services, or consulting, as well as medical, dental, veterinarian, and other professional or client services not related to retail sales.

PARKING STRUCTURE

A multi-level structure for the parking of vehicles, conducted as a business or to serve a business or district.

SOLAR COLLECTOR

See Article X, §223-81.

STORAGE BUSINESS

A fully enclosed structure for the containment of materials, including warehouses and residential storage facilities with individual bays that are leased for the storage of personal property.

STRUCTURE

Anything constructed or erected, the use of which requires location on the ground or attachment to something having location on the ground. Structures include accessory buildings, decks, swimming pools, and tennis courts, but sidewalks, ground-level parking lots, driveways, and patios are not considered structures.

THEATER

A building or part thereof devoted to the showing of films, live theatrical, musical, dance, or other performances.

TOWNHOUSE

A one-family dwelling attached in a row of at least three such units with each home having its own front and rear access to the outside. See also “Dwelling Unit, Attached.”

TRADE SCHOOL OR TRAINING PROGRAM

A facility offering educational services designed to give students the skills to prepare them for a specific occupation. Also referred to as a vocational school or technical school.

WHOLESALE BUSINESS

An enclosed place of business primarily engaged in sales, storage, display, and distribution of merchandise to retailers, industrial users, institutional uses, or other commercial businesses, including a warehouse, but not to include auto wrecking yards, junkyards, or outdoor storage of materials, unless outdoor storage of materials is specifically permitted as an accessory use in the district.

WORKSHOP

Work places, including retail sales, for carpenters, plumbers, cabinetmakers, upholsters, electricians, printers, tailors, dressmakers, shoemakers, jewelers, sculptors, watch and clockmakers, opticians and musical or scientific instrument repairers, or shops which employ similarly skilled persons.

Section 27. Chapter 223 of the Code of the City of Beacon, Article VII, Miscellaneous Provisions, Section 67, entitled “Referral of Proposals to Dutchess County Planning Department” is hereby amended as follows:

§ 223-67 Referral of proposals to Dutchess County Planning Department.

At least 30 days prior to the public hearing at which ~~such amendment~~ a proposal is to be considered, the ~~Town Board approving authority~~, in accordance with the provisions of Article 12-B, §§ 239-l and 239-m of the General Municipal Laws, as amended, shall refer to the Dutchess County Planning Department all proposals a zoning amendment to the code or map, site plan, special permit, area or use variance, comprehensive plan, or other authorization under the zoning provisions applying to affecting real property ~~abutting~~ within 500 feet of the following:

- A. The boundary of any existing or proposed state or county park or recreation area.
- B. The right-of-way of any existing or proposed county or state road, highway, parkway or expressway.
- C. The existing or proposed right-of-way of any stream or drainage channel owned by the county or for which the county has established channel lines.
- D. The existing or proposed boundary of any county- or state-owned land on which a public building or institution is located.
- E. The boundary of a farm operation located in an agricultural district, as defined by article twenty-five-AA of the agriculture and markets law, except this subparagraph shall not apply to the granting of area variances.
- F. The boundary of any city, village or town.

Section 28. Chapter 223 of the Code of the City of Beacon, Article IX, Scenic Roads, Section 71, entitled “Authority” is hereby amended as follows:

§ 223-71 Authority.

Pursuant to the authority granted by Municipal Home Rule Law, Article 2, § 10 of the Consolidated Laws of New York and consistent with the goals of the ~~1974 Development Plan~~ 2017 Comprehensive Plan Update, as amended, the City of Beacon hereby provides for the balancing of traditional matters of common convenience and public safety with designation of City roads as scenic roads. Further, in order to maintain the irreplaceable character and aesthetic and historic features and the scenic nature of roads so designated, the City of Beacon is authorized to regulate, in accordance with this article, the future alterations for improvements of roads so designated, including but not limited to widening of the right-of-way or of the traveled portions of the road, paving, changes of grade, straightening, removal of stone walls and removal of mature trees.

Section 29. Chapter 223 of the Code of the City of Beacon, Article X, Solar Collectors and Installations, §223-82, entitled “Permitting and placement requirements,” Subsection A(2) is hereby amended as follows

§ 223-82 Permitting and placement requirements.

A. Rooftop and building-mounted solar collectors are permitted in all zoning districts in the City, subject to the following requirements.

...

(2) Any height limitations provided in the City Code shall not be applicable to solar collectors except for the restrictions provided for in the Central Main Street District § 223-41.18 E(6) and (7) ~~D(7) and (8)~~ and the Linkage District § 223-41.21D(5). Solar collectors shall be erected only to such height as reasonably necessary to accomplish the purpose for which they are intended to serve, but in no case shall the maximum height of a panel in a tilted position exceed two feet above the surface of the roof, unless in a nonresidential district, and such structures shall not obstruct solar access to neighboring properties.

...

Section 30. Chapter 223 Attachments 1 and 2 of the Code of the City of Beacon, entitled “Schedule of Regulations for Residential Districts” and “Schedule of Regulations for Nonresidential Districts” as set forth at the end of Chapter 223 are hereby deleted in their entirety.

Section 31. Chapter 223 Attachment 1 Code of the City of Beacon, entitled “Section 223-17, City of Beacon Schedule of Use Regulations” shall be adopted as follows and as set forth at the end of Chapter 223.

SEE ATTACHED CHART

Section 32. Chapter 223 Attachment 1 Code of the City of Beacon, entitled “Section 223-17, Schedule of Dimensional Regulations” shall be adopted as follows and as set forth at the end of Chapter 223.

SEE ATTACHED CHART

Section 33. Chapter 210 of the Code of the City of Beacon, Vehicle Repair and Sales, §210-2, entitled “Motor vehicle repair shops, body shops and detail shops; gasoline filling stations,” Subsection B is hereby amended as follows

§ 210-2 Motor vehicle repair shops, body shops and detail shops; gasoline filling stations.

...

B. Within ~~an LB Local Business or CB Central Business~~ the GB General Business District, gasoline filling stations shall comply with the following additional standards and requirements:

- (1) The site for each gasoline filling station shall have a street frontage of at least 100 feet and an area of at least 10,000 square feet.
- (2) No new gasoline filling station shall be permitted to locate within 750 feet of any portion of an existing gasoline filling station.
- (3) Along all property boundaries adjoining streets, a continuous landscaped area shall be maintained, except where interrupted by permitted access drives. The City Council may, in approving the issuance of a special use permit, require such other additional landscaping and screening as set forth above as, in its opinion, may be necessary or appropriate for the proper development of the particular site.

Section 34. Ratification, Readoption and Confirmation

Except as specifically modified by the amendments contained herein, Chapters 223 and 210 of the City of Beacon is otherwise to remain in full force and effect and is otherwise ratified, readopted and confirmed.

Section 35. Numbering for Codification

It is the intention of the City of Beacon and it is hereby enacted that the provisions of this Local Law shall be included in the Code of the City of Beacon; that the sections and subsections of this Local Law may be re-numbered or re-lettered by the Codifier to accomplish such intention; that the Codifier shall make no substantive changes to this Local Law; that the word “Local Law” shall be changed to “Chapter,” “Section” or other appropriate word as required for codification; and that any such rearranging of the numbering and editing shall not affect the validity of this Local Law or the provisions of the Code affected thereby.

Section 36. 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 37. Effective Date

This local law shall take effect immediately upon filing with the Office of the Secretary of State.

Section 223-17, Schedule of Dimensional Regulations (suggested edits in red)

Draft 4.24.20

| Zoning District | Minimum Lot Size Area ^h (see also 223-12 l) | | | | Minimum Yard ^a | | | Minimum Distance Between Buildings Same Lot | Maximum Height Main Building (see 223-13) (stories ft) | Maximum % Building Coverage | | Maximum Number of Units per Building | Minimum Open Space | Zoning District | Also Refer to Pertinent Sections |
|-----------------------|---|---------------|------------|------------|---------------------------|-----------|--------------------------|---|--|-----------------------------|-----------|--------------------------------------|--------------------|-----------------------|----------------------------------|
| | Area (sf) | Per Unit (sf) | Width (ft) | Depth (ft) | Front (ft) | Side (ft) | Rear ^{d,e} (ft) | | | Multi-Fam | All Other | | | | |
| | | | | | | | | | | | | | | | |
| R1-120 | 120,000 | 120,000 | 250' | 350' | 75' | 50' | 75' | | 2.5 35' | N.A. | 7% | 1 | | R1-120 | |
| R1-80 | 80,000 | 80,000 | 150' | 200' | 50' | 30' | 50' | | 2.5 35' | N.A. | 10% | 1 | | R1-80 | |
| R1-40 | 40,000 | 40,000 | 150' | 150' | 40' | 25' | 50' | | 2.5 35' | N.A. | 15% | 1 | | R1-40 | |
| R1-20 | 20,000 | 20,000 | 125' | 125' | 30' | 20' | 40' | | 2.5 35' | N.A. | 20% | 1 | | R1-20 | |
| R1-10 | 10,000 | 10,000 | 85' | 100' | 25' | 15' | 35' | | 2.5 35' | N.A. | 25% | 1 | | R1-10 | |
| R1-7.5 | 7,500 | 7,500 | 75' | 100' | 20' | 10' | 25' | | 2.5 35' | N.A. | 30% | 1 | | R1-7.5 | |
| R1-5 | 5,000 | 5,000 | 50' | 100' | 15' | 10' | 20' | | 2.5 35' | N.A. | | 1 | | R1-5 | |
| RD-7.5 ^{d,e} | 2 acres | 7,500 | 200' | 200' | 20-35' | 25' | 50' | 30' | 3 35' | 15% | 20% | 12 | | RD-7.5 ^{d,e} | |
| RD-6 ^{d,e} | 2 acres | 6,000 | 200' | 200' | 50' | 25' | 50' | 30' | 2.5 35' | 15% | 20% | 16 | | RD-6 ^{d,e} | |
| RD-5 ^{d,e} | 5,000 | 5,000 | 50' | 100' | 30' | 10' | 25' | 30' | 3 35' | 20% | 30% | 16 | | RD-5 ^{d,e} | |
| RD-4 ^{d,e} | 5,000 | 4,000 | 200' | 200' | 40' | 20' | 40' | 30' | 2.5 35' | 20% | 25% | 20 | | RD-4 ^{d,e} | |
| RD-3 ^{d,e} | 5,000 | 3,000 | 50' | 100' | 30' | 20' | 25' | 30' | 3.5 45' | 20% | 40% | 24 | | RD-3 ^{d,e} | |
| RD-1.8 ^{d,e} | 5,000 | 1,800 | 50' | 100' | 30' | 20' | 25' | 30' | 10 ^b 100' | 25% | 40% | c | | RD-1.8 ^{d,e} | |
| RD-1.7 ^{d,e} | 5,000 | 1,700 | 50' | 100' | 30' | 20' | 25' | 30' | 4.5 ^f 55 ^f | 25% | 40% | 36 ^g | | RD-1.7 ^{d,e} | |
| T | 5,000 | i | 50' | 100' | 10' | 10' | 20' | | 2.5 35' | | | | | T | |
| GB | | 1,500 | | 100' | 15' | 20' | 25' | | - 35' | | | | | GB | |
| CMS | | | | 75' | 0-10' | 0' | 20' | | 3 38' | | | | 10% | CMS | Art IVD |
| L | | | | 75' | 0-20' | 0-30' | 25' | | 4 48' | | | | 15% | L | Art IVE |
| FCD | 2 acres | 3,960 | | | | | | | 3 40' | | 35% | | 30% | FCD | Art IVC |
| WP | 1 acre | | | | 10' | | | | 2.5 35' | | 20% | | | WP | Art IVA |
| WD | 5 acres | | | | | | | | See Art IVA | | | | 15% | WD | Art IVA |
| LI | | 1,500 | 60' | 100' | 20' | 20' | 25' | | 35' | | 70% | | 20% | LI | |
| HI | | | 60' | 100' | 30' | 20' | 25' | | 40' | | 70% | | 20% | HI | |

NOTES:

- ~~ab~~ ~~Except in multifamily developments,~~ A private garage may be built across a common lot line in multifamily developments by mutual agreement between adjoining property owners, with a copy of such agreement to be filed with the building permit application for such garage.
- ~~bh~~ But not more than 65% of the dwelling units in a multifamily development may be contained in buildings more than 3 1/2 stories in height.
- ~~ci~~ But not more than 24 dwelling units in any building 3 1/2 stories or less in height.
- ~~dk~~ For multifamily developments, a well-designed and landscaped recreation or usable open space area, approved by the Planning Board, of 2,000 square feet for the first 20 dwelling units or part thereof, plus 100 square feet for each additional dwelling unit will be required.
- ~~el~~ In any RD District, the Planning Board may approve a subdivision of land into individual building lots containing a minimum of 1,800 square feet of area each and designed for attached or semi-attached single-family dwellings (townhouses), provided that the design is such that the gross dwelling unit density for the entire tract does not exceed that which can normally be permitted for multiple dwellings in the district in which the property is located and further provided that the Planning Board attaches such conditions and standards to its approval as, in its opinion, are necessary to assure that the entire property, including any designated common areas for open space, recreational or other purposes, will be properly maintained for the intended purpose(s) and not further subdivided or developed in the future.
- ~~fn~~ A maximum of one story of parking under a building shall not count toward the maximum building height limitation in feet and stories. [Added 2-16-2010 by L.L. No. 2-2010]
- ~~ge~~ And each building shall not exceed 150 feet in length. [Added 2-16-2010 by L.L. No. 2-2010]
- ~~he~~ For all development proposals involving a total lot area of more than three acres within a R1, RD, or Fishkill Creek Development zoning district, the lot area per dwelling unit calculation shall first deduct any lot area covered by surface water, within a federal regulatory floodway, within a state or federally regulated wetland, or with existing, pre-development very steep slopes of 25 percent or more as defined in § 223-63.
- i One-half the minimum lot size area per dwelling unit as the least restrictive adjoining residential district.

