COURTROOM
1 MUNICIPAL PLAZA
BEACON, NY 12508
COURTROOM, CITY HALL
1 MUNICIPAL PLAZA
BEACON, NY 12508
THE PLANNING BOARD WILL MEET IN THE MUNICIPAL CENTER COURTROOM AT 7:00 P.M. A WORK SESSION WILL TAKE PLACE AT 7:00 P.M. FOR A TRAINING WORKSHOP, DISCUSSION OF AGENDA ITEMS AND/OR TOPICS OF INTEREST TO THE PLANNING BOARD. THE REGULAR MEETING WILL BEGIN IMMEDIATELY THEREAFTER, BUT NO LATER THAN 7:30 P.M.

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

March 8, 2022
7:00 PM
Planning Board Agenda

Regular Meeting

1. Continue public hearing for SEQRA environmental review on applications for Subdivision and Site Plan Approval, "Beacon Views Townhouses" 40 units, Conklin Street, submitted by Beacon Views, LLC (postponed at applicant's request)
2. Continue public hearing on applications for Subdivision (lot merger) Approval and Site Plan Approval, three-story mixed-use residential and commercial development, 364 Main Street, submitted by O'Donnell Construction Corp.
3. Continue review of application for Special Use Permit and Site Plan Approval, hotel and event space, 1113 Wolcott Avenue, submitted by Prophecy Theater, LLC
4. Continue review of applications for Site Plan Approval (revised since 2019) and Subdivision Approval, "Two Cross Street", 4 Cross Street/172 Main Street, three-story mixed-use building, submitted by Hudson Todd, LLC

Miscellaneous Business

1. Zoning Board of Appeals - March meeting
2. Consider request for one 90-day extension of Subdivision Approval, 32 North Street, submitted by MLM Property Management, LLC

Architectural Review

1. Certificate of Appropriateness - 473 Main Street; signage
2. 416-420 Main Street; Sign for Central Green Space

City of Beacon Planning Board Agenda
03/08/2022

Title:

Continue public hearing for SEQRA environmental review on applications for Subdivision and Site Plan Approval, "Beacon Views Townhouses" 40 units, Conklin Street, submitted by Beacon Views, LLC
(postponed at applicant's request)

ATTACHMENTS

City of Beacon Planning Board Agenda
03/08/2022

Title:

Continue public hearing on applications for Subdivision (lot merger) Approval and Site Plan Approval, three-story mixed-use residential and commercial development, 364 Main Street, submitted by O'Donnell Construction Corp.

ATTACHMENTS

364 Main Street Cover Letter.pdf

364 Main Street Architect Response Letter.pdf

364 Main Street Traffic Engineer Response Letter.pdf

364 Main Street Sheet 2 Existing Conditions Demo.pdf

364 Main Street Sheet 3 Landscape Plan.pdf

364 Main Street Sheet 4 Building Plans.pdf

364 Main Street Sheet 5 Building Elevations.pdf

364 Main Street Sheet 1 Site Plan.pdf

364 Main Street Refuse Truck Movement Plan.pdf

364 Main Street Truck Movement Plan.pdf

364 Main Street Utility Plan.pdf

364 Main Street No Easement Model.pdf

364 Main Street Erosion & Settlement Controls 2.pdf

364 Main Street Lighting Plan.pdf

364 Main Street Erosion & Settlement Control.pdf

364 Main Street Construction Details 2.pdf

364 Main Street Construction Details 3.pdf

364 Main Street Construction Details.pdf

Engineer Review Letter.pdf

Planner Review Letter.pdf

364 Main Street Rendering.tif

364 Main ARB 2.11.22.pdf

CUDDY +FEDER LLP

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

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

February 22, 2022

VIA E-MAIL
AND HAND DELIVERY
Hon. John Gunn
And Members of the Planning Board
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: Supplemental Submission – Application for Site Plan and Subdivision Approval
Commercial and Multi-Family Residential Mixed-Use Development
Premises: 364 Main Street & Eliza Street, Beacon, New York
Tax Parcel IDs: (6054-29-006819 & 6054-29-004836)

Dear Chairman Gunn and Members of the Planning Board:

On behalf of O'Donnell Construction Corp. (the "Applicant"), the owner of the above-referenced Premises, we respectfully submit this letter and the referenced enclosures in furtherance of the Applicant's pending Applications for Site Plan and Lot Merger Approval (collectively, the "Applications").

Since last appearing before the Planning Board on February 8, 2022, the Applicant has further updated the site plans in response to the comments raised by the Board at that meeting and the comments contained in the memoranda prepared by the City's Engineering Consultant, Lanc & Tully, dated February 3, 2022 (the "Engineering Comments Memorandum"); the City's Planning Consultant, John Clarke Planning and Design, dated February 3, 2022 (the "Planning Comments Memorandum"); and the City's Traffic Consultant, Creighton Manning, dated February 7, 2022 (the "Traffic Comments Memorandum").

SITE PLAN UPDATES & RESPONSES TO COMMENTS:

Based on this Board's comments at the February 8th meeting, the Applicant has updated the Site Plan set to incorporate additional features that will further activate the Main Street frontage. As is more fully detailed in the enclosed Site Plan set and in accordance with Zoning Code Section 223.41-18(h)(2), the planter located in the front of the Premises was brought further back from Main Street and reduced in size in order to create an eight (8.0') foot wide pedestrian clearway between the patio planter and the existing city tree pit, which change resulted in a reduction in green space. To gain the green space back, another planter was added between the patio and the

sidewalk, in addition to a tree planter with ferns.[1] Further, the rooftop amenity space features planters and different experiences, from dining and working communally and alone, to lounges and varied seating opportunities.[2] The landscape design has strived to balance the functional needs of the site and the surrounding area, with requirements the City has for ensuring each project meets the ten percent (10%) landscaped area.[3] As with the prior site plans, it is respectfully submitted that the refined proposal satisfies the landscaping requirement in the Central Main Street ("CMS") Zoning District.

In addition to the adjustments noted above, the refined building program now consists of an approximately 35,619 sq. ft. mixed-use development, which reflects the following allocation of square feet: first floor commercial space: 8,892 square feet; first floor residential space: 1,607 square feet; and second and third floor residential space: 25,120 square feet. The building program has also been updated to include a total of 31 bedrooms (down from 32 bedrooms), which is a slight change from the previous count due to a change in the layout of one (1) of the apartments to incorporate the stair to the roof within the bulkhead area.

The above-referenced project refinements are reflected in the enclosed, updated Site Plan Application Form, as well as in the updated Full Environmental Assessment Form ("Full EAF"). *See* **Exhibit A** – Updated Application for Site Plan Approval Form; and **Exhibit B** – Full EAF.[4]

PROPOSED LOT LINE REMOVAL TO MERGE LOTS & REFERRAL TO ARB SUBCOMMITTEE:

In connection with the lot line removal (subdivision) component of the Application, enclosed please find an updated copy of the Subdivision Plat, which details the proposed lot merger that will remove the existing lot lines between the Eliza Street Lot and Main Street Lot, thereby merging the existing two (2) lots into one (1) resultant lot. *See* enclosed Subdivision Plat. In

---

[1] Note: The benches and site furniture depicted in the landscaped plaza are shown for future installation by tenants at their option. Further, the seam between the paver and concrete will be an expansion joint detail.

[2] Note: The Applicant is not including the rooftop features toward the landscaping requirement.

[3] Note: The landscaped area is approximately eleven percent (11%). The overall measured landscaped area is 4,043 square feet. The overall site area is 36,954 square feet. 4,043/36,954 = 0.1094. The measured landscaped area includes all planted areas on the site shaded in green. Note that the requirement for landscaping can be reduced to five percent (5%) if the landscaped area is accessible to the public. Since a large portion of the landscaped area is accessible to the public, the Applicant contends that the landscaping requirement is met by both the eleven percent (11%) total landscape coverage, and the reduced five percent (5%) requirement.

[4] Note: The Applicant does not anticipate having to take any material off site and thus has answered D.2(a) in the negative.

accordance with the Engineer and Planning Comments Memoranda, the Subdivision Plat has been revised to include the current the property information and omit Note No. 3. As with the previous submission, the revised Subdivision Plat identifies the existing property line that is proposed to be eliminated. The Applicant is presently reviewing title documentation related to the Premises to determine if any easements are associated with the utility poles that run along the south side of the parking lot off of Eliza Street.

In addition, as this Board is aware, the Project was referred to the Architectural Review Board ("ARB") Subcommittee at the December 14th meeting. The Applicant has since appeared before the ARB Subcommittee on January 19, 2022 and February 11, 2022. In response to the ARB Subcommittee's comments, the Applicant is presently revising the elevations to incorporate various changes most-recently requested by the ARB, as well as coordinating the preparation of photorealistic streetscape renderings that demonstrate the building's relation to the surrounding area to present at the Planning Board's March meeting Agenda.