Section 223-17, City of Beacon Schedule of Use Regulations (Suggested Edits)

| Permitted Uses by District | Reference Notes | All R1 | All RD | I | GB | CMS | L | WD | WP | FCD | LI | HI |
|---|-----------------------------|--------|--------|-----|----|-----|----|----|-----|-----|----|----|
| Residential | | | | | | | | | | | | |
| One-Family Detached Dwelling | | P | P | P | x | x | x | x | x | x | x | x |
| One-Family Attached/Semidetached | Including Townhouses | x | P | P | x | x | P | x | x | P | x | x |
| Two-Family Dwelling | | x | P | P | x | x | x | x | x | x | x | x |
| Multifamily Dwelling | | x | SP* | P | P | P | P | P | x | P | x | x |
| Artist Live/Work Space | Subject to §223-14.2 | x | x | P | P | P | P | P | x | P | P | x |
| Retail/Office/Service | | | | | | | | | | | | |
| Retail, Personal Service, or Bank | | x | x | x | P | P | P | P | x | x | P | x |
| Office | | x | x | P | P | P | P | P | x | P | P | x |
| Artist Studio, Art Gallery/Exhibit Space | | x | x | P | P | P | P | x | x | P | P | x |
| Funeral Home | | x | x | x | P | x | x | x | x | x | P | x |
| Commercial Recreation, Indoor | | x | x | x | P | P | x | x | x | x | P | P |
| Auction Gallery | | x | x | x | P | x | x | x | x | x | P | P |
| Adult Use | Subject to §223-20.1 | x | x | x | x | x | x | x | x | x | SP | x |
| Food/Lodging | | | | | | | | | | | | |
| Restaurant or Coffee House | | x | x | x | P | P | P | P | SP* | P | x | x |
| Bar/Brew Pub/Microbrewery/Microdistillery | | x | x | x | P | P | P | P | x | P | P | P |
| Food Preparation Business | | x | x | x | P | SP | SP | x | x | x | P | P |
| Bed and Breakfast | Subject to §223-24.4 | SP | SP | SP | P | x | P | x | SP* | P | P | x |
| Inn | | x | x | x | P | P | P | P | SP* | P | P | x |
| Hotel | Subject to §223-14.1 | x | x | x | P | P | P | P | x | x | P | x |
| Social/Community | | | | | | | | | | | | |
| Spa/Fitness Center/Exercise Studio | | x | x | SP | P | P | P | P | x | P | P | x |
| Day Care Center | | x | x | P | P | x | P | P | x | P | SP | x |
| Park, Preserve, Community Garden | | P | P | P | P | P | P | P | P | P | P | x |
| Theater, Concert or Conference Space | | x | x | x | P | P | P | P | x | P | P | x |
| Museum | | SP* | SP* | SP* | P | P | P | P | x | P | P | SP |
| Place of Worship/Religious Facility | | P | P | P | P | x | x | x | x | x | P | x |
| Social Club | Subject to §223-24.2 | SP | SP | SP | SP | P | x | x | x | x | SP | x |
| Government Facility | | P | P | P | P | P | P | P | P | P | P | P |
| Golf Course | | SP* | SP* | x | x | x | x | x | x | x | x | x |
| Healthcare | | | | | | | | | | | | |
| Hospital or Nursing Home | Subject to §223-21.1 and 22 | SP* | SP* | x | x | x | x | x | x | P | P | P |
| Animal Care Facility | | SP | SP | x | SP | x | x | x | x | x | SP | x |
| Educational | | | | | | | | | | | | |
| College or University | | SP* | SP* | x | P | P | P | x | x | P | P | P |
| Trade School or Training Program | | x | x | x | P | P | P | x | x | P | P | P |
| Private School or Nursery School | | SP | SP | SP | P | x | P | x | x | P | SP | x |

x = Use Not Permitted
P = Permitted Use
SP=Special Permit Use by Planning Board
SP*=Special Permit Use by City Council

For Specific Standards See -->

Article IVD Article IVE Article IVA Article IVA Article IVC 4.24.20

DRAFT

Section 223-17, City of Beacon Schedule of Use Regulations (Suggested Edits)

| Permitted Uses by District | Reference Notes | All R1 | All RD | I | GB | CMS | L | WD | WP | FCD | LI | HI |
|---|-----------------------------|--------|--------|------|------|------|------|------|------|------|------|------|
| Parking/Auto-Oriented | | | | | | | | | | | | |
| Off-Street Parking or Parking Structure | Subject to §223-26 | x | x | SP | SP | SP | x | x | x | x | x | x |
| Vehicle Sales or Rental Lot | | x | x | x | SP | x | x | x | x | x | SP | x |
| Gas Filling Station and/or Car Wash | Subject to Ch. 210 & 223-21 | x | x | x | SP | x | x | x | x | x | SP | x |
| Auto Body or Repair Shop | Subject to Chapter 210 | x | x | x | SP | x | x | x | x | x | SP | x |
| Ambulance Service | | SP | SP | SP | P | x | x | x | x | x | P | x |
| Industrial or Assembly | | | | | | | | | | | | |
| Wholesale or Storage Business | | x | x | x | P | x | x | x | x | x | P | P |
| Workshop | | x | x | SP | P | P | P | x | x | P | P | P |
| Industrial or Manufacturing Use | | x | x | x | x | x | SP | x | x | P | P | P |
| Other | | | | | | | | | | | | |
| Wireless Telecommunications Facility | Subject to §223-24.5 | SP* | SP* | SP* | SP* | SP* | SP* | SP* | SP* | SP* | SP* | SP* |
| Small Cell Wireless Facility | Subject to §223-26.4 | P/SP | P/SP | P/SP | P/SP | P/SP | P/SP | P/SP | P/SP | P/SP | P/SP | P/SP |
| Farm | | P | x | x | x | x | x | x | x | x | x | x |
| Horticultural Nursery | | P | P | x | P | x | x | x | x | x | P | x |
| Historic District Overlay Use | Subject to §223-24.7 | SP* | SP* | SP* | SP* | SP* | SP* | SP* | SP* | SP* | SP* | SP* |
| Permitted Accessory Uses (includes uses/structures customarily incidental to a permitted principal use, but not an activity for commercial gain in a residential district) | | | | | | | | | | | | |
| Accessory Apartment | Subject to §223-24.1 | SP | SP | SP | x | x | x | x | x | x | x | x |
| Private Tennis Court or Pool | Subject to §223-13 | P | P | P | x | x | x | x | x | x | x | x |
| Home Occupation or Artist Studio | Subject to §223-17.1 | P | P | P | x | x | x | x | x | x | x | x |
| Parking Structure | | x | x | SP | x | P | P | P | x | P | x | x |
| Garden, Roof Garden, or Greenhouse | | P | P | P | P | P | P | P | P | P | P | P |
| Solar Collectors | Subject to Article X | P | P | P | P | P | P | P | P | P | P | P |

x = Use Not Permitted

P = Permitted Use

SP=Special Permit Use by Planning Board

SP*=Special Permit Use by City Council

For Specific Standards See -->

Article IVD

Article IVE

Article IVA

Article IVA

Article IVC

4.24.20

DRAFT

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: City of Beacon Local Law Amending the Zoning Map of the City of Beacon and Chapters 223 and 210 of the Code of the City of Beacon | | |
| Project Location (describe, and attach a general location map): City of Beacon | | |
| Brief Description of Proposed Action (include purpose or need): The proposed Local Law amends the Zoning Map of the City of Beacon and Chapters 223 and 210 of the Code of the City of Beacon concerning the City's Schedule of Regulations and associated amendments regarding permitted uses in the City of Beacon. The intent of the Proposed Local Law is to update the City's zoning provisions in accordance with the City's Comprehensive Plan Updated, adopted April 3, 2017 and improve future development of the City of Beacon. The City's goal is to make the Schedule of Uses easier to read and to combine similar districts to streamline the Code. The EAF addresses (1) revisions to the Zoning Map of the City of Beacon (rezoning 173 parcels, eliminating zoning districts and creating the T District;) (2) Updates to the City's schedule of use regulations (3) updates to the City's Schedule of Dimensional Regulations and (4) text amendments to Chapters 223 and 210 of the City Code to incorporate the proposed changes to the use schedule, bulk schedule and zoning map in the text of the Zoning Code. | | |
| Name of Applicant/Sponsor: City of Beacon | Telephone: 845-838-5000 | E-Mail: Aruggiero@cityofbeacon.org |
| Address: 1 Municipal Plaza | | |
| City/PO: Beacon | State: New York | Zip Code: 12508 |
| Project Contact (if not same as sponsor; give name and title/role): | Telephone: | E-Mail: |
| Address: | | |
| City/PO: | State: | Zip Code: |
| Property Owner (if not same as sponsor): | Telephone: | E-Mail: |
| Address: | | |
| 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, <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No or Village Board of Trustees | City Counsel must approve proposed Local Law. | n/a |
| b. City, Town or Village <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Planning Board or Commission | | |
| c. City, Town or <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Village Zoning Board of Appeals | | |
| d. Other local agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| e. County agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| f. Regional agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| g. State agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| h. Federal agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| i. Coastal Resources. i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No iii. Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? YesNo

- **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? YesNo

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? YesNo

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?) YesNo

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? YesNo

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?

The Proposed Action involves the adopting of amendments to the Zoning Map of the City of Beacon, the City's Zoning Code, Chapter 223 of the Code of the City of Beacon.

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? Parcels will be rezoned to the new T District or to the same classification as adjacent parcels.

C.4. Existing community services.

a. In what school district is the project site located? City of Beacon School District

b. What police or other public protection forces serve the project site?

City of Beacon

c. Which fire protection and emergency medical services serve the project site?

City of Beacon

d. What parks serve the project site?

The proposed amendments impact the entire area of the City of Beacon.

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)? This is a legislative action.

b. a. Total acreage of the site of the proposed action? _____ n/a acres

b. Total acreage to be physically disturbed? _____ n/a acres

c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ n/a 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.

| | <u>One Family</u> | <u>Two Family</u> | <u>Three Family</u> | <u>Multiple Family (four or more)</u> |
|---------------|-------------------|-------------------|---------------------|---------------------------------------|
| Initial Phase | _____ | _____ | _____ | _____ |
| At completion | _____ | _____ | _____ | _____ |
| of all phases | _____ | _____ | _____ | _____ |

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: _____

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? Yes No
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
 If Yes:

i. What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____

iv. Will there be onsite dewatering or processing of excavated materials? Yes No
 If yes, describe. _____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? Yes No

ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No
 If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? Yes No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? Yes No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? Yes No

If Yes:

i. Total anticipated water usage/demand per day: _____ 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: _____
- 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: _____ 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): _____

iii. Will the proposed action use any existing public wastewater treatment facilities? Yes No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- 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 _____ 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 (CO₂)
 • _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
 • _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
 • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
 • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (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 1/2 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: _____

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.

| | |
|--|---|
| <p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ n/a • Saturday: _____ n/a • Sunday: _____ n/a • Holidays: _____ n/a | <p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ n/a • Saturday: _____ n/a • Sunday: _____ n/a • Holidays: _____ n/a |
|--|---|

| | |
|--|--|
| <p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration:</p> <p>_____</p> <p>_____</p> | |
| <p>ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p> | |
| <p>n. Will the proposed action have outdoor lighting? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:</p> <p>_____</p> <p>_____</p> | |
| <p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p> | |
| <p>o. Does the proposed action have the potential to produce odors for more than one hour per day? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____</p> <p>_____</p> <p>_____</p> | |
| <p>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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally, describe the proposed storage facilities: _____</p> <p>_____</p> | |
| <p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe proposed treatment(s):</p> <p>_____</p> <p>_____</p> <p>_____</p> | |
| <p>ii. Will the proposed action use Integrated Pest Management Practices? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> | |
| <p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> • Construction: _____ tons per _____ (unit of time) • Operation : _____ tons per _____ (unit of time) <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> • Construction: _____ • Operation: _____ <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> • 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:
 The proposed legislation action impacts the entire area of the City of Beacon. The City includes urban uses, industrial uses, commercial uses and residential uses.

b. Land uses and covertypes on the project site.

| Land use or Covertypes | Current Acreage | Acreage After Project Completion | Change (Acres +/-) |
|--|-----------------|----------------------------------|--------------------|
| • Roads, buildings, and other paved or impervious surfaces | n/a | | |
| • Forested | n/a | | |
| • Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural) | n/a | | |
| • Agricultural (includes active orchards, field, greenhouse etc.) | n/a | | |
| • Surface water features (lakes, ponds, streams, rivers, etc.) | n/a | | |
| • Wetlands (freshwater or tidal) | n/a | | |
| • Non-vegetated (bare rock, earth or fill) | n/a | | |
| • Other Describe: _____ _____ | | | |

c. Is the project site presently used by members of the community for public recreation? Yes No
i. If Yes: explain: n/a

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:
n/a

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? _____ n/a 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: _____ %
 _____ %
 _____ %

d. What is the average depth to the water table on the project site? Average: _____ n/a feet

e. Drainage status of project site soils: Well Drained: _____ % of site
 Moderately Well Drained: _____ % of site
 Poorly Drained _____ % of site

f. Approximate proportion of proposed action site with slopes: 0-10%: _____ % 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: n/a _____

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: _____ n/a _____ _____ | |
| n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes: i. Species and listing (endangered or threatened): _____ n/a _____ _____ | |
| 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes: i. Species and listing: _____ n/a _____ | |
| q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide county plus district name/number: _____ | |
| b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If Yes: | | |
| <i>i.</i> Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input checked="" type="checkbox"/> Historic Building or District | | |
| <i>ii.</i> Name: <u>n/a</u> | | |
| <i>iii.</i> Brief description of attributes on which listing is based: _____ | | |
| <hr/> | | |
| 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? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| <hr/> | | |
| g. Have additional archaeological or historic site(s) or resources been identified on the project site? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| If Yes: | | |
| <i>i.</i> Describe possible resource(s): _____ | | |
| <i>ii.</i> Basis for identification: _____ | | |
| <hr/> | | |
| h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| If Yes: | | |
| <i>i.</i> Identify resource: _____ | | |
| <i>ii.</i> Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____ | | |
| <i>iii.</i> Distance between project and resource: _____ miles. | | |
| <hr/> | | |
| i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| If Yes: | | |
| <i>i.</i> Identify the name of the river and its designation: _____ | | |
| <i>ii.</i> Is the activity consistent with development restrictions contained in 6NYCRR Part 666? | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 _____ Date _____

Signature _____ Title _____

**ATTACHMENT A
FULL EAF PART 1, QUESTION F**

**AMENDMENTS TO THE ZONING MAP OF THE CITY OF BEACON AND
THE CODE OF THE CITY OF BEACON CONCERNING THE CITY'S
SCHEDULE OF REGULATIONS AND ASSOCIATED AMENDMENTS
REGARDING PERMITTED USES IN THE CITY OF BEACON**

The Proposed Action will amend the Zoning Map of the City of Beacon and Chapters 223 and 210 of the Code of the City of Beacon (“City Code”) concerning the City’s Schedule of Regulations and associated amendments regarding permitted uses in the City of Beacon. The intent of the Proposed Local Law is to update the City’s zoning provisions in accordance with the City’s Comprehensive Plan Updated, adopted April 3, 2017, and improve future development of the City of Beacon. The majority of the Proposed Local Law updates the City’s bulk regulations and amends the City’s Schedule of Regulations and other City Code provisions with respect to what uses are permitted in each Zoning District. The City’s goal is to make the Schedule of Uses easier to read and to combine similar districts to streamline the Code.

The proposed Local Law eliminates the following zoning districts (1) the RMF 1.5 Multifamily Residence District, (2) the RMF 8 Multifamily Residence District, (3) the PB Business Off-Street Parking District, (4) the LB Local Business District, (5) the OB Office Business District and (6) the CB Central Business District. In addition, the proposed Local Law adds a new Zoning District - the Transitional (“T”) Zoning District - to the Zoning Map of the City of Beacon and the City Code.

The proposed local law amending the Zoning Map of the City of Beacon rezones 173 parcels. All PB and LB properties are rezoned to the T Zoning District which accounts for 156 parcels. The other 17 parcels are classified to zoning designations of adjacent properties to better preserve community character and encourage compatible development.

In order to accomplish the City’s goal, the City has reformatted the City’s Schedule of Use Regulations. The revised Schedule of Use Regulations also includes the T Zoning District and reflects changes made to the uses permitted in each zoning district. The City has also updated its Schedule of Dimensional Regulations to amend the bulk regulation associated with each zoning district. These changes allow the City to encourage development that will meet the goals and objectives set forth in the Comprehensive Plan to allow for sufficient density to support a transit oriented community focused toward residents, workers and visitors who seek the convenience of transportation facilities in a walkable community framework. Through these changes the City hopes to encourage a vibrant business community, protect natural and historic resources, and create a variety of housing opportunities for residents.

The proposed Local Law includes several text amendments to Chapters 223 and 210 of the City Code. These amendments in the Local Law revise the code as follows:

- The amendments remove all regulations pertaining to non-conforming residential uses on Main Street in § 223-10.
- The amendments revise amend City Code § 223-13 to clarify certain height requirements.
- The amendments modifies the permitted and special permit uses for the Waterfront Development Zone, Fishkill Creek Development District, Central Main Street District and the Linkage District.
- The amendments update the special use permit application process and review standards set forth in City Code § 223-18.B. The City added the following new conditions and standards for special use permits:
 - Uses, buildings, and operations will be accessible for emergency services and appropriately located for water, sewer, and other infrastructure requirements.
 - The use will comply with other regulations in the Code and will be compatible with the recommendations in the City's Comprehensive Plan and Local Waterfront Revitalization Program.
- The amendments change the review process required for accessory apartments. Under the proposed amendments, accessory apartments require special use permits issued by the Planning Board rather than the City Council.
- The amendments revise City Code § 223-24.7 to allow hotel uses in the Historic District and Landmark Overlay Zone.
- The amendments add additional permitted principal uses to the waterfront development zone, including certain public and semipublic uses, conference spaces, microbreweries and other similar uses.
- The amendments change the bulk regulations applicable to the Waterfront Park Zone and Waterfront Development Zone.
- The amendments add additional permitted uses to the Fishkill Creek Development District, including day care centers, trade schools, colleges, private school or nursery school.
- The amendments modify the uses permitted in the Central Main Street and the Linkage District.
- The amendments establish lighting standards in § 223-14.B.
- The amendments add new definitions to City Code City Code § 223-63 to define uses referenced throughout the Code. .

- The amendments remove references to zoning districts which are being eliminated from the City Code.
- The amendments modify City Code § 223-67 to update the City's provision concerning the referral of proposals to Dutchess County Planning Department to comply with New York States required statutory procedures and the procedures established by the Dutchess County Planning Department.

**ATTACHMENT A
FULL EAF PART 1, QUESTION F**

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- The amendments modify City Code § 223-67 to update the City's provision concerning the referral of proposals to Dutchess County Planning Department to comply with New York States required statutory procedures and the procedures established by the Dutchess County Planning Department.

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

| |
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| Agency Use Only [If applicable] |
| Project : Zoning Amendments |
| Date : April 30, 2020 |

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer “**Yes**” to a numbered question, please complete all the questions that follow in that section.
- If you answer “**No**” to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box “Moderate to large impact may occur.”
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the “whole action”.
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

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| 1. Impact on Land Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1) <i>If “Yes”, answer questions a - j. If “No”, move on to Section 2.</i> | | | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur | | |
| a. The proposed action may involve construction on land where depth to water table is less than 3 feet. | E2d | <input type="checkbox"/> | <input type="checkbox"/> | | |
| b. The proposed action may involve construction on slopes of 15% or greater. | E2f | <input type="checkbox"/> | <input type="checkbox"/> | | |
| c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface. | E2a | <input type="checkbox"/> | <input type="checkbox"/> | | |
| d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material. | D2a | <input type="checkbox"/> | <input type="checkbox"/> | | |
| e. The proposed action may involve construction that continues for more than one year or in multiple phases. | D1e | <input type="checkbox"/> | <input type="checkbox"/> | | |
| f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides). | D2e, D2q | <input type="checkbox"/> | <input type="checkbox"/> | | |
| g. The proposed action is, or may be, located within a Coastal Erosion hazard area. | B1i | <input type="checkbox"/> | <input type="checkbox"/> | | |
| h. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> | | |

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g)

NO

YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|-----------------------------|-------------------------------|------------------------------------|
| a. Identify the specific land form(s) attached: _____ _____ | E2g | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____ | E3c | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h)

NO

YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|--|-----------------------------|-------------------------------|------------------------------------|
| a. The proposed action may create a new water body. | D2b, D1h | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water. | D2b | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body. | D2a | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body. | E2h | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments. | D2a, D2h | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water. | D2c | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s). | D2d | <input type="checkbox"/> | <input type="checkbox"/> |
| h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies. | D2e | <input type="checkbox"/> | <input type="checkbox"/> |
| i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action. | E2h | <input type="checkbox"/> | <input type="checkbox"/> |
| j. The proposed action may involve the application of pesticides or herbicides in or around any water body. | D2q, E2h | <input type="checkbox"/> | <input type="checkbox"/> |
| k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities. | D1a, D2d | <input type="checkbox"/> | <input type="checkbox"/> |

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| I. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |
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4. Impact on groundwater

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. NO YES
(See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)
If "Yes", answer questions a - h. If "No", move on to Section 5.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|--|-----------------------------|-------------------------------|------------------------------------|
| a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells. | D2c | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____ | D2c | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may allow or result in residential uses in areas without water and sewer services. | D1a, D2c | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may include or require wastewater discharged to groundwater. | D2d, E2l | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated. | D2c, E1f, E1g, E1h | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer. | D2p, E2l | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources. | E2h, D2q, E2l, D2c | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

5. Impact on Flooding

The proposed action may result in development on lands subject to flooding. NO YES
(See Part 1. E.2)
If "Yes", answer questions a - g. If "No", move on to Section 6.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|--|-----------------------------|-------------------------------|------------------------------------|
| a. The proposed action may result in development in a designated floodway. | E2i | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in development within a 100 year floodplain. | E2j | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may result in development within a 500 year floodplain. | E2k | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may result in, or require, modification of existing drainage patterns. | D2b, D2e | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may change flood water flows that contribute to flooding. | D2b, E2i, E2j, E2k | <input type="checkbox"/> | <input type="checkbox"/> |
| f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade? | E1e | <input type="checkbox"/> | <input type="checkbox"/> |

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| g. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |
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| 6. Impacts on Air | | | |
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| The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2.h, D.2.g) <i>If "Yes", answer questions a - f. If "No", move on to Section 7.</i> | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: i. More than 1000 tons/year of carbon dioxide (CO ₂) ii. More than 3.5 tons/year of nitrous oxide (N ₂ O) iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) iv. More than .045 tons/year of sulfur hexafluoride (SF ₆) v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions vi. 43 tons/year or more of methane | D2g D2g D2g D2g D2g D2h | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants. | D2g | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour. | D2f, D2g | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above. | D2g | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour. | D2s | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

| 7. Impact on Plants and Animals | | | |
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| The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) <i>If "Yes", answer questions a - j. If "No", move on to Section 8.</i> | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site. | E2o | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government. | E2o | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site. | E2p | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government. | E2p | <input type="checkbox"/> | <input type="checkbox"/> |

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| e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect. | E3c | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____ | E2n | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site. | E2m | <input type="checkbox"/> | <input type="checkbox"/> |
| h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ | E1b | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides. | D2q | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Other impacts: _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

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| 8. Impact on Agricultural Resources | | | |
| The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| <i>If "Yes", answer questions a - h. If "No", move on to Section 9.</i> | | | |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System. | E2c, E3b | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc). | E1a, E1b | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land. | E3b | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District. | E1b, E3a | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may disrupt or prevent installation of an agricultural land management system. | E1 a, E1b | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland. | C2c, C3, D2c, D2d | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan. | C2c | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Other impacts: _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

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| 9. Impact on Aesthetic Resources The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) <i>If "Yes", answer questions a - g. If "No", go to Section 10.</i> | | | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur | | |
| a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource. | E3h | <input type="checkbox"/> | <input type="checkbox"/> | | |
| b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views. | E3h, C2b | <input type="checkbox"/> | <input type="checkbox"/> | | |
| c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round | E3h | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | | |
| d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities | E3h E2q, E1c | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | | |
| e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource. | E3h | <input type="checkbox"/> | <input type="checkbox"/> | | |
| f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 -3 mile 3-5 mile 5+ mile | D1a, E1a, D1f, D1g | <input type="checkbox"/> | <input type="checkbox"/> | | |
| g. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> | | |

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| 10. Impact on Historic and Archeological Resources The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) <i>If "Yes", answer questions a - e. If "No", go to Section 11.</i> | | | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur | | |
| a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical 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. | E3e | <input type="checkbox"/> | <input type="checkbox"/> | | |
| b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory. | E3f | <input type="checkbox"/> | <input type="checkbox"/> | | |
| c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____ | E3g | <input type="checkbox"/> | <input type="checkbox"/> | | |

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| d. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |
| e. If any of the above (a-d) are answered “Moderate to large impact may occur”, continue with the following questions to help support conclusions in Part 3: | | | |
| i. The proposed action may result in the destruction or alteration of all or part of the site or property. | E3e, E3g, E3f | <input type="checkbox"/> | <input type="checkbox"/> |
| ii. The proposed action may result in the alteration of the property’s setting or integrity. | E3e, E3f, E3g, E1a, E1b | <input type="checkbox"/> | <input type="checkbox"/> |
| iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting. | E3e, E3f, E3g, E3h, C2, C3 | <input type="checkbox"/> | <input type="checkbox"/> |

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| 11. Impact on Open Space and Recreation The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1. C.2.c, E.1.c., E.2.q.) <i>If “Yes”, answer questions a - e. If “No”, go to Section 12.</i> | | | | <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur | |
| a. The proposed action may result in an impairment of natural functions, or “ecosystem services”, provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat. | D2e, E1b E2h, E2m, E2o, E2n, E2p | <input type="checkbox"/> | <input type="checkbox"/> | |
| b. The proposed action may result in the loss of a current or future recreational resource. | C2a, E1c, C2c, E2q | <input type="checkbox"/> | <input type="checkbox"/> | |
| c. The proposed action may eliminate open space or recreational resource in an area with few such resources. | C2a, C2c E1c, E2q | <input type="checkbox"/> | <input type="checkbox"/> | |
| d. The proposed action may result in loss of an area now used informally by the community as an open space resource. | C2c, E1c | <input type="checkbox"/> | <input type="checkbox"/> | |
| e. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> | |

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| 12. Impact on Critical Environmental Areas The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) <i>If “Yes”, answer questions a - c. If “No”, go to Section 13.</i> | | | | <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur | |
| a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA. | E3d | <input type="checkbox"/> | <input type="checkbox"/> | |
| b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA. | E3d | <input type="checkbox"/> | <input type="checkbox"/> | |
| c. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> | |

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems.

 NO YES

(See Part 1. D.2.j)

If "Yes", answer questions a - f. If "No", go to Section 14.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|-----------------------------|-------------------------------|------------------------------------|
| a. Projected traffic increase may exceed capacity of existing road network. | D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in the construction of paved parking area for 500 or more vehicles. | D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action will degrade existing transit access. | D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action will degrade existing pedestrian or bicycle accommodations. | D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may alter the present pattern of movement of people or goods. | D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy.

 NO YES

(See Part 1. D.2.k)

If "Yes", answer questions a - e. If "No", go to Section 15.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|--|-----------------------------|-------------------------------|------------------------------------|
| a. The proposed action will require a new, or an upgrade to an existing, substation. | D2k | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use. | D1f, D1q, D2k | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may utilize more than 2,500 MWhrs per year of electricity. | D2k | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed. | D1g | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Other Impacts: _____ _____ | | | |

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting.

 NO YES

(See Part 1. D.2.m., n., and o.)

If "Yes", answer questions a - f. If "No", go to Section 16.

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|--|-----------------------------|-------------------------------|------------------------------------|
| a. The proposed action may produce sound above noise levels established by local regulation. | D2m | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home. | D2m, E1d | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may result in routine odors for more than one hour per day. | D2o | <input type="checkbox"/> | <input type="checkbox"/> |

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| d. The proposed action may result in light shining onto adjoining properties. | D2n | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions. | D2n, E1a | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.)
If "Yes", answer questions a - m. If "No", go to Section 17.

NO

YES

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|-----------------------------|-------------------------------|------------------------------------|
| a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community. | E1d | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The site of the proposed action is currently undergoing remediation. | E1g, E1h | <input type="checkbox"/> | <input type="checkbox"/> |
| c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action. | E1g, E1h | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction). | E1g, E1h | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health. | E1g, E1h | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health. | D2t | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed action involves construction or modification of a solid waste management facility. | D2q, E1f | <input type="checkbox"/> | <input type="checkbox"/> |
| h. The proposed action may result in the unearthing of solid or hazardous waste. | D2q, E1f | <input type="checkbox"/> | <input type="checkbox"/> |
| i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste. | D2r, D2s | <input type="checkbox"/> | <input type="checkbox"/> |
| j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste. | E1f, E1g E1h | <input type="checkbox"/> | <input type="checkbox"/> |
| k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures. | E1f, E1g | <input type="checkbox"/> | <input type="checkbox"/> |
| l. The proposed action may result in the release of contaminated leachate from the project site. | D2s, E1f, D2r | <input type="checkbox"/> | <input type="checkbox"/> |
| m. Other impacts: _____ _____ | | | |

| 17. Consistency with Community Plans The proposed action is not consistent with adopted land use plans. (See Part 1. C.1, C.2. and C.3.) <i>If “Yes”, answer questions a - h. If “No”, go to Section 18.</i> | | | |
|--|-----------------------------------|--|------------------------------------|
| | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action’s land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s). | C2, C3, D1a E1a, E1b | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%. | C2 | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action is inconsistent with local land use plans or zoning regulations. | C2, C2, C3 | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action is inconsistent with any County plans, or other regional land use plans. | C2, C2 | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure. | C3, D1c, D1d, D1f, D1d, E1b | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure. | C4, D2c, D2d D2j | <input type="checkbox"/> | <input type="checkbox"/> |
| g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action) | C2a | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Other: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

| 18. Consistency with Community Character The proposed project is inconsistent with the existing community character. (See Part 1. C.2, C.3, D.2, E.3) <i>If “Yes”, answer questions a - g. If “No”, proceed to Part 3.</i> | | | |
|--|--------------------------------|--|------------------------------------|
| | | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community. | E3e, E3f, E3g | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The proposed action may create a demand for additional community services (e.g. schools, police and fire) | C4 | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing. | C2, C3, D1f D1g, E1a | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources. | C2, E3 | <input type="checkbox"/> | <input type="checkbox"/> |
| e. The proposed action is inconsistent with the predominant architectural scale and character. | C2, C3 | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Proposed action is inconsistent with the character of the existing natural landscape. | C2, C3 E1a, E1b E2g, E2h | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Other impacts: _____ _____ | | <input type="checkbox"/> | <input type="checkbox"/> |

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

Part 1 and Attachment A of the Full EAF and Part 2 of the Full EAF demonstrate there are no potential significant impacts from the Proposed Action. The proposed amendments to the Zoning Map of the City of Beacon and Chapters 223 and 210 of the City Code are made to update the City Code and Zoning Map to be more consistent with the City's Comprehensive Plan Update, adopted on April 3, 2017, and to improve future development of the City of Beacon. Through the proposed changes the City will create a new zoning district referred to as the Linkage District to link the CMS District to neighboring residential districts.