EASEMENT ACCESS & BEACON NATURAL FOODS MARKET:

As the Applicant previously reviewed with the Board and the Planning Board attorney, the title review of the Premises revealed that the adjacent property, presently occupied by Beacon Natural Foods Market, *does not* have any formal written agreement or legal right to use the Applicant's Premises as a means of ingress/egress into its own parking lot. However, in response to the Board's comments, we understand that the Applicant and the owner of Beacon Natural Foods Market are presently recommunicating regarding potential easement access for loading and unloading (no parking). In the meantime, Sheet 1 of the enclosed Site Plan set shows a potential future easement area running from the rear of the Beacon Natural Foods Market, through a portion of the Applicant's parking lot out to Eliza Street. This would result in the loss of two (2) parking spaces on the Site leaving a total of 40 parking spaces to accommodate the Project's parking requirements, which still satisfies the minimum parking requirement by the Zoning Code.[5]

ADDITIONAL RESPONSE TO COMMENTS MEMORANDA:

To further assist this Board in its continued review of the refined proposal, the Applicant respectfully submits the following memoranda prepared by its Consultants providing annotated

[5] Note: The layout on the updated plan shows the potential future easement area for loading and unloading only (no parking) for the existing supermarket use owned by Beacon Natural Market in the event an easement agreement is executed and recorded, shows the area impacts three (3) spaces, but will be slightly adjusted and only impact two (2) spaces as noted above.

responses to the applicable comments noted in the Engineering Comments Memorandum, the Planning Comments Memorandum, and the Traffic Comments Memorandum:

- Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated February 22, 2022 (the "Architect Response to Comments Memorandum"). *See* **Exhibit C** – Architect Response to Comments Memorandum;

- Response to Comments Memorandum prepared by Day Stokosa Engineering, P.C. dated February 21, 2022 (the "Day Response to Comments Memorandum"). *See* **Exhibit D** – Day Response to Comments Memorandum; and

- Response to Comments letter prepared by Colliers Engineering & Design CT, P.C., dated February 21, 2022 (the "Colliers Response to Comments Memorandum"). *See* **Exhibit E** – Colliers Response to Comments Memorandum.

INDEX OF ENCLOSURES:

In support of this supplemental submission, please find enclosed five (5) sets of the instant letter with the following materials:

Exhibit A: Updated Application for Site Plan Approval Form;[6]

Exhibit B: Updated Full Environmental Assessment Form ("EAF");[7]

Exhibit C: Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated February 22, 2022, providing responses to the Planning Comments Memorandum;

Exhibit D: Response to Comments Memorandum prepared by Day Stokosa Engineering, P.C. dated February 21, 2022, providing responses to the Engineering Comments Memoranda; and

Exhibit E: Response to Comments Memorandum prepared by Colliers Engineering & Design, P.C., dated February 21, 2022, providing responses to the Traffic Comments Memorandum.

In further support of this supplemental submission, we respectfully submit the revised site plans

[6] Note: There are no changes to the Subdivision Plat that require modification to the Subdivision Application Form that was previously submitted to this Board.

[7] Note: As noted by the Planning Board Attorney, the SEQRA process is complete – however, as the Board requested for this information to be updated, it is included herein for the Board's records.

and renderings entitled "364 Main Street", prepared by Day & Stokosa Engineering P.C. and Aryeh Siegal, Architect, dated April 2, 2021, last revised February 22, 2022, unless otherwise noted, numbered and titled as follows:

o Sheet 1 of 14	Site Plan;
o Sheet 2 of 14	Existing Conditions & Demolition Plan;
o Sheet 3 of 12	Landscape Plan & Planting Schedule[8];
o Sheet 4 of 14	Building Plans;
o Sheet 5 of 12	Building Elevations & Renderings; [9]
o Sheet 6 of 14	UP.1 - Utility Plan;
o Sheet 7 of 14	LP.1 - Lighting Plan;[10]
o Sheet 8 of 14	VM.1 - Refuse Truck Movement Plan;
o Sheet 9 of 14	VM.2 - 30' Truck Movement Plan;
o Sheet 10 of 14	CD.1 - Construction Details;
o Sheet 11 of 14	CD.2 - Construction Details;
o Sheet 12 of 14	CD.3 - Construction Details;[11]
o Sheet 13 of 14	ESC.1 - Erosion & Sediment Control Plan; and
o Sheet 14 of 14	ESC.2 - Erosion & Sediment Control Details.

Also enclosed, please find a copy of the revised Subdivision Plat entitled "Lot Line Change for the Lands of O'Donnell Construction Corp.", prepared by Robert V. Oswald, dated February 20, 2017, last revised February 21, 2022.

We look forward to appearing at the Planning Board's March 8th regular meeting Agenda for further review of the Project, at which time the Applicant respectfully requests that the Planning Board close the Site Plan and Subdivision Public Hearings and consider authorizing the Planning Board Attorney to prepare a draft Resolution regarding the Applications for consideration at the

---

[8] Note: The Landscape Plan was prepared in collaboration with Debra Adamsons of Landscape Restorations. As requested, the plans include construction details for the planting of trees and shrubs.

[9] Note: The Applicant is presently revising Sheet 5: Building Elevations & Renderings in order to respond to the ARB Subcommittee's comments. Nonetheless, a preliminarily revised Sheet 5 is included in this Submission. As indicated at this Board's February 8th meeting, the project architect intends for streetscape renderings to be available for review at the March meeting Agenda.

[10] Note: The Lighting Plan has been revised to include wall-mounted LED lighting along the front of the building and the sidewalk wrapping around to the residential entrance in the rear. Additionally, in response to the Engineer Comment Memorandum and as was previously noted by the Applicant, there are no other locations in the rear parking area where a relocated pole will not cause light intrusion onto a neighboring property. This is true even for a fully shielded light fixture.

[11] Note: Sheet 12 (CD.3) now depicts the details for the accessible parking signage and 6' stockade fence.

Board's April meeting Agenda.

In the meantime, should the Planning 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.
John Clarke Planning and Design
Lanc & Tully, P.C.
Aryeh J. Siegel Architect
Mark A. Day, P.E. – Day Stokosa Engineering, P.C.
Richard D'Andrea, P.E., PTOE – Colliers Engineering & Design CT, P.C.
Allison Fausner, Esq.

ARYEH SIEGEL
ARCHITECT

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

Re: 364 Main Street, Beacon, New York
Site Plan Application – Responses to Comments

February 22, 2022

Dear Chairman Gunn and Members of the Planning Board,

Below please find our responses to the comments included in John Clarke Planning and Design's Memorandum, dated February 3, 2022. Please refer to Day & Stokoska's response letter regarding Lanc & Tully's letter dated February 3, 2022.

John Clarke Planning and Design Comment Responses:

1. **Sheet 1 – Site Plan**
   a Comment acknowledged. The plan notes how the landscaped area is calculated. Individual areas of planting have sub-total areas noted.

   b The landscaped plaza in front of the building was re-designed, and now meets the 8' sidewalk clearway requirement.

   c The parking table commercial square footage was corrected.

   d Details have been provided for the rear fence. Details are in progress for the front gate and east side railing and will be submitted later. Benches and site furniture are shown for future installation by tenants at their option. Details will not be provided for these items as they are not being installed by the Applicant.

2. Updated landscape plans and roof plans have been provided. The applicant is working with the ARB Subcommittee on updating the architectural plans. Preliminary revised plans and images are provided. Phtorealistic renderings will be provided later.

3. Building mounted lighting is provided along the sidewalk to the residential entrance. The fixtures are dark sky compliants and full cutoff to avoid glare. The site/civil engineer is reviewing

84 Mason Circle
Beacon, New York 12508
ajs@ajsarch.com
www.ajsarch.com
Tel 845 838 2490
Fax 845 838 2657

lighting in the Eliza Street parking lot.

4. Comment acknowledged. The Applicant is in contact with the Beacon Natural Market owner regarding a rear access easement. The potential future easement is indicated on the site plan

5. The surveyor corrected the Lot Line Change sheet building address.

Lanc & Tully Comment Response

General Comments

1. Comment acknowledged
2. The Drawing Index has been updated to show 14 drawings
3. A construction detail will be added for the paving at the front of the site

Lot Line Change Plan

1. Refer to Day & Stokoska letter

Site Plan Sheet 1 of 14

1. Required signage for accessible parking is noted on the site plan
2. Refer to Day & Stokoska letter
3. Utility poles are shown on the site plan

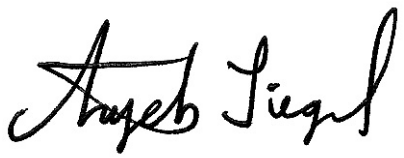
Landscape Plan Sheet 3 of 14

1. Planting Schedule has been corrected.
2. The plans includes construction details for the planting of trees and shrubs

Please refer to Day & Stokoska's letter for responses to additional engineering comments from Lanc & Tully.