The majority of the Proposed Local Law updates the City's bulk regulations and amends the City's Schedule of Regulations and other City Code provisions with respect to what uses are permitted in each Zoning District. The City's goal is to make the Schedule of Uses easier to read and to combine similar districts to streamline the Code.

The proposed zoning amendments streamline the Zoning Code and improve its readability. These changes allow the City to encourage development that will meet the goals and objectives set forth in the Comprehensive Plan to allow for sufficient density to support a transit oriented community focused toward residents, workers and visitors who seek the convenience of transportation facilities in a walkable community framework. Through these changes the City hopes to encourage a vibrant business community, protect natural and historic resources, and create a variety of housing opportunities for residents.

Any projects developed pursuant to the new code provisions will undergo specific SEQRA review to evaluate each proposal on a case by case basis. Overall the proposed local law will not result in any significant adverse environmental impacts and will improve the quality of the existing community and preserve community character throughout the City. The proposed local law will overall protect the health, safety and welfare of the City and its residents.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: Type 1 Unlisted

Identify portions of EAF completed for this Project: Part 1 Part 2 Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information visual presentations by the City Planner, memorandums from the City Planner, and comparison tables and charts.

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the City Council of the City of Beacon as lead agency that:

A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: City of Beacon Local Law Amending Chapters 223 and 210 of the Code of the City of Beacon

Name of Lead Agency: City of Beacon

Name of Responsible Officer in Lead Agency: Lee Kyriacou

Title of Responsible Officer: Mayor

Signature of Responsible Officer in Lead Agency:

Date:

Signature of Preparer (if different from Responsible Officer)

Date:

For Further Information:

Contact Person: Anthony Ruggiero, City Administrator

Address: 1 Municipal Plaza, New York 12508

Telephone Number: 845-838-5000

E-mail: Aruggiero@cityofbeacon.org

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)

Other involved agencies (if any)

Applicant (if any)

Environmental Notice Bulletin: <http://www.dec.ny.gov/enb/enb.html>

City of Beacon Planning Board
5/12/2020

Title:

Local Law Review to Amend City's Zoning Map

Subject:

City Council request to review proposed Local Law to amend the City's Zoning Map

Background:

ATTACHMENTS:

| Description | Type |
|---|------|
| Local_Law_Amending_the_Zoning_Map_of_the_City_of_Beacon | Map |
| Zoning Map Changes | Map |

LOCAL LAW NO. ____ OF 2020

**CITY COUNCIL
CITY OF BEACON**

**LOCAL LAW AMENDING THE ZONING MAP OF
THE CITY OF BEACON**

A LOCAL LAW to amend the 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 Council believes that it is reasonable and appropriate to rezone certain areas in the central downtown business district and along Fishkill Creek in a manner that is not inconsistent with the City’s Comprehensive Plan and provides for more efficient zoning boundaries. This local law is determined to be an exercise of the police powers of the City to protect the public health, safety and welfare of its residents.

Section 2. The zoning of the parcels listed below is hereby changed from the Existing Zoning District to the New Zoning District as shown in the table and as shown in Figure 1 annexed hereto:

| Tax Parcel Number | Subject Property Address | Owner’s Name and Address | Existing Zoning District | New Zoning District |
|--|---------------------------------|---|---------------------------------|----------------------------|
| p/o 6054-29-056780 (See Fig. 1 - portion of lot fronting on South Street) | Main Street Beacon, NY 12508 | McDermott Properties 48 Foxboro Rd Essex CT 06840 | PB | T |

| | | | | |
|--|---|---|----|---|
| p/o 6054-29-086757 (See Fig. 1- portion of lot fronting on South Street) | Main Street, Beacon, NY 12508 | Qualamar Corporation PO Box 4292 New Windsor NY 12553 | PB | T |
| 6054-29-082764 | 28 South St, Beacon, NY 12508 | Ross J. Beeley America Olivo Campbell Rebecca A. Engle 25 Rombout Avenue Beacon, NY 12508 | PB | T |
| 6054-29-079768 | 32 South St, Beacon, NY 12508 | Jennifer Rossa 425 Prospect Pl Brooklyn, NY 11238 | PB | T |
| 6054-29-075770 | 34 South St, Beacon NY 12508 | Neil Vaughn Erika M Foy 432 Main Street Beacon NY 12508 | PB | T |
| p/o 6054-29-068768 (See Fig. 1- portion of lot fronting on South Street) | 432 Main Street, Beacon, NY 12508 | Neil Vaughn 432 Main Street Beacon, NY 12508 | PB | T |
| p/o 6054-29-062771 (See. Fig. 1-portion of lot fronting on South Street) | 422-428 Main Street, Beacon, NY 12508 | Beacon Main Real Estate Group 8 Bellford Lane Beacon, NY 12508 | PB | T |
| 6054-29-063780 | 48 South Street Beacon NY 12508 | John WH Dacey Holly R Sumner 48 South Street Beacon, NY 12508 | PB | T |
| 6054-29-049789 | Schenck Avenue Beacon, NY 12508 | JP Morgan Chase Bank Natl Assn. PO Box 810490 Dallas TX 75381 | PB | T |

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|----------------|--|--|----|---|
| 6054-29-054793 | 12 Schenck Avenue Beacon, NY 12508 | George E Buckley Dolores M Way Howard E Way 12 Schenck Avenue Beacon, NY 12508 | PB | T |
| 6054-29-041801 | 152 Fishkill Avenue Beacon, NY 12508 | 152-158 Fishkill Avenue LLC 316 Main St Poughkeepsie NY 12601 | PB | T |
| 6054-29-042814 | 158 Fishkill Avenue Beacon, NY 12508 | 152-158 Fishkill Avenue LLC 316 Main St Poughkeepsie NY 12601 | PB | T |
| 6054-29-026830 | 163 Fishkill Avenue Beacon, NY 12508 | James Vivian Melissa L. Vivian 163 Fishkill Avenue Beacon NY 12508 | PB | T |
| 6054-29-024827 | 159 Fishkill Avenue Beacon, NY 12508 | Kimberly L. Garcia James J. Halstead 159 Fishkill Avenue Beacon NY 12508 | PB | T |
| 6054-29-007841 | 23 Eliza Street Beacon, NY 12508 | John C. Thom Tara E. Thom 82 Sunrise Hill Rd Fishkill NY 12524 | PB | T |
| 6054-29-004836 | Eliza Street Beacon, NY 12508 | O'Donnell Construction Corp. PO Box 526 Fishkill NY 12524 | PB | T |
| 5954-36-958873 | Church Street Beacon, NY 12508 | 59 Church Street Development PO Box 390 Beacon, NY 12508 | PB | T |
| 5954-36-951861 | 12 N. Chestnut Street Beacon, NY 12508 | Suzanne McElduff Judith Keating 232 S. Smith Street LaGrangeville, NY 12540 | PB | T |

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|----------------|---|--|----|---|
| 5954-36-954865 | 14 N. Chestnut Street Beacon, NY 12508 | Pamela S. Koeber-Diebboll 14 N. Chestnut Street Beacon, NY 12508 | PB | T |
| 5954-28-951876 | Church Street Beacon, NY 12508 | Joseph Neville Joan Ehrenberg 91 Rombout Avenue Beacon, NY 12508 | PB | T |
| 5954-28-943881 | N. Cedar Street Beacon, NY 12508 | Cervone Realty LLC 111 N Walnut Street Beacon, NY | PB | T |
| 5954-28-943875 | 10 N. Cedar Street Beacon, NY 12508 | Aaron T. Ketry Rebecca L. Eaton 10 N. Cedar Street Beacon, NY 12508 | PB | T |
| 5954-36-938872 | 8 N. Cedar Street Beacon, NY 12508 | Anthony Risicato 8 N. Cedar Street Beacon, NY 12508 | PB | T |
| 5954-28-938892 | 15 N. Cedar Street Beacon, NY 12508 | Thomas W. Hoyt 15 N. Cedar Street Beacon, NY 12508 | PB | T |
| 5954-28-933886 | 11 N. Cedar Street Beacon, NY 12508 | Eileen Ohare 11 N. Cedar Street Beacon, NY 12508 | PB | T |
| 5954-28-930881 | 7 N. Cedar Street Beacon, NY 12508 | Lydia Panko LT Treanor Luba RM TR Weidler Nina Panko RM TR Keating Peter RM TR Panko 7 N. Cedar Street Beacon, NY 12508 | PB | T |
| 5954-28-931894 | Church Street Beacon, NY 12508 | Movil Development Corp. 284 Main Street Beacon, NY 12508 | PB | T |
| 5954-28-929896 | 43 Church Street Beacon, NY 12508 | Dolores Hughes 43 Church Street Beacon, NY 12508 | PB | T |
| 5954-28-926898 | 41 Church Street Beacon, NY 12508 | Nicholas J. Dennany Jessica Shaffer 41 Church Street Beacon, NY 12508 | PB | T |

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| 5954-28-924903 | 14 N. Brett Street Beacon, NY 12508 | Adella F. Coultas 14 N. Brett Street Beacon, NY 12508 | PB | T |
| 5954-28-922900 | 12 N. Brett Street Beacon, NY 12508 | Dana Collins PO Box 1798 Pleasant Valley NY 12569 | PB | T |
| 5954-28-920897 | 10 N. Brett Street Beacon, NY 12508 | Asif B. Hemdani 10 N. Brett Street Beacon, NY 12508 | PB | T |
| 5954-28-920893 | 8 N. Brett Street Beacon, NY 12508 | Theodore Henry 8 N. Brett Street Beacon, NY 12508 | PB | T |
| 5954-28-917889 | 6 N. Brett Street Beacon, NY 12508 | Movil Development Corp. 284 Main Street Beacon, NY 12508 | PB | T |
| 5954-28-915905 | 37 Church Street Beacon, NY 12508 | Clarence Heroy 37 Church Street Beacon, NY 12508 | PB | T |
| 5954-28-912908 | 35 Church Street Beacon, NY 12508 | Nicholas G. Lovallo Allison M. Lovallo 35 Church Street Beacon, NY 12508 | PB | T |
| 5954-28-909910 | 33 Church Street Beacon, NY 12508 | Isaac Gutierrez 33 Church Street Beacon, NY 12508 | PB | T |
| 5954-28-904913 | 31 Church Street Beacon, NY 12508 | Jaime Q. LT Montanez James RM Montanez Stacy RM Montanez 31 Church Street Beacon, NY 12508 | PB | T |
| 5954-28-897918 | 27 Church Street Beacon, NY 12508 | Christopher D. Brown Babette J. Brown 27 Church Street Beacon, NY 12508 | PB | T |
| 5954-28-888923 | 25 Church Street Beacon, NY 12508 | Karan Garewal 6 Brentwood Ct. Mt. Kisco, NY 10549 | PB | T |
| 5954-28-885926 | 23 Church Street Beacon, NY 12508 | Ryan K. Green 23 Church Street Beacon, NY 12508 | PB | T |
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|----------------|--|---|----|---|
| 5954-28-880926 | 21 Church Street Beacon, NY 12508 | Michelle Hilton 21 Church Street Beacon, NY 12508 | PB | T |
| 5954-28-882920 | 9 N. Walnut Street Beacon, NY 12508 | Angelo A. Cervone Paula J. Cervone 111 N. Walnut Street Beacon, NY 12508 | PB | T |
| 5954-28-880917 | 7 N. Walnut Street Beacon, NY 12508 | Jessica Dias 7 N. Walnut Street Beacon, NY 12508 | PB | T |
| 5954-28-879914 | 5 N. Walnut Street Beacon, NY 12508 | Colin Cheyne Helen Nelsen 5 N. Walnut Street Beacon, NY 12508 | PB | T |
| 5954-27-864924 | 4 N. Elm Street Beacon, NY 12508 | 4 Elm Holdings LLC 15 Sumter Road Airmont, NY 10952 | PB | T |
| 5954-27-862944 | 13 Mattie Cooper Square Beacon, NY 12508 | Ana Tapia Miguel Tapia 13 Mattie Cooper Square Beacon, NY 12508 | PB | T |
| 5954-27-858938 | 11 N. Elm Street Beacon, NY 12508 | Daniel L. Aubry 196 Bowery New York, NY 10012 | PB | T |
| 5954-27-857931 | 5 N. Elm Street Beacon, NY 12508 | Daniel L. Aubry 196 Bowery New York, NY 10012 | PB | T |
| 5954-27-853946 | 9 Mattie Cooper Square Beacon, NY 12508 | Erich Hess Hattie C. Hess 9 Mattie Cooper Square Beacon, NY 12508 | PB | T |
| 5954-27-846941 | 6 Digger Phelps Ct. Beacon, NY 12508 | David Maros Agnieszka Maros 1456 Ulster Hts Ellenville, NY 12428 | PB | T |
| 5954-27-845957 | 13 Digger Phelps Ct. Beacon, NY 12508 | Springfield Baptist Church 8 Mattie Cooper Square Beacon, NY 12508 | PB | T |
| 5954-27-843954 | 11 Digger Phelps Ct. Beacon, NY 12508 | Jonathan Bailey Gemma Simon 11 Digger Phelps Ct. Beacon, NY 12508 | PB | T |

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| 5954-27-840949 | 7 Digger Phelps Ct. Beacon, NY 12508 | Thomas R. Garrett Zina Garrett 7 Digger Phelps Ct. Beacon, NY 12508 | PB | T |
| 5954-27-837945 | 5 Digger Phelps Ct. Beacon, NY 12508 | Richard F. Benash Shelita Birchett 339 Roberts Avenue Yonkers, NY 10703 | PB | T |
| 5954-27-838962 | 12 Willow Street Beacon, NY 12508 | KG Beacon LLC 460 W. 24 th Street New York, NY 10011 | PB | T |
| 5954-27-836959 | 10 Willow Street Beacon, NY 12508 | Jill F. Reynolds Daniel M. Spitzer 10 Willow Street Beacon, NY 12508 | PB | T |
| 5954-27-833955 | 8 Willow Street Beacon, NY 12508 | Anthony Davis Deva Woodly 8 Willow Street Beacon, NY 12508 | PB | T |
| 5954-27-831951 | 6 Willow Street Beacon, NY 12508 | Jonathan Halevah 6 Willow Street Beacon, NY 12508 | PB | T |
| 5954-27-830970 | 13 Willow Street Beacon, NY 12508 | Joell Morales 13 Willow Street Beacon, NY 12508 | PB | T |
| 5954-27-827970 | 11 Willow Street Beacon, NY 12508 | Lelach Shani David Lant 29 Cutler Ln Garrison, NY 10524 | PB | T |
| 5954-27-873931 | 17 Church Street Beacon, NY 12508 | Brenda Belladone Edwards, Trustee 17 Church Street Beacon, NY 12508 | PB | T |
| 5954-27-824967 | 9 Willow Street Beacon, NY 12508 | Patrick LT Kerr John F. RM Kerr Kevin M. RM Kerr Martin William RM Kerr Mary B. RM Mateer Patrick E RM Kerr Pauline Patricia LT Kerr 9 Willow St Beacon NY 125080000 | PB | T |