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

Sincerely,



Aryeh Siegel
Aryeh Siegel, Architect

400 Columbus Avenue
Suite 180E
Valhalla New York 10595
Main: 877 627 3772
colliersengineering.com

Colliers
Engineering
& Design

February 21, 2022

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

364 Main Street City of Beacon, Dutchess County, New York
Colliers Engineering & Design Project No. 21001718A

Dear Chairperson Gunn & Members of the Planning Board,

Our office has reviewed the latest comments regarding the above referenced project contained in the Creighton Manning (CM) letter dated February 7, 2021. In their letter CM notes that the first-floor commercial space has increase in size to 10,638 sq. ft. for an increase of 1,819 sq.ft. over the previously submitted plan set. This conclusion was based on an error in the Site Plan tables, that has since been corrected, and as clarified during the February 8, 2021 Planning Board meeting the actual proposed size of the commercial space is now 8,892 sq. ft., an increase of 73 sq. ft. over the previous plans. Based on this information we provide the following detail responses to the comments contained in the CM review letter.

Site Plan

1. The proposed development now includes a 10,638-square-foot commercial space. The Site Plan still indicates the parking requirements for the previous development plan which included an 8,819-square-foot commercial space. Based on the new development plan, the commercial space will require 22 spaces. Along with the 20 spaces required for the apartments, the site now requires 42 parking spaces. Please update the Parking and Loading Table on the Site Plan.

   Response: As noted above the proposed size of the first-floor commercial space is 8,892 sq. ft. Based on this size, the commercial spaces still requires 18 parking spaces and the overall Site requires 38 parking spaces including 20 spaces for the residential portion of the Project. The Site is proposed to be provided 42 parking spaces, which exceeds the minimum parking requirements.

   It should be noted that the Applicant is working on an agreement with the neighboring Beacon Natural Market property for access to the rear of that property through the Project parking area from Eliza Street. When completed this agreement will result in the loss of two (2) parking spaces on the Site leaving a total of 40 parking spaces to accommodate the Project parking requirements, which will still satisfy the minimum parking requirement by Code.

Colliers
Engineering & Design

Traffic Impact Study

1. The most recent Traffic Impact Study considered a 9,451-square-foot commercial space. Based on ITE Trip Generation rates, the site would generate 28 total trips during the weekday morning peak hour, 75 total trips during the weekday evening peak hour, and 62 total trips during the Saturday midday peak hour. The proposed development now includes a 10,638-square-foot commercial space. Based on ITE Trip Generation rates, the commercial use would generate 30 total trips during the weekday morning peak hour, 81 total trips during the weekday evening peak hour, and 72 total trips during the Saturday midday peak hour.

   Response: As noted above the proposed size of the first-floor commercial space is 8,892 sq. ft. The traffic study considered a 9,451 sq. ft. commercial space, which is slightly higher than the actual proposed size of the commercial spaces. Based on this the traffic analysis is representative of the current project proposal.

2. Colliers did not provide an updated Traffic Impact Study which considered the increased commercial use square-footage. However, the level of service analysis conducted for the 9,451-square-foot commercial space indicates that the study intersections will operate at an acceptable LOS B or better during all study periods. When compared to the trip generation of the previously considered commercial use's square-footage, the greatest increase is trip generation is 10 trips during the Saturday midday peak hour. Qualitatively, the study intersections will likely continue to operate at acceptable levels of service with the increase in site-generated trips.

   Response: As noted above the proposed size of the first-floor commercial space is 8,892 sq. ft. The traffic study considered a 9,451 sq. ft. commercial space, which is slightly higher than the actual proposed size of the commercial spaces. Based on this the traffic analysis is representative of the current project proposal.

Sincerely,

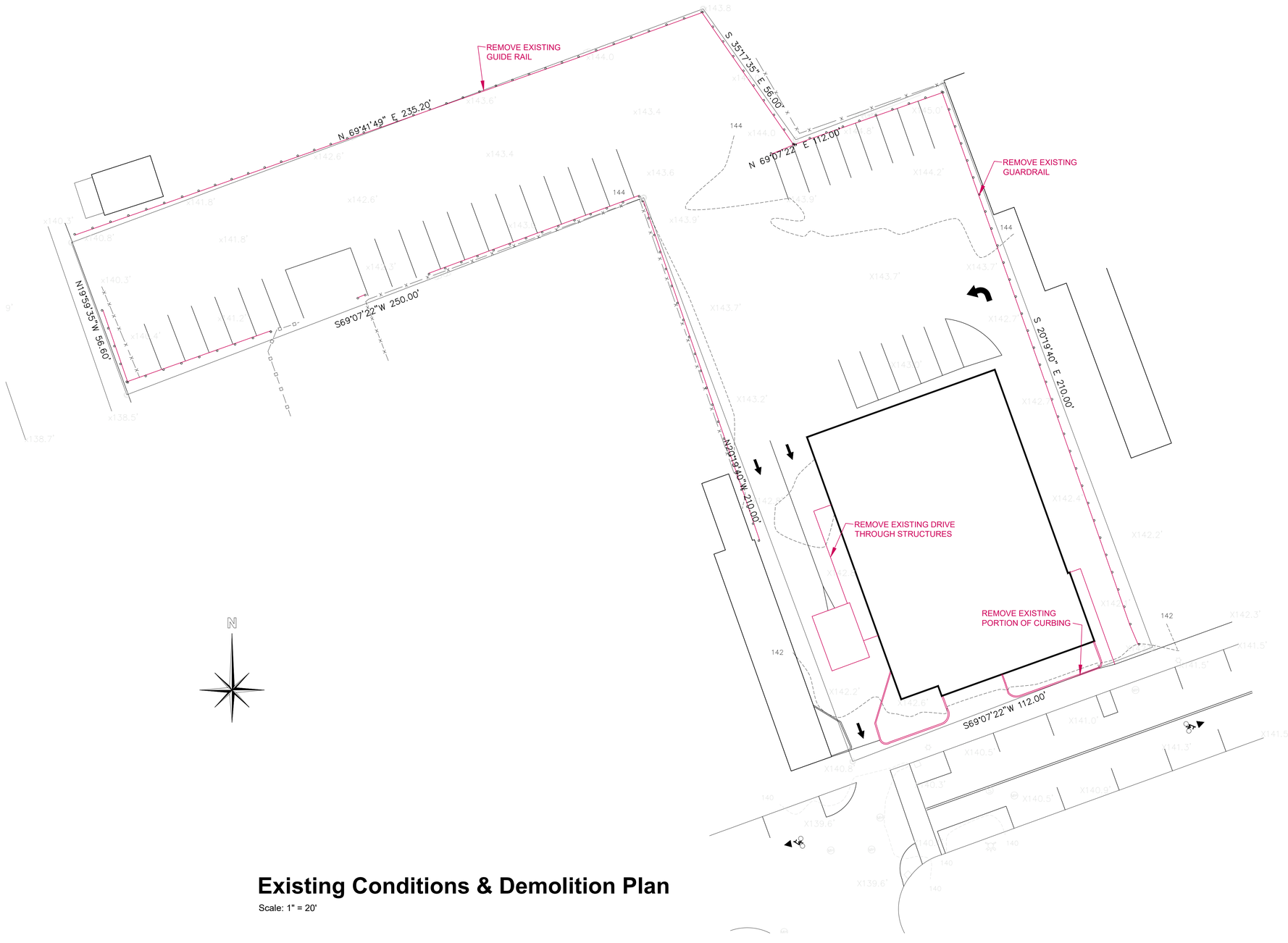
Colliers Engineering & Design CT, P.C.
(DBA Maser Consulting Engineering & Land Surveying)



Richard D'Andrea, P.E., PTOE
Assistant Department Manager

R:\Projects\2021\21001718A\Correspondence\OUT\220221RGD_CM 2.07.22 Response.docx

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	07/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	08/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	10/26/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
6	01/25/22	REVISED PER PLANNING BOARD COMMENTS	AJS
7	02/22/22	NO CHANGE	AJS



Existing Conditions & Demolition Plan

Scale: 1" = 20'

Site Plan Application

Sheet 2 of 14 - Existing Conditions & Demolition Plan

Owner:
O'Donnell & Son
P.O. Box 526
Fishkill, NY 12524

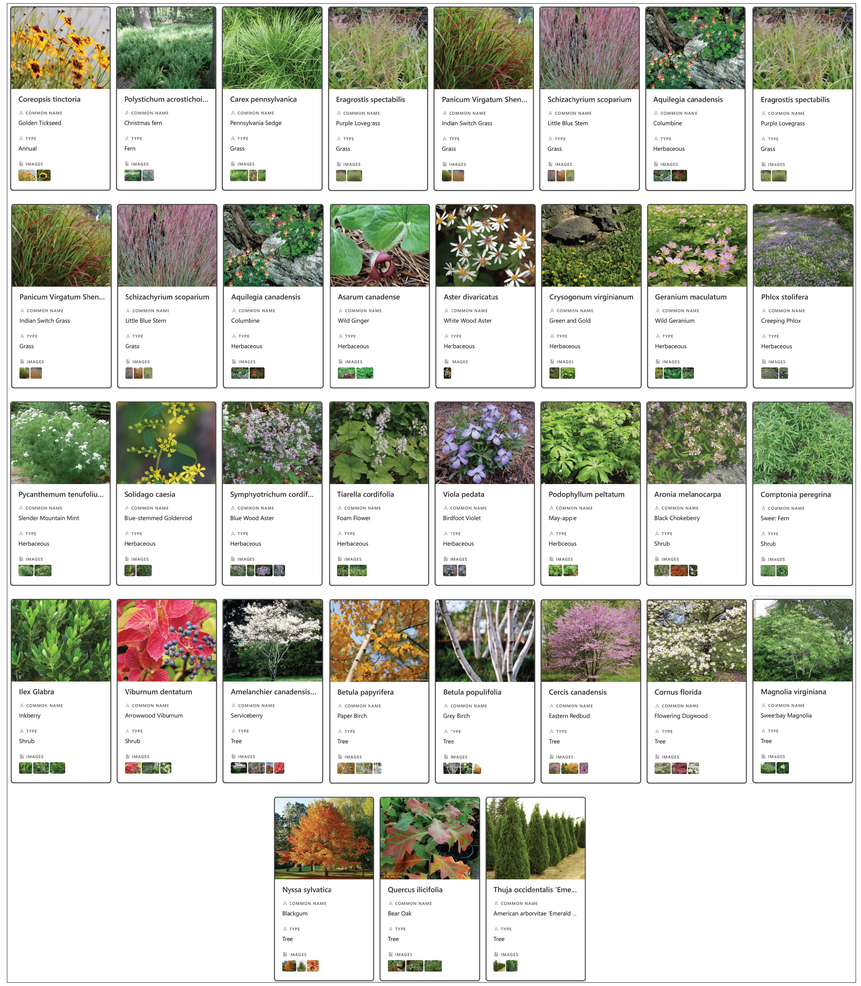
Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Day & Stokosa Engineering P.C
3 Van Wyck Lane
Wappingers Falls, New York 12590

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

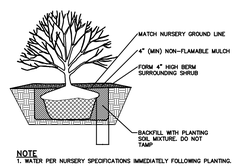
364 Main Street
Beacon, New York
Scale: 1" = 20'
October 4, 2021

Illustrated Plant List



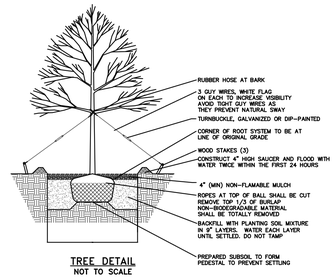
Planting Notes

1. CONTRACTORS SHALL ENTER AND EXIT SITE THROUGH PRE-APPROVED ROUTES ONLY.
2. NO NON-NATIVE PLANT SPECIES SHALL BE INTRODUCED ONTO THE SITE. ALL SPECIES SHALL BE INDIGENOUS TO THE NORTHEAST REGION OF NORTH AMERICA.
3. IF A STRAIGHT SPECIE IS SPECIFIED, NO CULTIVARS WILL BE ACCEPTED WITHOUT PRIOR APPROVAL OF DESIGNER.
4. NO PLANTS WILL BE ACCEPTED THAT DISPLAY MECHANICAL INJURY, DISEASE OR SPECIE IRREGULARITIES.
5. SOIL SHALL BE PREPPED BY REMOVING ALL CONSTRUCTION DEBRIS, LOOSE ROOTS AND STONES LARGER THAN 3".
6. ALL PLANTS MUST BE LABELED WHEN DELIVERED TO SITE.
7. AREAS TO BE PLANTED SHALL BE MARKED AND LABELED BY DESIGNER.
8. ALL PLANT LOCATIONS AND ORIENTATIONS IN THE FIELD REQUIRE APPROVAL FROM DESIGNER AND OWNER PRIOR TO INSTALLATION.
9. TEST TREE-PIT FOR DRAINAGE BEFORE PLANTING. DO NOT PLANT TREE IN PIT IF WATER IS STILL EVIDENT AFTER ONE HOUR. CONTACT SITE ENGINEER OR LANDSCAPE DESIGNER IF THIS CONDITION IS ENCOUNTERED.
10. ALL TREE-PLANTING TO BE COORDINATED WITH AS-BUILT UTILITIES. TREES TO BE LOCATED MINIMUM OF 5' FROM ACTIVE LINES.
11. ALL TREES SHALL BE BALL AND BURLAP UNLESS OTHERWISE SPECIFIED ON PLANT LIST.
12. EACH NEW TREE HOLE TREE SHALL BE TWICE THE WIDTH OF THE ROOTBALL.
13. BURLAP, WIRE, CORDS, TIES AND ANY WRAPPING MATERIALS MUST BE REMOVED FROM ALL ROOTBALLS BEFORE BACKFILLING.
14. PLANT ALL PLANTS SO TOP OF ROOTBALL IS SLIGHTLY ABOVE SURROUNDING SOIL(SMALL AND LARGE PLANTS)
15. NO PLANTING SHALL BE DONE IN MUDDY, RAINY OR FROZEN CONDITIONS.
16. ALL PLANTS CALLING FOR 'OVERFLOWING' IN THE NOTES SHALL NOT BE ACCEPTED BY DESIGNER IF PLANTS ARE THIN.
17. IF PLANTING IS DELAYED FOR MORE THAN 3 HOURS AFTER DELIVERY, SET PLANTS IN SHADE. PROTECT FROM WEATHER AND MECHANICAL DAMAGE. KEEP ROOTS MOIST AND COVER WITH MULCH.
18. CONTRACTORS SHALL LEAVE SITE NEAT AND ORDERLY DURING COURSE OF PROJECT, AND STORE MATERIALS AND EQUIPMENT IN OWNER-APPROVED LOCATIONS AWAY FROM ALL TREES AND PLANTS. STORE ALL UNPLANTED PLANT MATERIAL AWAY FROM DAMAGING SUN.
19. IF SITE CONDITIONS CONFLICT WITH INTENDED DESIGN, CONTRACTOR SHALL ALERT OWNER AND DESIGNER.
20. NO SUBSTITUTIONS ARE TO BE MADE WITHOUT THE WRITTEN OR VERBAL CONSENT OF LANDSCAPE DESIGNER AND OWNER
21. CREATE A SIZE-SPECIFIC WATER-WELL AROUND EACH PLANT, 3' FROM CENTER OF TREE, AND MULCH FROM THE OUTSIDE. DO NOT MULCH CROWN.
22. WATER THOROUGHLY AFTER PLANTING EACH PLANT. WATER SCHEDULE TO BE DETERMINED.
23. SPRAY FOR DEER IF PLANTED IN FALL. SOMETIMES BUCKS MARK THEIR TERRITORY WITH THEIR ANTLERS.
24. KEEP PLANTING AREAS WEED-FREE UNTIL PLANT IS ESTABLISHED.
25. ECO LAWN SEEDING SHALL BE IMPLEMENTED BY CONTRACTOR FAMILIAR WITH THIS SPECIE MIX AND WITH THE PROCESS, AND APPROVED BY DESIGNER. THIS IS NOT THE SAME AS CASTING CONTRACTOR GRASS SEED.
26. PERVIOUS/PERMEABLE PAVERS AND ASSOCIATED GRASS SEEDING SHALL BE INSTALLED BY CONTRACTOR WITH EXPERIENCE IN THIS PROCESS. THIS PROCESS REQUIRES ESTABLISHMENT MAINTENANCE, IN ORDER TO SUCCEED.
27. BERMED AREAS SHALL BE BUILT WITH DESIGNER DIRECTING CONSTRUCTION
28. STREET TREE AND SURROUNDING TREE-PIT SHALL BE INSTALLED BY CONTRACTOR EXPERIENCED WITH THESE MATERIALS AND APPROVED BY DESIGNER
29. ALL PLANTS REQUIRE REGULAR WATERING FOR THE FIRST TWO SEASONS IN ORDER TO SUCCEED