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|---|---------------------------------------|--|----|---|
| 5954-27-820961 | 5 Willow Street Beacon, NY 12508 | Susan C. Battersby 1 Mountain Ln. Beacon, NY 12508 | PB | T |
| p/o 5954-27-813963(See Fig. 1 - portion of lot adjacent to Parcel #s 820961 and 824967) | 182 Main Street Beacon, NY 12508 | 182 Main Street Beacon LLC 3169 Glendale Blvd Los Angeles, CA 90039 | PB | T |
| p/o 5954-27-813968(See Fig. 1 - portion of lot adjacent to Parcel #s 808975, 811979 and 814984) | 180 Main Street Beacon, NY 12508 | 180 Main LLC 48 Angola Rd Cornwall, NY 12518 | PB | T |
| 5954-27-814984 | 14 Cross Street Beacon, NY 12508 | Linda M. Owen 50 Red Schoolhouse Rd Fishkill, NY 12524 | PB | T |
| 5954-27-811979 | 12 Cross Street Beacon, NY 12508 | Charles Lashley Alyce Lashley 12 Cross Street Beacon, NY 12508 | PB | T |
| 5954-27-808975 | 10 Cross Street Beacon, NY 12508 | Crossix LLC 50 Simmons Ln Beacon, NY 12508 | PB | T |
| 5954-27-802974 | 8 Cross Street Beacon, NY 12508 | Jose R. Santiago Myriam Orrego 8 Cross Street Beacon, NY 12508 | PB | T |
| 5954-27-798971 | 4 Cross Street Beacon, NY 12508 | Hudson Todd LLC 4 Cross Street Beacon, NY 12508 | PB | T |
| 5954-27-792985 | 9 Cross Street Beacon, NY 12508 | Crossix LLC 50 Simmons Ln Beacon, NY 12508 | PB | T |
| 5954-27-788982 | Cross Street Beacon, NY 12508 | Crossix, LLC 50 Simmons Ln Beacon, NY 12508 | PB | T |
| 5954-27-813905 | 18 Dewindt Street Beacon, NY 12508 | Denise M. Szuniewicz 1128 Parker Mountain Rd Strafford, NH 03884 | PB | T |

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|----------------|---------------------------------------|---|----|---|
| 5954-27-814910 | Dewindt Street Beacon, NY 12508 | AMGC Corp. 6405 Atlantic Avenue Wildwood, NJ 08260 | PB | T |
| 5954-27-809909 | 12 Dewindt Street Beacon, NY 12508 | Ana Iris Quintana, Trustee 12 Dewindt Street Beacon, NY 12508 | PB | T |
| 5954-27-804912 | 10 Dewindt Street Beacon, NY 12508 | Juan Tacuri 10 Dewindt Street Beacon, NY 12508 | PB | T |
| 5954-27-799915 | 8 Dewindt Street Beacon, NY 12508 | Luis Collado Jaifa Collado 8 Dewindt Street Beacon, NY 12508 | PB | T |
| 5954-27-787915 | 4 Dewindt Street Beacon, NY 12508 | Eleni Chrones David Smolen 4 Dewindt Street Beacon, NY 12508 | PB | T |
| 5954-27-793921 | 12 Cliff Street Beacon, NY 12508 | Rhonda Elizabeth Thompson 12 Cliff Street Beacon, NY 12508 | PB | T |
| 5954-27-801923 | 10 Cliff Street Beacon, NY 12508 | Juan Claudio 10 Cliff Street Beacon, NY 12508 | PB | T |
| 5954-27-795926 | 10 Cliff Street Beacon, NY 12508 | Juan Claudio Alexandria Claudio 10 Cliff Street Beacon, NY 12508 | PB | T |
| 5954-27-796928 | Cliff Street Beacon, NY 12508 | Lazarus Rising LLC 98 Smithtown Rd Fishkill, NY 12524 | PB | T |
| 5954-27-797931 | 8 Cliff Street Beacon, NY 12508 | Minerva Cabrera 8 Cliff Street Beacon, NY 12508 | PB | T |
| 5954-27-799935 | 6 Cliff Street Beacon, NY 12508 | Willie L. Reed, Sr. 6 Cliff Street Beacon, NY 12508 | PB | T |
| 5954-27-790938 | Commerce Street Beacon, NY 12508 | Paul B. Supple PO Box 227 Beacon, NY 12508 | PB | T |

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|---|---|--|----|---|
| 5954-27-793942 | 5 Cliff Street Beacon, NY 12508 | Paul B. Supple PO Box 227 Beacon, NY 12508 | PB | T |
| 5954-27-836884 | 16 S. Elm Street Beacon, NY 12508 | Bernardo Valentin Oscar Valentin 74 Church Street Beacon, NY 12508 | PB | T |
| 5954-27-839887 | 14 S. Elm Street Beacon, NY 12508 | Manuel LT Quintana Barbara RM Quintana Carmen LT Quintana Manuel Jr RM Quintana 14 S. Elm Street Beacon, NY 12508 | PB | T |
| 5954-27-841890 | 12 S. Elm Street Beacon, NY 12508 | Benjamin Harnett 12 S. Elm Street Beacon, NY 12508 | PB | T |
| 5954-27-844894 | 10 S. Elm Street Beacon, NY 12508 | Carole Brown-Naidu, Trustee 10 S. Elm Street Beacon, NY 12508 | PB | T |
| 5954-27-846897 | 8 S. Elm Street Beacon, NY 12508 | Melissa J. Kozlowski 8 S. Elm Street Beacon, NY 12508 | PB | T |
| 5954-27-848901 | 6 S. Elm Street Beacon, NY 12508 | Brenda M. Cahill 6 S. Elm Street Beacon, NY 12508 | PB | T |
| 5954-27-849876 | 15 S. Walnut Street Beacon, NY 12508 | Jose M. Roman Miriam Santana-Roman 15 S. Walnut Street Beacon, NY 12508 | PB | T |
| p/o 5954-27-852906 (See Fig. 1 – portion of lot fronting on Dewindt Street) | 249 Main Street Beacon, NY 12508 | 249 Main Street LLC 80 Business Park Drive Armonk, NY 10504 | PB | T |
| 5954-27-852879 | 13 S. Walnut Street Beacon, NY 12508 | Anthony L. Thomaselli Gina M. Thomaselli 149 Sargent Avenue Beacon, NY 12508 | PB | T |
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|----------------|---|--|----|---|
| 5954-27-854882 | 11 S. Walnut Street Beacon, NY 12508 | Lucille R. Rodriguez 11 S. Walnut Street Beacon, NY 12508 | PB | T |
| 5954-27-856885 | 9 S. Walnut Street Beacon, NY 12508 | Richard C. Burton Imogene D. Jones 9 S. Walnut Street Beacon, NY 12508 | PB | T |
| 5954-27-859888 | 7 S. Walnut Street Beacon, NY 12508 | Samuel R. Basso 7 S. Walnut Street Beacon, NY 12508 | PB | T |
| 5954-27-861891 | 5 S. Walnut Street Beacon, NY 12508 | Roland Desmarais Eva Desmarais 5 S. Walnut Street Beacon, NY 12508 | PB | T |
| 5954-35-862869 | 16 S. Walnut Street Beacon, NY 12508 | Elise C. Knudson 16 S. Walnut Street Beacon, NY 12508 | PB | T |
| 5954-35-864871 | 14 S. Walnut Street Beacon, NY 12508 | Frank R. Martinez Stephen A. Yount 14 S. Walnut Street Beacon, NY 12508 | PB | T |
| 5954-35-866874 | 12 S. Walnut Street Beacon, NY 12508 | Joseph Valentin 74 Church Street Beacon, NY 12508 | PB | T |
| 5954-27-868876 | 10 S. Walnut Street Beacon, NY 12508 | US Bank Trust NA, Trustee 3630 Peachtree Rd Atlanta, GA 30326 | PB | T |
| 5954-27-870879 | 8 S. Walnut Street Beacon, NY 12508 | 8 Walnut St Realty LLC 43 Watch Hill Dr Fishkill, NY 12524 | PB | T |
| 5954-27-872882 | 6 S. Walnut Street Beacon, NY 12508 | Dennis E. Conklin Joan A. Conklin 6 S. Walnut Street Beacon, NY 12508 | PB | T |
| 5954-35-874868 | 40 Dewindt Street Beacon, NY 12508 | Thomas C. Di Perno, Jr 40 Dewindt Street Beacon, NY 12508 | PB | T |
| 5954-36-880861 | 11 S. Brett Street Beacon, NY 12508 | 11 Brett Street LLC 114-11 Lefferts Blvd. South Ozone Park, NY 11420 | PB | T |

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| 5954-36-883865 | 9 S. Brett Street Beacon, NY 12508 | Victor M. DeJesus Denora DeJesus 9 S. Brett Street Beacon, NY 12508 | PB | T |
| 5954-36-886869 | 7 S. Brett Street Beacon, NY 12508 | Andrew Szustka Patricia Szustka 7 S. Brett Street Beacon, NY 12508 | PB | T |
| 5954-36-892853 | 12 S. Brett Street Beacon, NY 12508 | Jennifer Burnley Earlene Mallory 12 S. Brett Street Beacon, NY 12508 | PB | T |
| p/o 5954-36-899864 (See Fig. 1 – portion of lot fronting on Dewindt Street) | 297 Main Street Beacon, NY 12508 | Hedgestone Associates, Inc 17 Stonehedge Drive West Nyack, NY 10994 | PB | T |
| 5954-36-895857 | 10 S. Brett Street Beacon, NY 12508 | Ana I. Santos Alejandro Quintana 10 S. Brett Street Beacon, NY 12508 | PB | T |
| 5954-36-903845 | 13 S. Cedar Street Beacon, NY 12508 | Juana M. Rivera Chris Stamo 13 S. Cedar Street Beacon, NY 12508 | PB | T |
| 5954-36-906849 | 11 S. Cedar Street Beacon, NY 12508 | Alfredo J. Gneiting 11 S. Cedar Street Beacon, NY 12508 | PB | T |
| 5954-36-909853 | 7-9 S. Cedar Street Beacon, NY 12508 | Ramroop Bhagwandin Chanderdai Bhagwandi 14 Richmond Pl Cortlandt Manor, NY 10567 | PB | T |
| 5954-36-915835 | 16 S. Cedar Street Beacon, NY 12508 | Danie Murgatroyd PO Box 187 Beacon, NY 1250 | PB | T |
| 5954-36-918839 | 14 S. Cedar Street Beacon, NY 12508 | RUBIQ LLC 170 Second Avenue New York, NY 10003 | PB | T |
| 5954-36-922841 | 10 S. Cedar Street Beacon, NY 12508 | J & S Ritter Realty 2 Cedarcliff Ln Poughkeepsie, NY 12601 | PB | T |

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| 5954-36-923843 | 8 S. Cedar Street Beacon, NY 12508 | Hudson Todd LLC 4 Cross Street Beacon, NY | PB | T |
| 5954-36-922847 | 6 S. Cedar Street Beacon, NY 12508 | Hudson Todd LLC 4 Cross Street Beacon, NY | PB | T |
| 5954-36-928828 | 20 S. Chestnut Street Beacon, NY 12508 | Jeffrey R. McHugh 20 S. Chestnut Street Beacon, NY 12508 | PB | T |
| 5954-36-930832 | 18 S. Chestnut Street Beacon, NY 12508 | Michael Loughran Joanne Loughran 18 S. Chestnut Street Beacon, NY 12508 | PB | T |
| 5954-36-935836 | S. Chestnut Street Beacon, NY 12508 | J & S Ritter Realty 2 Cedarcliff Ln Poughkeepsie, NY 12601 | PB | T |
| 6054-37-073725 | 5 Tioronda Avenue Beacon, NY 12508 | Dennis Meyer Karen Meyer 43 Ackerman Street Beacon, NY 12508 | PB | T |
| p/o Partial 6054-37- 062739(See Fig. 1 - portion of lot fronting on Van Nydeck Avenue) | 25 Van Nydeck Avenue Beacon, NY 12508 | City of Beacon 1 Municipal Plaza Beacon, NY 12508 | PB | T |
| p/o 6054-29- 055758 (See Fig. 1 – portion of lot fronting on Van Nydeck Avenue) | 445-449 Main Street Beacon, NY 12508 | Beacon Main Street Theater LLC 484 Main Street Beacon, NY 12508 | PB | T |
| p/o 6054-29- 045758 (See Fig. 1 – portion of lot fronting on Van Nydeck) | 443 Main Street Beacon, NY 12508 | Verizon New York Inc. PO Box 2749 Addison, TX 75001 | PB | T |
| p/o 6054-29- 041761 (See Fig. 1 – portion of lot fronting on Van Nydeck Avenue) | 433 Main Street Beacon, NY 12508 | Verizon New York Inc. PO Box 2749 Addison, TX 75001 | PB | T |

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| p/o 6054-29-035764 (See Fig. 1 – portion of lot fronting on Van Nydeck Avenue) | 427 Main Street Beacon, NY 12508 | Beacon Court Associates Inc. 427 Main Street Beacon, NY 12508 | PB | T |
| p/o 6054-29-026773 (See Fig. 1 – portion of lot fronting on Van Nydeck Avenue) | 423-425 Main Street Beacon, NY 12508 | City of Beacon 1 Municipal Plaza Beacon, NY 12508 | PB | T |
| 5954-36-918821 | Dewindt Street Beacon, NY 12508 | St. Rocco Society 26 S. Chestnut Street Beacon, NY 12508 | OB | T |
| 5954-36-926817 | 26 S. Chestnut Street Beacon, NY 12508 | St. Rocco Society 26 S. Chestnut Street Beacon, NY 12508 | OB | T |
| 5954-36-939808 | 5 Henry Street Beacon, NY 12508 | Ninnie Management Corp. PO Box 328 Beacon, NY 12508 | OB | T |
| 5954-36-948802 | 7 Henry Street Beacon, NY 12508 | Garth T. Mark 434 Clermont Avenue Brooklyn, NY 11238 | OB | T |
| 5954-36-955796 | 19 Henry Street Beacon, NY 12508 | Anthony J. Furco, Trustee 19 Henry Street Beacon, NY 12508 | OB | T |
| 5954-36-963790 | 21 Henry Street Beacon, NY 12508 | Lorraine Koscal, LT Glenn Koscal RM John Koscal LT Lynn Golde RM Thomas Koscal RM 21 Henry Street Beacon, NY 12508 | OB | T |
| 5954-36-970785 | 25 Henry Street Beacon, NY 12508 | Lucas F. Simmons 25 Henry Street Beacon, NY 12508 | OB | T |
| 5954-36-973782 | Henry Street Beacon, NY 12508 | Lucas F. Simmons 25 Henry Street Beacon, NY 12508 | OB | T |
| 5954-36-986773 | 33 Henry Street Beacon, NY 12508 | Henry St. Professional Bldg LLC 33 Henry Street Beacon, NY 12508 | OB | T |