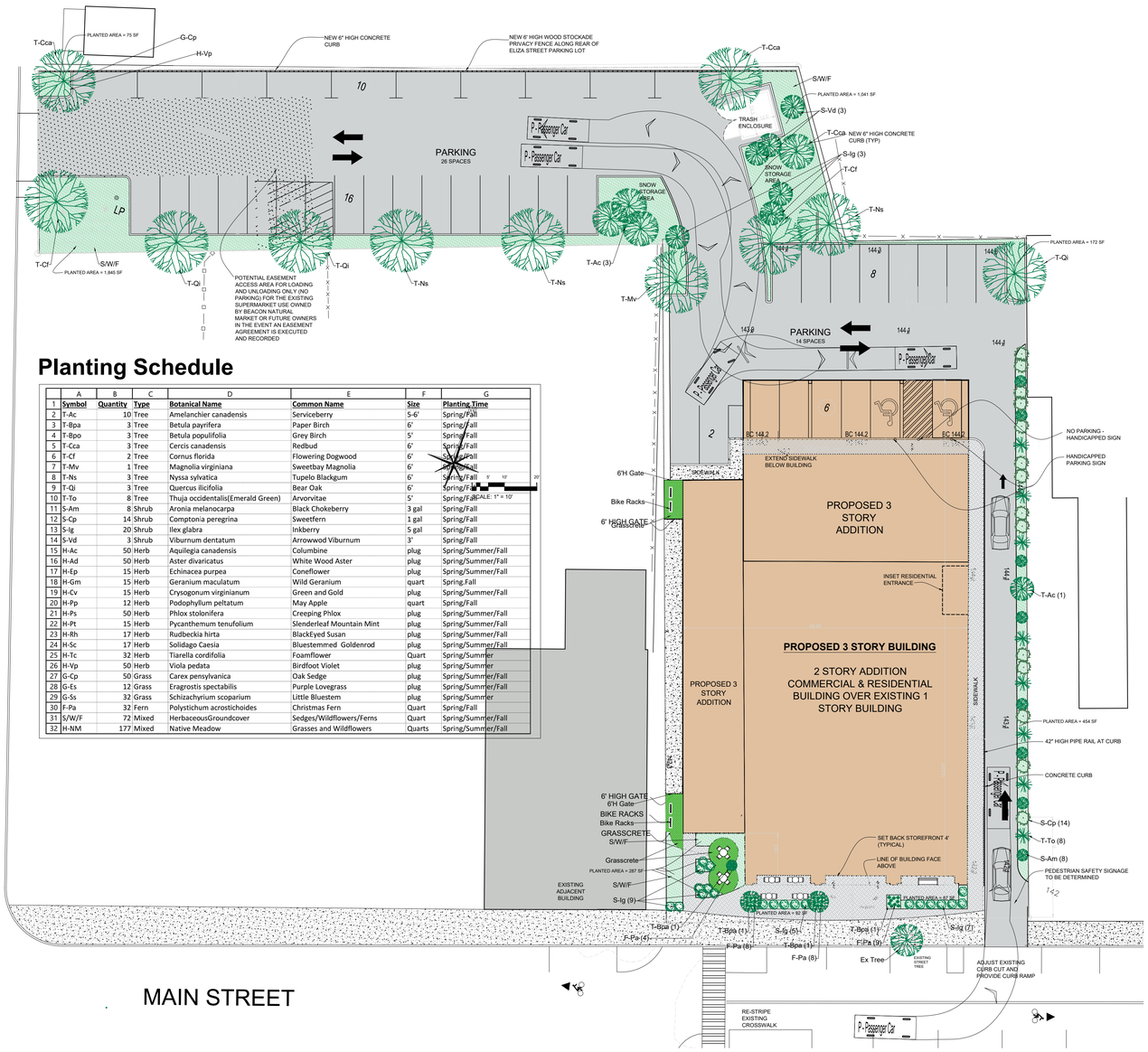
NOTE
1. WATER PER NURSERY SPECIFICATIONS IMMEDIATELY FOLLOWING PLANTING.
2. DETAIL IS FOR BOTH BALL & BURLAPPED OR CONTAINERED SHRUBS.

SHRUB PLANTING DETAIL
NOT TO SCALE



TREE DETAIL
NOT TO SCALE

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	07/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	08/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	10/26/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
6	01/25/22	REVISED PER PLANNING BOARD COMMENTS	AJS
7	02/22/22	REVISED PER PLANNING BOARD COMMENTS	AJS



Planting Schedule

	A	B	C	D	E	F	G
1	Symbol	Quantity	Type	Botanical Name	Common Name	Size	Planting Time
2	T-Ac	10	Tree	Amelanchier canadensis	Serviceberry	5-6'	Spring/Fall
3	T-Bpa	3	Tree	Betula payrifera	Paper Birch	6'	Spring/Fall
4	T-Bpo	3	Tree	Betula populifolia	Grey Birch	5'	Spring/Fall
5	T-Cca	3	Tree	Cercis canadensis	Redbud	6'	Spring/Fall
6	T-Cf	2	Tree	Cornus florida	Flowering Dogwood	6'	Spring/Fall
7	T-Mv	1	Tree	Magnolia virginiana	Sweetbay Magnolia	6'	Spring/Fall
8	T-Ns	3	Tree	Nyssa sylvatica	Tupelo Blackgum	6'	Spring/Fall
9	T-Qi	3	Tree	Quercus ilicifolia	Bear Oak	6'	Spring/Fall
10	T-To	8	Tree	Thuja occidentalis(Emerald Green)	Arvorvitae	5'	Spring/Fall
11	S-Am	8	Shrub	Aronia melanocarpa	Black Chokeberry	3 gal	Spring/Fall
12	S-Cp	14	Shrub	Comptonia peregrina	Sweetfern	1 gal	Spring/Fall
13	S-Ig	20	Shrub	Ilex glabra	Inkberry	5 gal	Spring/Fall
14	S-Vd	3	Shrub	Viburnum dentatum	Arrowwood Viburnum	3'	Spring/Fall
15	H-Ac	50	Herb	Aquilegia canadensis	Columbine	plug	Spring/Summer/Fall
16	H-Ad	50	Herb	Aster divaricatus	White Wood Aster	plug	Spring/Summer/Fall
17	H-Ep	15	Herb	Echinacea purpea	Coneflower	plug	Spring/Summer/Fall
18	H-Gm	15	Herb	Geranium maculatum	Wild Geranium	quart	Spring.Fall
19	H-Cv	15	Herb	Crysogonum virginianum	Green and Gold	plug	Spring/Summer/Fall
20	H-Pp	12	Herb	Podophyllum peltatum	May Apple	quart	Spring/Fall
21	H-Ps	50	Herb	Phlox stolonifera	Creeping Phlox	plug	Spring/Summer/Fall
22	H-Pt	15	Herb	Pycanthemum tenufolium	Slenderleaf Mountain Mint	plug	Spring/Summer/Fall
23	H-Rh	17	Herb	Rudbeckia hirta	BlackEyed Susan	plug	Spring/Summer/Fall
24	H-Sc	17	Herb	Solidago Caesia	Bluestemmed Goldenrod	plug	Spring/Summer/Fall
25	H-Tc	32	Herb	Tiarella cordifolia	Foamflower	Quart	Spring/Summer
26	H-Vp	50	Herb	Viola pedata	Birdfoot Violet	plug	Spring/Summer
27	G-Cp	50	Grass	Carex pensylvanica	Oak Sedge	plug	Spring/Summer/Fall
28	G-Es	12	Grass	Eragrostis spectabilis	Purple Lovegrass	plug	Spring/Summer/Fall
29	G-Ss	32	Grass	Schizachyrium scoparium	Little Bluestem	plug	Spring/Summer
30	F-Pa	32	Fern	Polystichum acrostichoides	Christmas Fern	Quart	Spring/Fall
31	S/W/F	72	Mixed	HerbaceousGroundcover	Sedges/Wildflowers/Ferns	Quart	Spring/Summer/Fall
32	H-NM	177	Mixed	Native Meadow	Grasses and Wildflowers	Quarts	Spring/Summer/Fall

Landscape Plan

Scale: 1" = 20'

Site Plan Application

Sheet 3 of 14 - Landscape Plan

Owner:
O'Donnell Construction Corp.
P.O. Box 526
Fishkill, NY 12524

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

Site / Civil Engineer:
Day & Stokosa Engineering P.C
3 Van Wyck Lane
Wappingers Falls, New York 12590