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| 5954-36-992768 | 37 Henry Street Beacon, NY 12508 | Maria Caputo LT Felicia McKeon RM 111 Teller Avenue Beacon, NY 12508 | OB | T |
| 5954-36-994766 | Henry Street Beacon, NY 12508 | Maria Caputo LT Felicia McKeon RM 111 Teller Avenue Beacon, NY 12508 | OB | T |
| 6054-29-002765 | 111 Teller Avenue Beacon, NY 12508 | Felicia McKeon 111 Teller Avenue Beacon, NY 12508 | OB | T |
| 5954-36-999761 | 107 Teller Avenue Beacon, NY 12508 | Alexander W. Bloomstein 61 Cold Water Street PO Box 248 Hillsdale, NY 12529 | OB | T |
| p/o 6054-38-170722 (See Fig. 1 - portion of lot fronting on E Main Street) | 3 Water Street Beacon, NY 12508 | Pok Beacon LLC 3 Water Street Beacon, NY 12508 | CMS | R1-5 |
| 6054-30-172841 | 590 Main Street Beacon, NY 12508 | John Kelly Zoe Markwalter-Kelly 590 Main Street Beacon, NY 12508 | OB | T |
| 6054-30-177846 | 592 Main Street Beacon, NY 12508 | Michael Huxta 592 Main Street Beacon, NY 12508 | OB | T |
| 6054-30-166854 | 3 Blackburn Avenue Beacon, NY 12508 | James F. Mesmain Euphema A. Mesmain | OB | T |
| 6054-30-172867 | 16 Hanna Lane Beacon, NY 12508 | EjC I LLC 16 Hanna Lane Beacon, NY 12508 | OB | T |
| 6054-30-187866 | 12 Hanna Lane Beacon, NY 12508 | EjC II LLC 16 Hanna Lane Beacon, NY 12508 | OB | LI |
| 6054-22-183889 | 4 Hanna Lane Beacon, NY 12508 | EjC III LLC 16 Hanna Lane Beacon, NY 12508 | OB | LI |
| p/o 5954-49-608543 (See Fig. 2 - portion of lot | Dennings Avenue Beacon, NY 12508 | D I A Center for Arts 3 Beekman Street Beacon, NY 12508 | LB | LI |

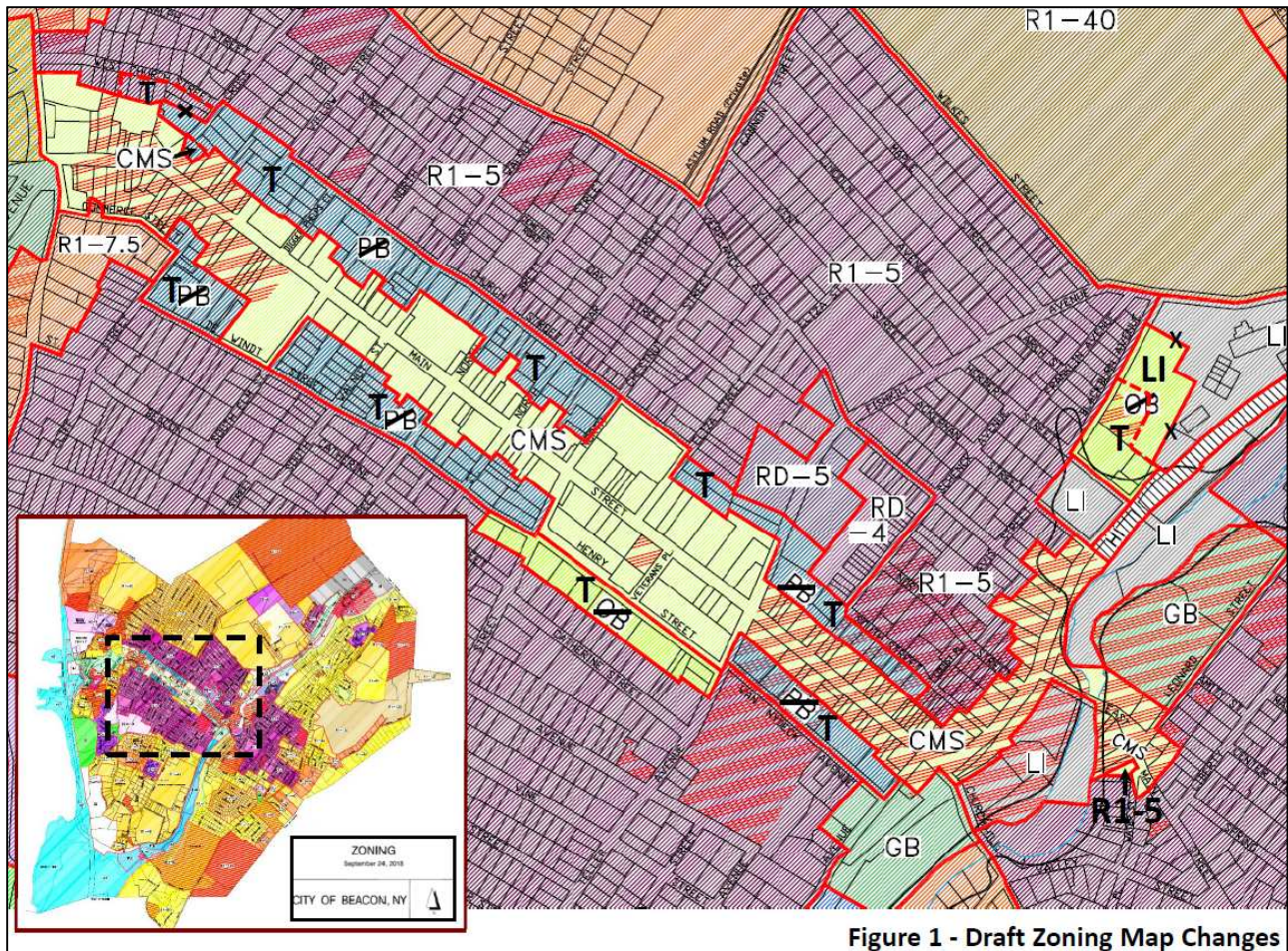
| | | | | |
|---------------------------------|--|--|----|------|
| adjacent to Parcel # 605699) | | | | |
| 5954-41-605699 | 3 Beekman Street Beacon, NY 12508 | D I A Center for Arts 3 Beekman Street Beacon, NY 12508 | LB | LI |
| 5954-42-709720 | 73-75 South Avenue Beacon, NY 12508 | The McKinney Family LP 10 Greenwood Drive Beacon, NY 12508 | LB | GB |
| 5954-42-693718 | 506 Harbor View Court Beacon, NY 12508 | John David O'Leary Kaouthar Arroum 395 12 th Street Brooklyn, NY 11215 | LB | RD-6 |
| 5954-42-694714 | 504 Harbor View Court Beacon, NY 12508 | Annie C. Harden 504 Harbor View Court Beacon, NY 12508 | LB | RD-6 |
| 5954-42-691708 | 502 Harbor View Court Beacon, NY 12508 | Victor Rivera Mary Rivera 502 Harbor View Court Beacon, NY 12508 | LB | RD-6 |
| 5954-42-706703 | 1020 Wolcott Avenue Beacon, NY 12508 | Movil Development Corp. 284 Main Street Beacon, NY 12508 | LB | GB |
| 5954-42-731679 | 100 South Avenue Beacon, NY 12508 | 100 South Avenue LLC 105 Sedgman Ct Cary, NC 27511 | LB | GB |
| 6054-13-220480 | 798 Wolcott Avenue Beacon, NY 12508 | Prospect Realty Syndicate Inc. 1100 Route 9 Fishkill, NY 12524 | LB | GB |
| 6054-13-223470 | 796 Wolcott Avenue Beacon, NY 12508 | Prospect Realty Syndicate Inc. 1100 Route 9 Fishkill, NY 12524 | LB | GB |
| 6054-13-228457 | 790 Wolcott Avenue Beacon, NY 12508 | Rafiq Ahmed 790 Wolcott Avenue Beacon, NY 12508 | LB | GB |
| 6055-80-459057 | Fishkill Avenue Beacon, NY 12508 | Landgrove Realty Inc. 29 Lydia Drive Beacon, NY 12508 | LI | FCD |

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| p/o 6054-37-096715(See Fig. 3- portion of lot adjacent to Parcel # 459057) | Main Street Beacon, NY 12508 | Midtown Trackage Ventures LLC 347 Madison Avenue New York, NY 10017 | LI | FCD |
| 5954-27-798971 | 4 Cross Street Beacon, NY 12508 | Hudson Todd LLC 4 Cross Street Beacon, NY 12508 | PB | CMS |
| 5954-27-795990 | 11 Cross Street Beacon, NY 12508 | Jeremy M. Goulder 11 Cross Street Beacon, NY 12508 | R1-5 | T |
| 5954-27-798992 | 13 Cross Street Beacon, NY 12508 | Richard L. Brigati Ethel Jean Brigati 335 Woodmont Road Hopewell Junction, NY 12533 | R1-5 | T |
| 5954-27-790996 | 25 West Church Street Beacon, NY 12508 | Lisa Taravella 25 West Church Street Beacon, NY 12508 | R1-5 | T |
| 5954-27-784996 | West Church Street Beacon, NY 12508 | Lindley Todd LLC 4 Cross Street Beacon, NY 12508 | R1-5 | T |
| p/o 5954-27-774986(See Fig 1 – portion of lot fronting on West Church Street | 152 Main Street Beacon, NY 12508 | Lindley Todd LLC 4 Cross Street Beacon, NY 12508 | R1-5 | T |
| 5954-27-774997 | West Church Street Beacon, NY 12508 | Lindley Todd LLC 4 Cross Street Beacon, NY 12508 | R1-5 | T |
| 5954-27-769998 | West Church Street Beacon, NY 12508 | Lindley Todd LLC 4 Cross Street Beacon, NY 12508 | R1-5 | T |

Section 5. 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 6. This local law shall become effective immediately upon filing with the Office of the Secretary of State.



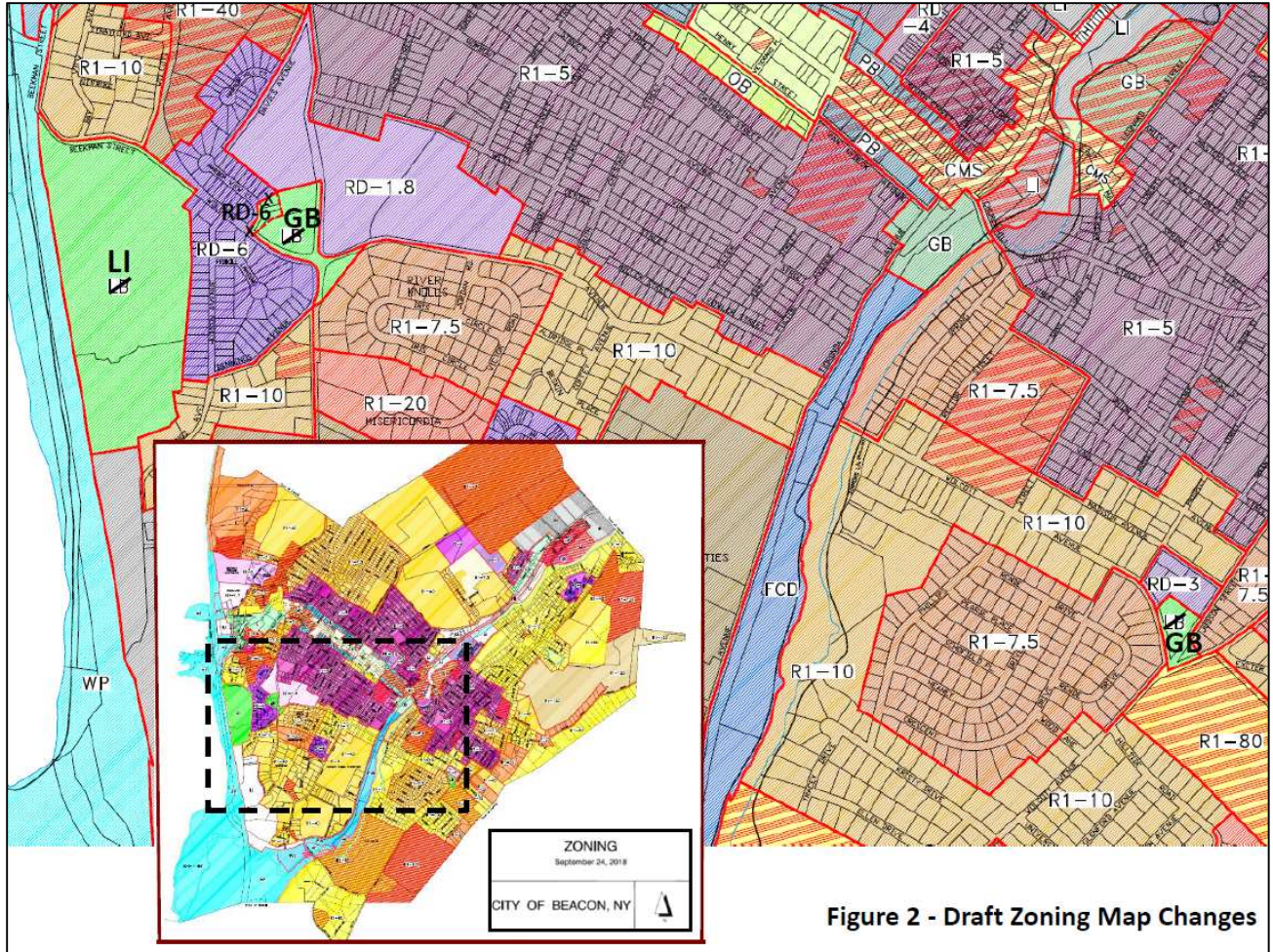


Figure 2 - Draft Zoning Map Changes

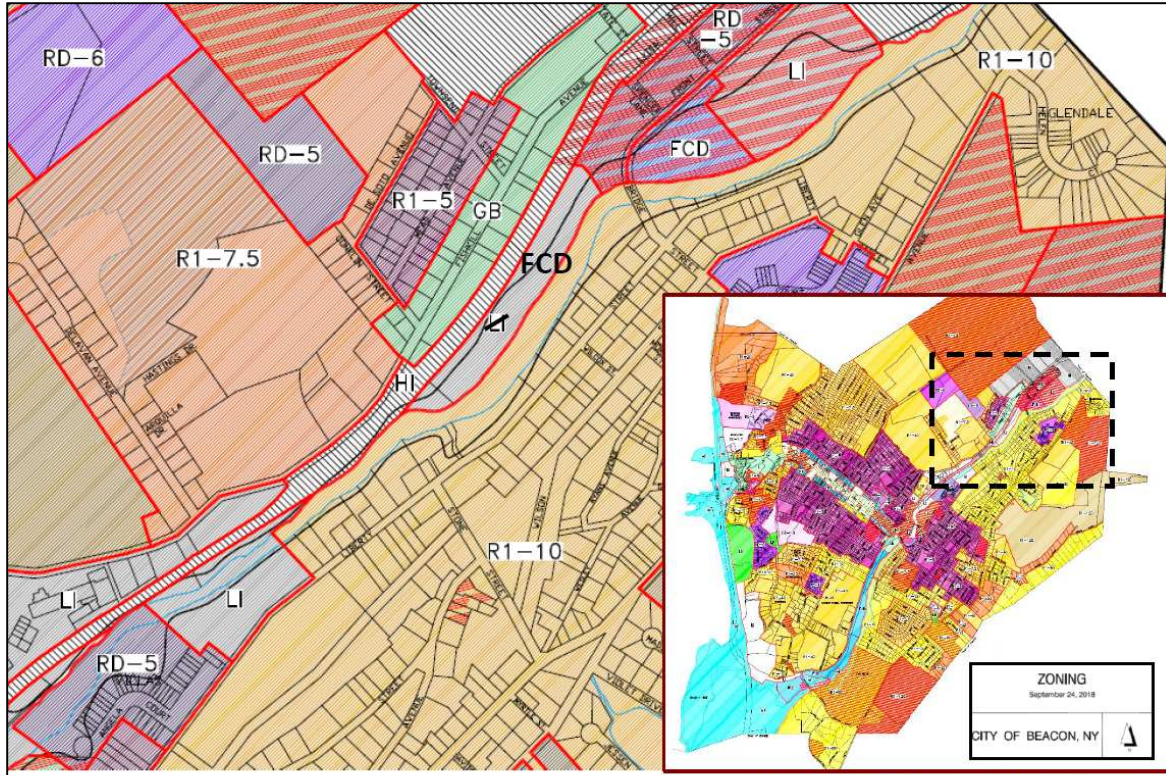


Figure 3 - Draft Zoning Map Changes

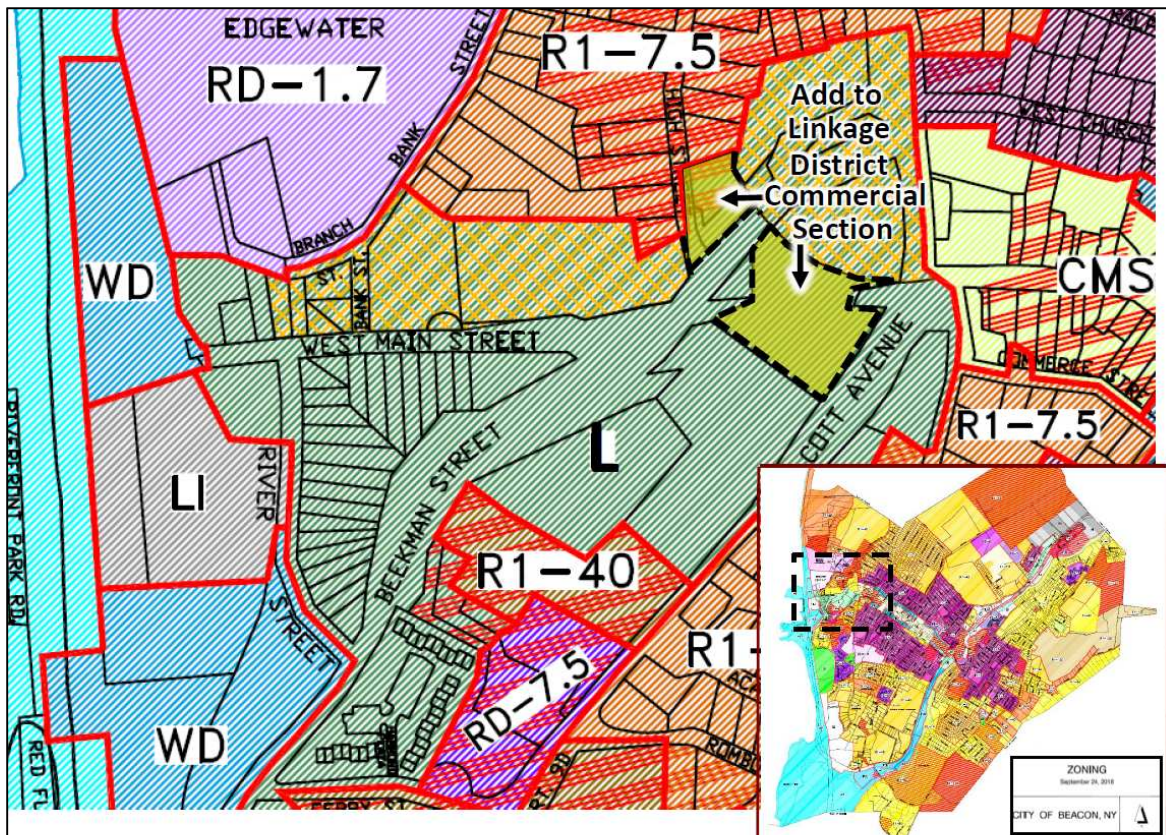


Figure 4 - Draft Zoning Map Changes

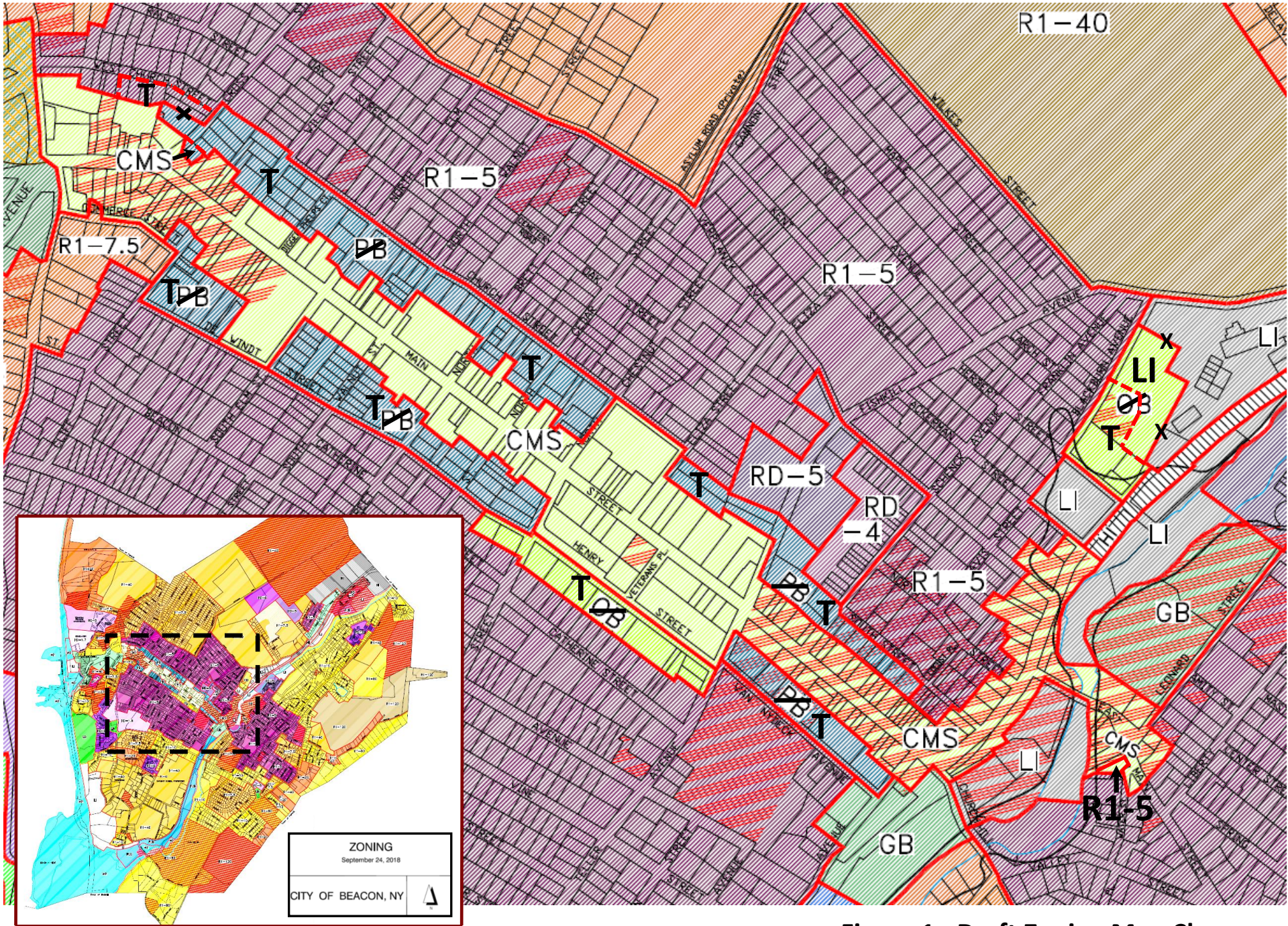
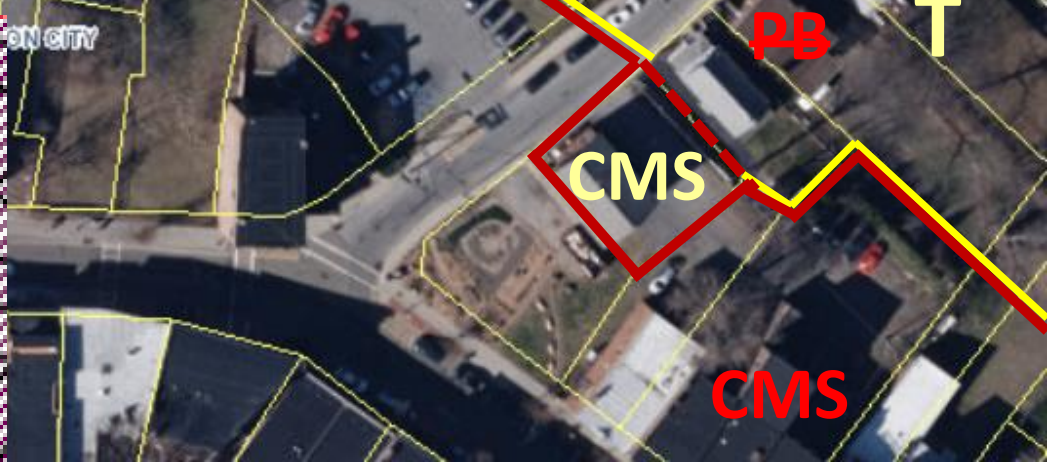
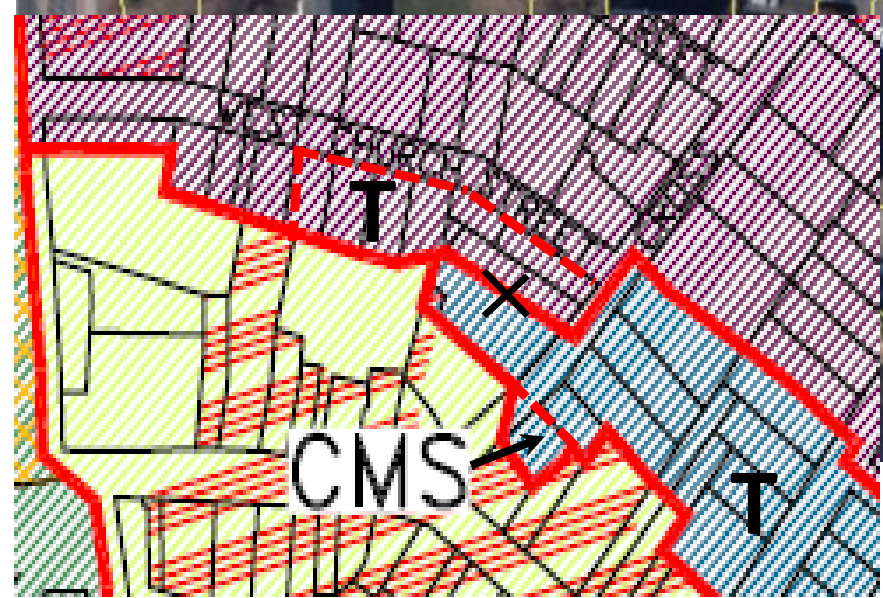
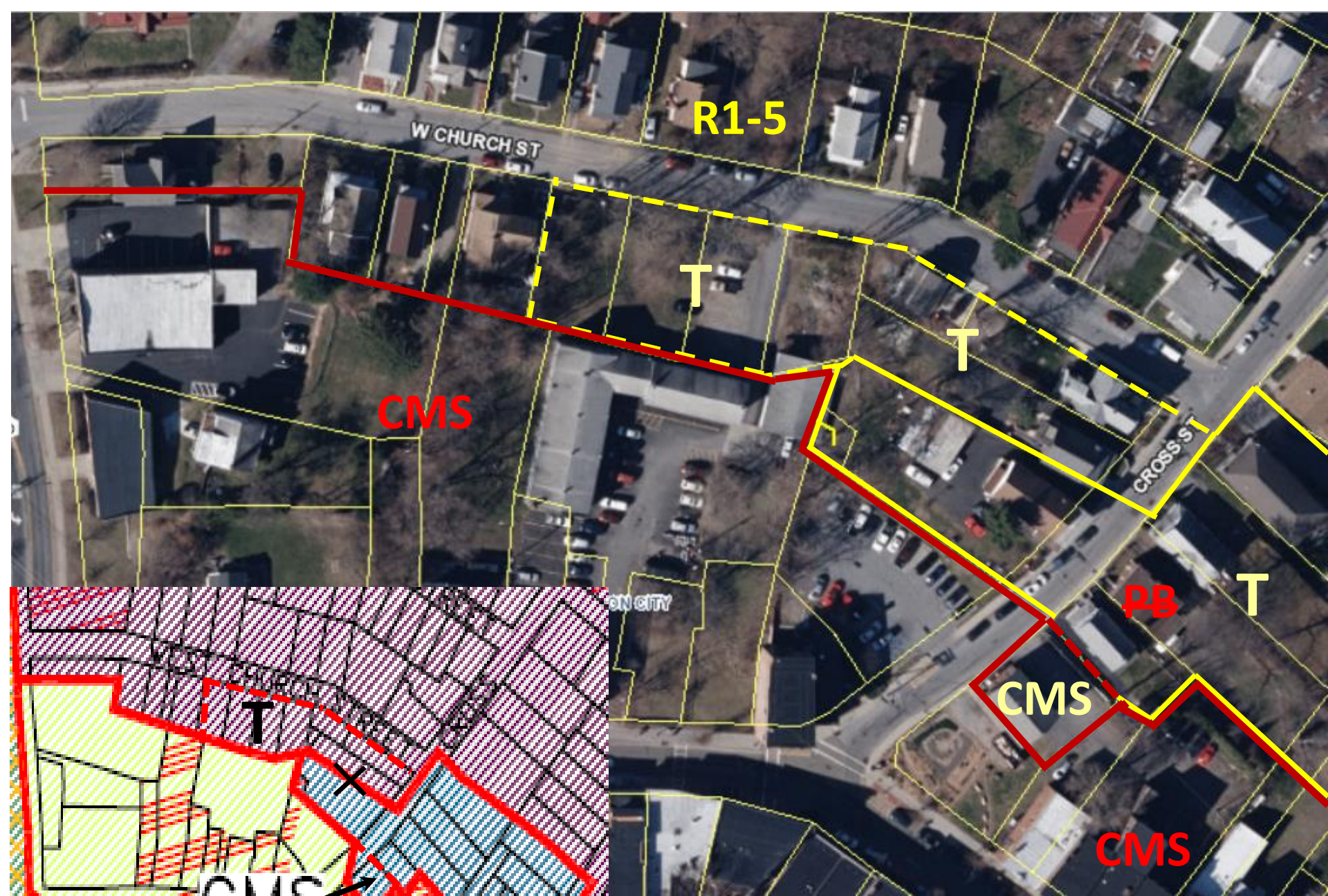