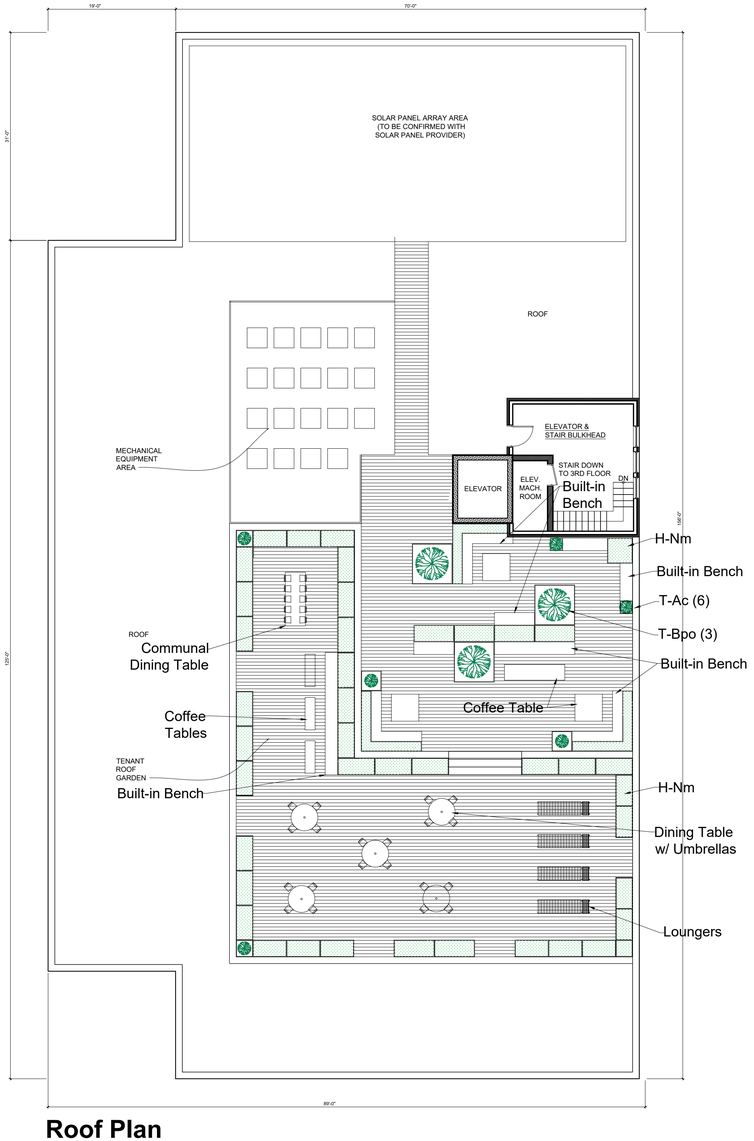
Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

364 Main Street
Beacon, New York
Scale: 1/8" = 1'-0"
May 25, 2021

Area Summary Table

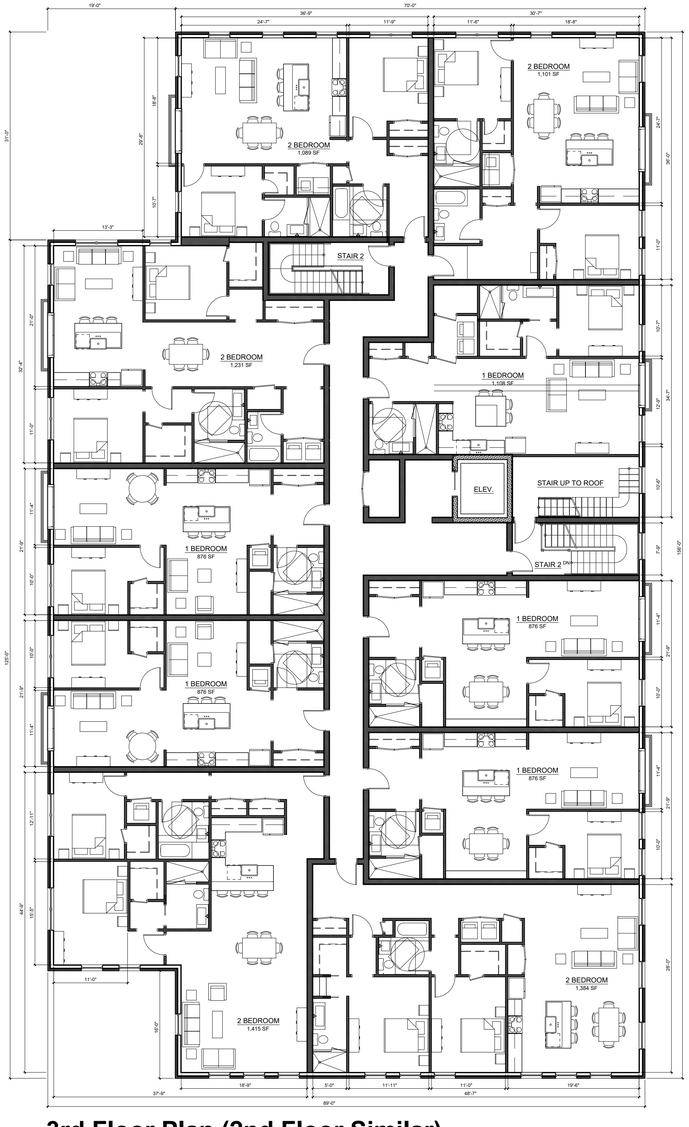
Floor	Space	Area (Net Square Feet)
1	Commercial 1	5,711
	Commercial 2	1,489
	Commercial 3	1,525
	All Commercial	**8,892**
	Note that all commercial space includes demising walls. It is not the total of the individual commercial spaces	
	1st Floor Residential	1,607
2	Residential	12,560
3	Residential	12,560
		35,619

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	07/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	10/26/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	10/26/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
6	01/25/22	REVISED PER PLANNING BOARD COMMENTS	AJS
7	02/22/22	REVISED PER PLANNING BOARD COMMENTS	AJS



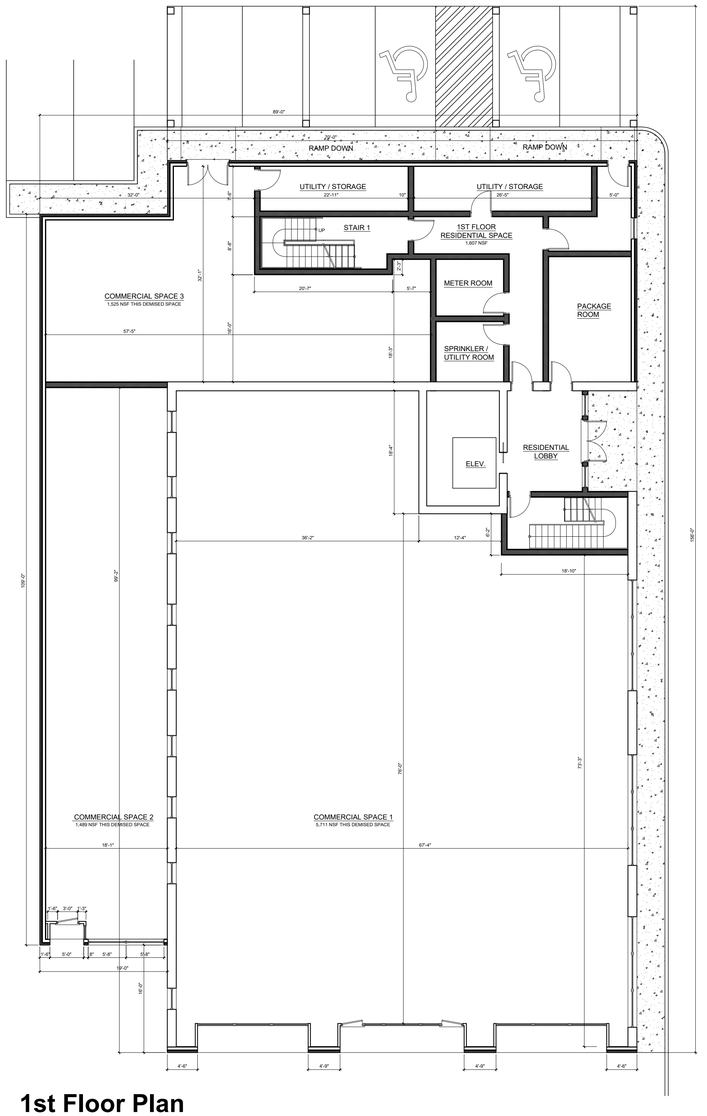
Roof Plan

Scale: $\frac{3}{32}$" = 1'-0"



3rd Floor Plan (2nd Floor Similar)

Scale: $\frac{3}{32}$" = 1'-0"



1st Floor Plan

Scale: $\frac{3}{32}$" = 1'-0"

Site Plan Application

Sheet 4 of 14 - Building Plans

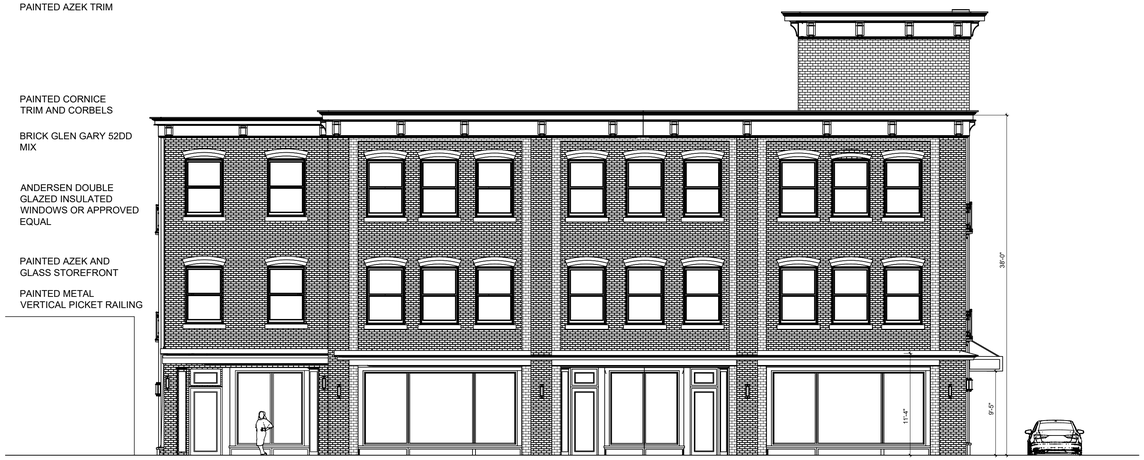
Owner:
O'Donnell Construction Corp.
P.O. Box 526
Fishkill, NY 12524

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

Site / Civil Engineer:
Day & Stokosa Engineering P.C
3 Van Wyck Lane
Wappingers Falls, New York 12590

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

364 Main Street
Beacon, New York
Scale: $\frac{3}{32}$" = 1'-0"
May 25, 2021



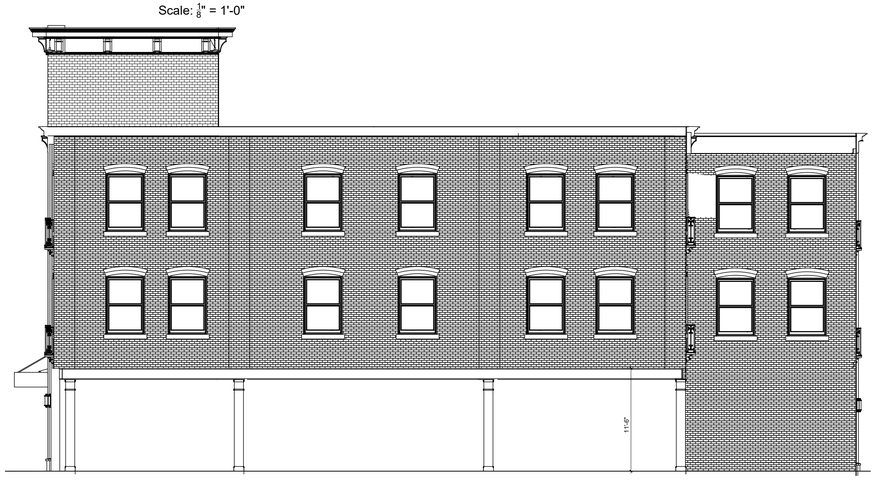
Elevation: South

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



Elevation: East

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



Elevation: North

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



View: From Main Street

Not to Scale



View: From Driveway

Not to Scale



View: From Main Street

Not to Scale



View: From Main Street

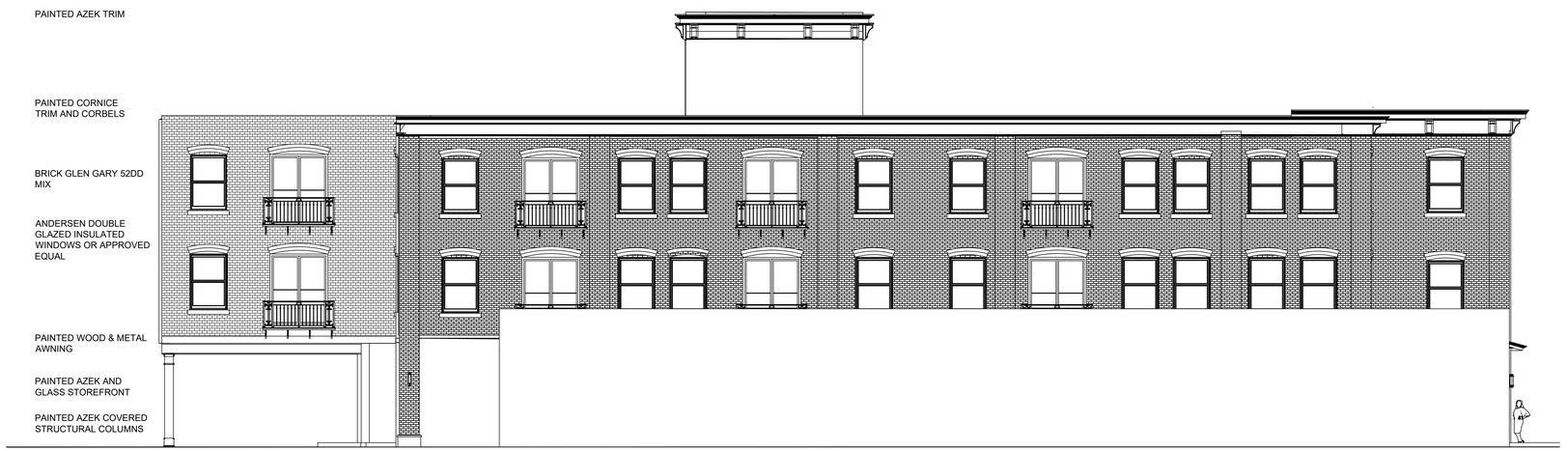
Not to Scale

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	07/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	10/26/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	10/26/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
6	01/25/22	REVISED PER PLANNING BOARD COMMENTS	AJS
7	02/22/22	REVISED PER PLANNING BOARD COMMENTS	AJS



View: Main Street

Not to Scale



Elevation: West

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

Site Plan Application

Sheet 5 of 14 - Building Elevations

Owner:
O'Donnell Construction Corp.
P.O. Box 526
Fishkill, NY 12524

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

Site / Civil Engineer:
Day & Stokosa Engineering P.C
3 Van Wyck Lane
Wappingers Falls, New York 12590

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

364 Main Street
Beacon, New York
Scale: $\frac{1}{8}$" = 1'-0"
May 25, 2021

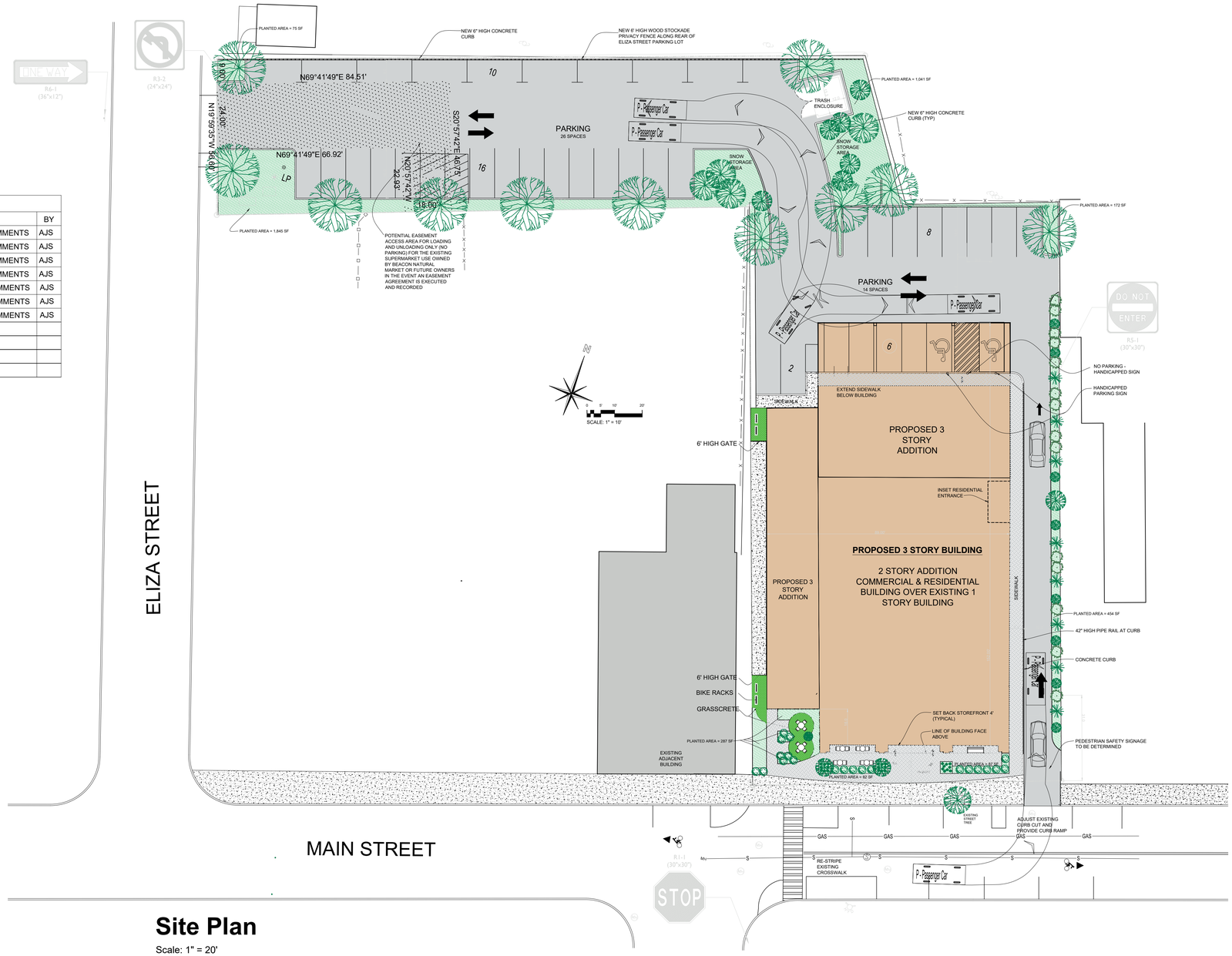
Bulk Zoning Regulations Table - Parking Lot