Figure 1 - Draft Zoning Map Changes



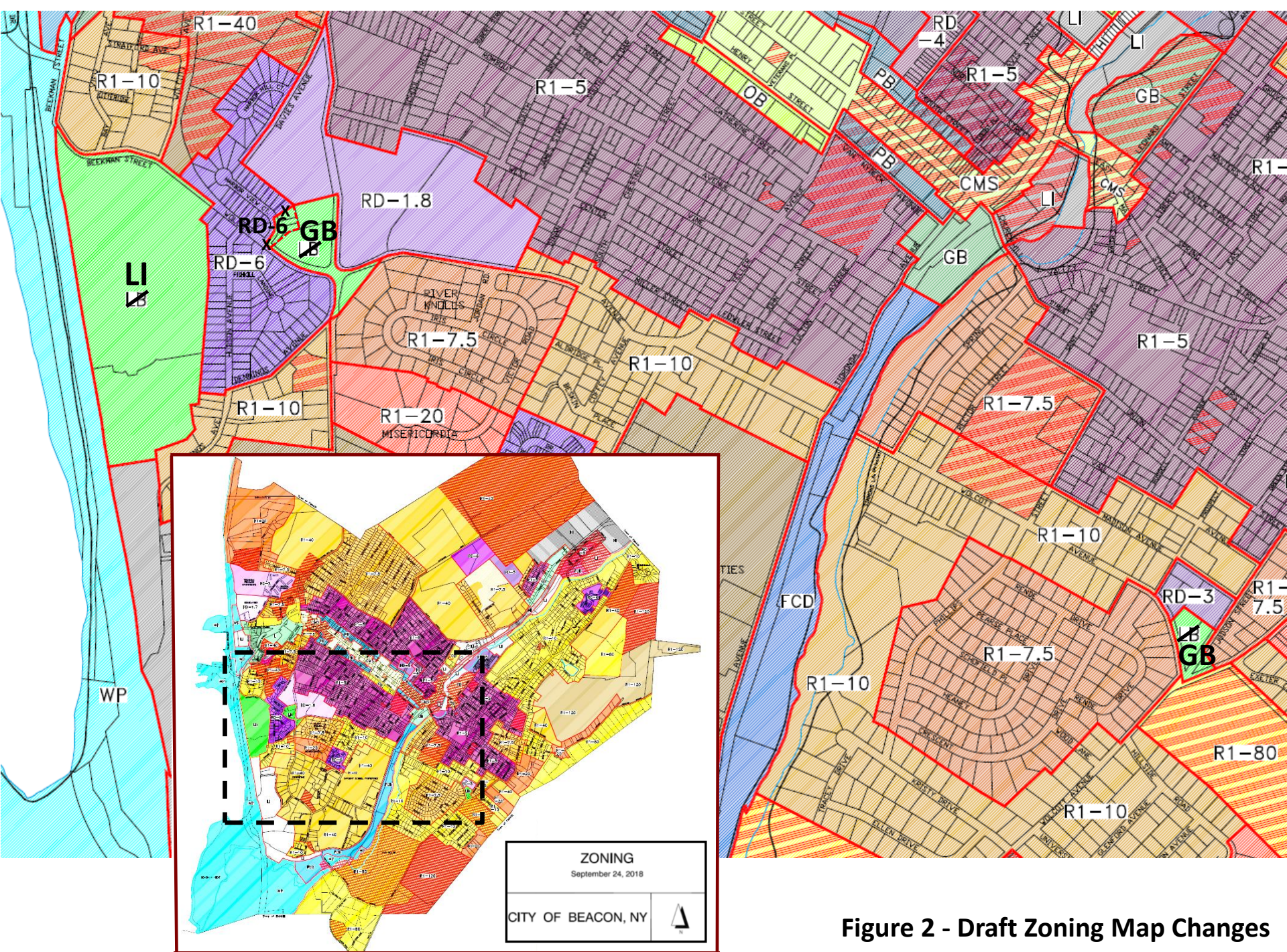


Figure 2 - Draft Zoning Map Changes

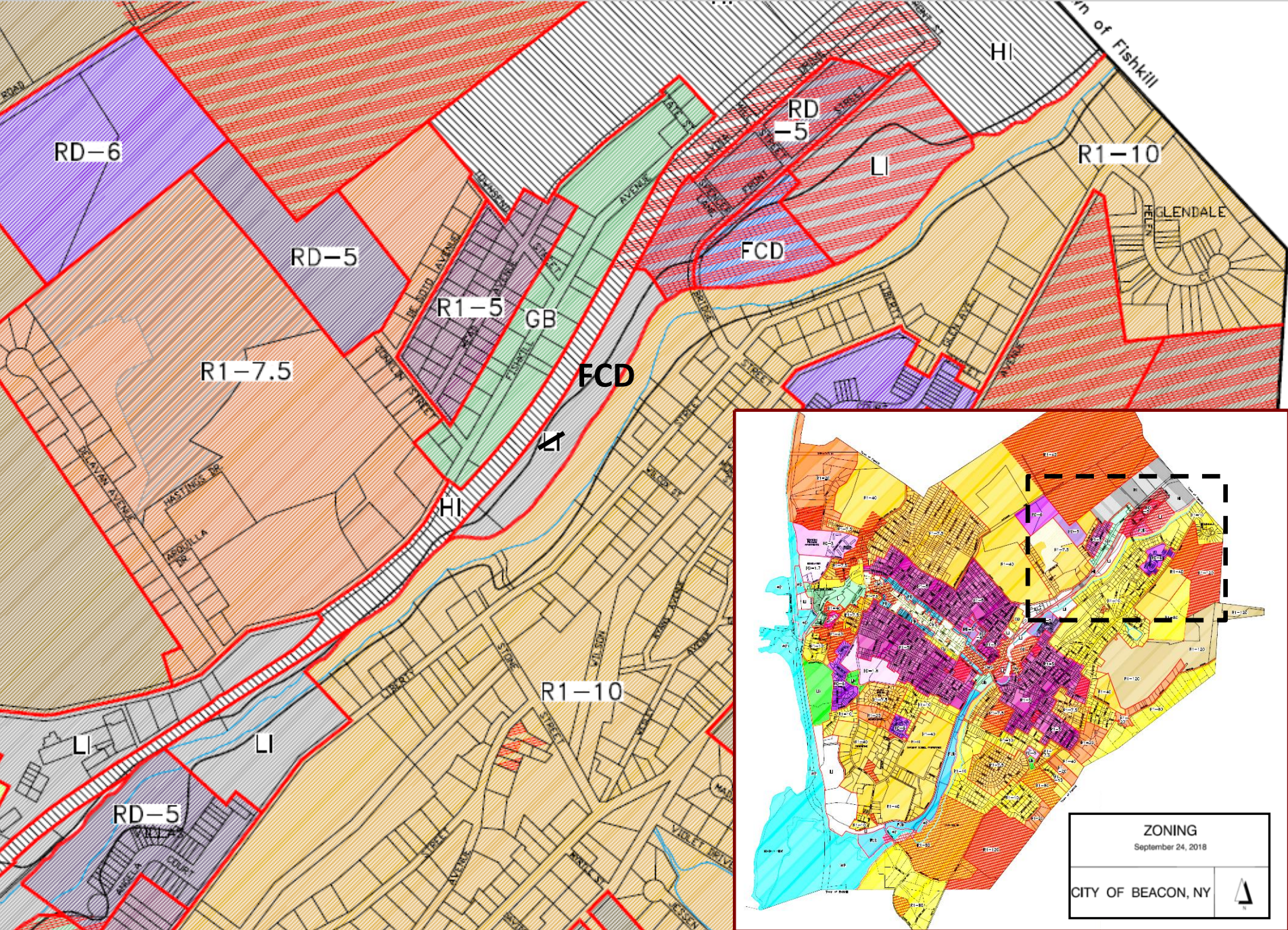


Figure 3 - Draft Zoning Map Changes

2017 Comprehensive Plan Update Rezoning



Waterfront Park District

WD District North

LI District

WD District South

Linkage District

Ferry Dock

Train Platform

West Main St.

Beekman St.

Main Street

NYS Route 9D

Waterfront Park District

City of Beacon Planning Board
5/12/2020

Title:

16 Coyne Hill Road

Subject:

Single Family House – 16 Coyne Hill Road

Background:

ATTACHMENTS:

| Description | Type |
|--------------------------------|-----------------|
| 16 Coyne Hill Road Application | Application |
| 16 Coyne Hill Road Elevations | Backup Material |

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: April 22, 2020

Project Address: 16 Coyne Hill Road

5954-16-996464

Project Architect/Engineer: Roy Fredricksen

Owner/Builder: Stephen Spaccarelli/ Claire Tiple

Contact Phone No.: (845) 264-4239

Approval Requested: Certificate of Appropriateness New Single Family House

Color/Materials:

Siding: 8" Fiber Cement Ship-lap Siding, Behr 'Iron Mountain' gray

Roofing: Cedar Shingle Roofing

Windows: Color: "Arcadian" green Type: Weathershield Contemporary Collection

Trim: 2.5" Fiber Cement, Behr 'Iron Mountain' gray

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

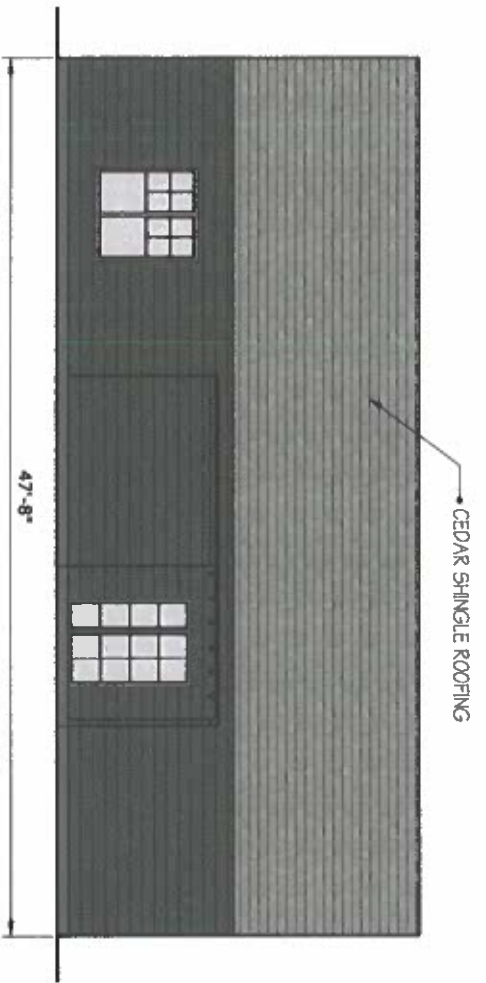
(Date)

Plan Approved

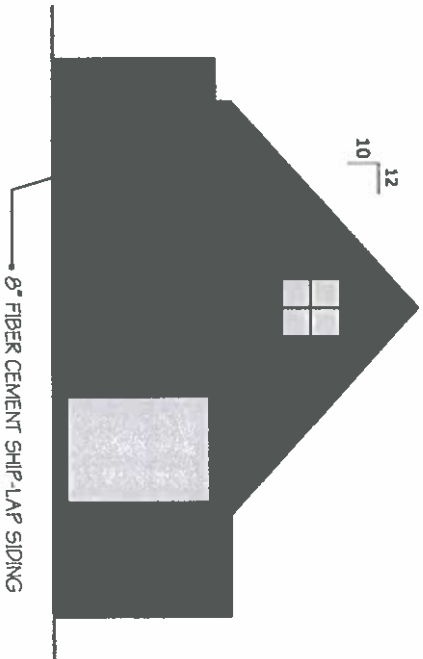
(Date)

Subject to the following:

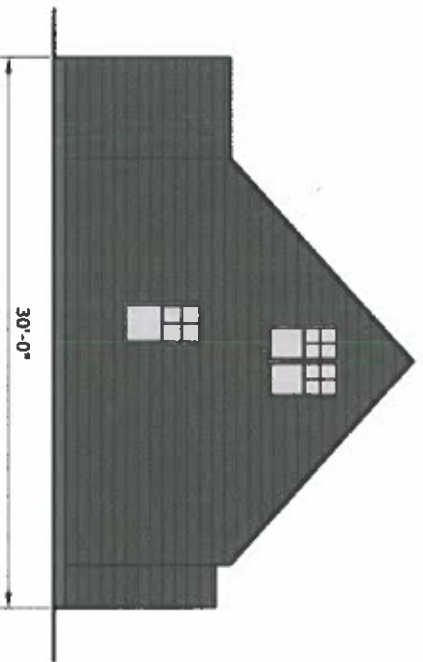
FEE: \$100.00



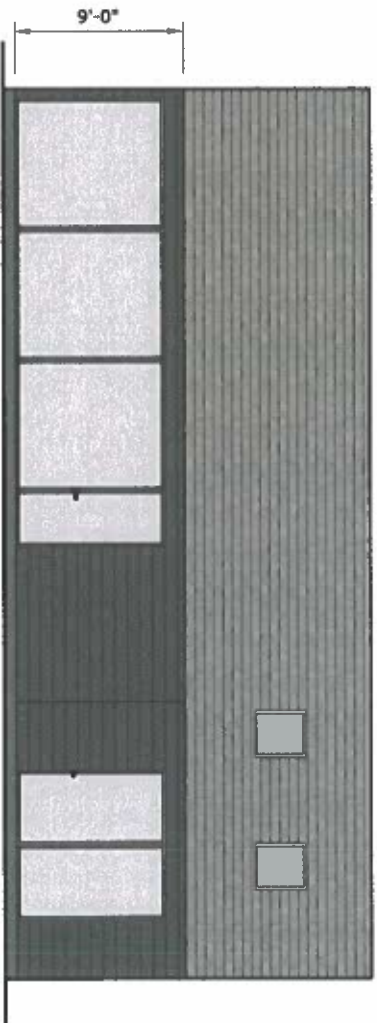
FRONT ELEVATION



RIGHT SIDE ELEVATION



LEFT SIDE ELEVATION



REAR ELEVATION

TIPLEV/ SPACCARELLI
 16 COYNE HILL ROAD, BEACON,
 DUTCHESS COUNTY, NEW YORK

Project: NEW SINGLE FAMILY HOUSE
 drawing: ELEVATIONS FOR ARCH REVIEW

date: MAR/ 2020
 scale: NTS

page: 1/1