	Required Setbacks			Proposed Setbacks			Lot Depth Required	Lot Depth Existing	Allowable Building Height	Proposed Building Height	Lot Area	Proposed Floor Area
	Front	Side	Rear	Front	Side	Rear						
Zoning District												
T*	10'	10'	20'	NA	NA	NA	100'	242.6'	2.5 | 35'	NA	0.85	NA

Bulk Zoning Regulations Table

	Required Setbacks			Proposed Setbacks			Main Street Frontage Required	Main Street Frontage Required	Minimum Lot Depth	Proposed Lot Depth	Allowable Building Height	Proposed Building Height	Minimum Landscaped Area	Proposed Landscaped Area	Lot Area	Proposed Floor Area
	Front	Side	Rear	Front	Side	Rear										
Zoning District																
CMS*	0'-10'	0'	20'	14.78'	18' exist 5'	44'	80%	89%	75'	264.37'	3 | 38' & 4th Story w/ Special Permit	3 Stories 38'	10% 5% if open to public	11%	0.85 acres	35,000 SF

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	07/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	08/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	10/26/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
6	01/25/22	REVISED PER PLANNING BOARD COMMENTS	AJS
7	02/22/22	REVISED PER PLANNING BOARD COMMENTS	AJS



Site Plan

Scale: 1" = 20'



Location Plan

Not to Scale

Zoning Summary

Zoning District:	CMS (Central Main Street) & T (Transition Zone)
Tax Map No.:	6054-29-006819 (364 Main Street) & 6054-29-0004836 (Eliza Street)
Lot Area:	0.54 Acres & 0.31 Acres
Building Footprint:	12,632 SF
Historical Overlay District:	No
Parking Overlay District:	Partial, not the portion of the lot in the T District.
Existing Use:	Vacant (364 Main Street) & Parking Lot
Proposed Use:	Mixed-Use: Retail / Residential

Parking & Loading

Use & Parking Requirements	Proposed Area	Current Parking Requirement
Residential		
(1) space per unit (CMS)	(20) Apartments	20 parking spaces
Commercial		
(2) spaces per 1,000 SF for Retail	8,892 sf	18 parking spaces
Total Required		**38 parking spaces**
Total Provided		**42 parking spaces**

Notes:

1. Commercial hours are 7am – 12am, Monday through Sunday, inclusive.
2. No signage is proposed as part of this application. Retail tenants will apply separately to the Planning Board for their own signage
3. The landscaped area is approximately 11%. The overall measured landscaped area is 4,043 square feet. The overall site area is 36,954 square feet. 4,043/36,954 = 0.1094. The measured landscaped area includes all planted areas on the site shaded in green. Note that the requirement for landscaping can be reduced to 5% if the landscaped area is accessible to the public. Since a large portion of the landscaped area is accessible to the public, the Applicant contends that the landscaping requirement is met by both the 11% total landscape coverage, and the reduced 5% requirement.

Index of Drawings

Subdivision Plat

Sheet 1 of 14	Site Plan
Sheet 2 of 14	Existing Conditions & Demolition Plan
Sheet 3 of 14	Landscape Plan
Sheet 4 of 14	Building Plans
Sheet 5 of 14	Building Elevations & Renderings
Sheet 6 of 14 - UP.1	Utility Plan
Sheet 7 of 14 - LP.1	Lighting Plan
Sheet 8 of 14 - VM.1	Refuse Truck Movement Plan
Sheet 9 of 14 - VM.2	30' Truck Movement Plan
Sheet 10 of 14 - CD.1	Construction Details
Sheet 11 of 14 - CD.2	Construction Details
Sheet 12 of 14 - CD.3	Construction Details
Sheet 13 of 14 - ESC.1	Erosion & Sediment Control Plan
Sheet 14 of 14 - ESC.2	Erosion & Sediment Control Details

Site Plan Application

Sheet 1 of 14 - Site Plan

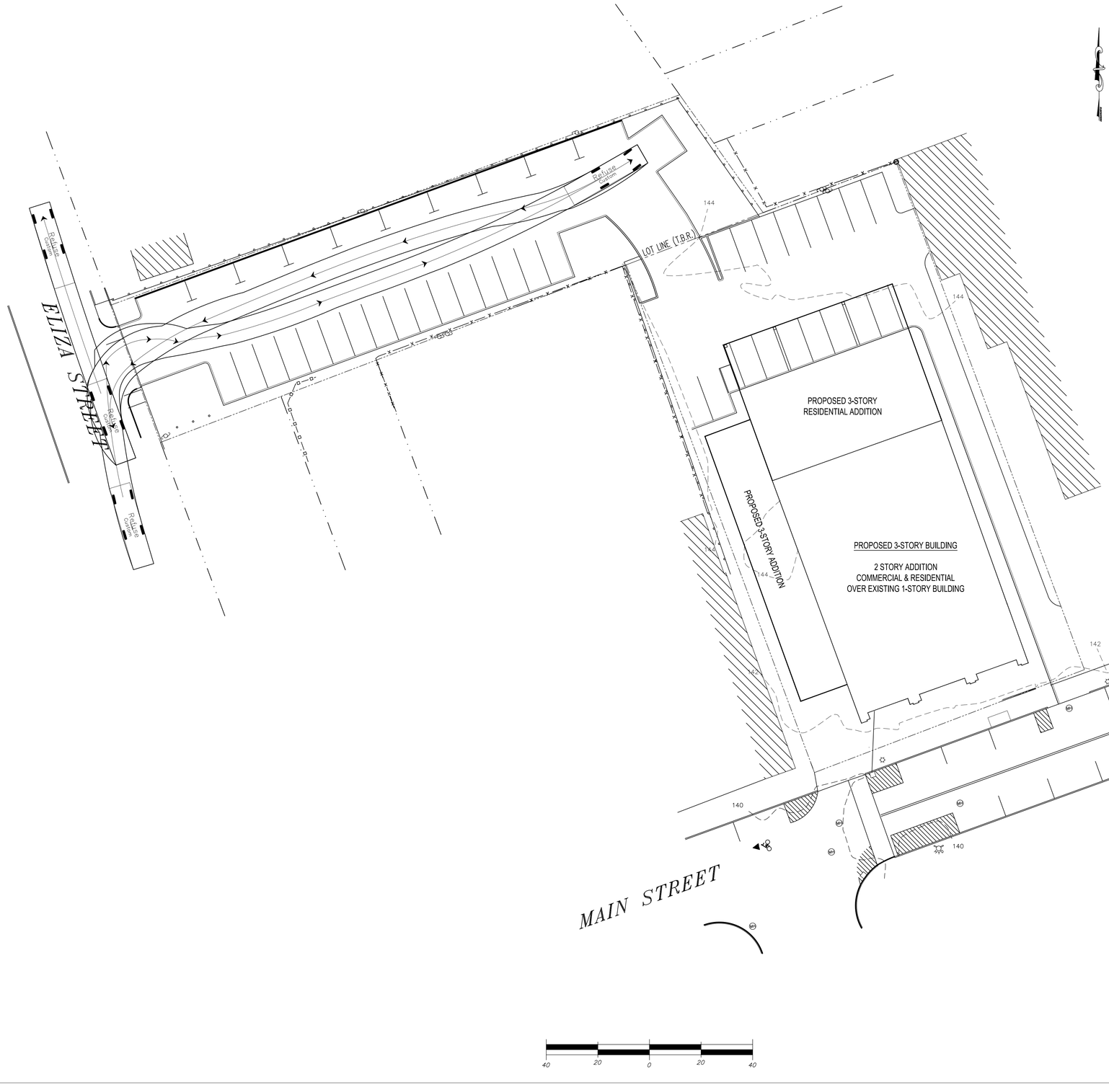
Owner:
O'Donnell & Son
P.O. Box 526
Fishkill, NY 12524

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

Site / Civil Engineer:
Day & Stokosa Engineering P.C
3 Van Wyck Lane
Wappingers Falls, New York 12590

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

364 Main Street
Beacon, New York
Scale: 1" = 20'
October 4, 2021



PARKING AND ACCESS EASEMENTS:

THERE SHALL BE A BLANKET ACCESS AND PARKING EASEMENT OVER BOTH LOTS ALLOWING BOTH ACCESS AND PARKING FOR EACH LOT OVER THE OTHER LOT.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS, SPECIFICATIONS, OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

	Mark A. Day, PE
02-17-21	
01-07-21	
12-21-21	
11-27-21	
08-27-21	
Revisions 07-20-21	
Project No. 2020.475	License No. 069646

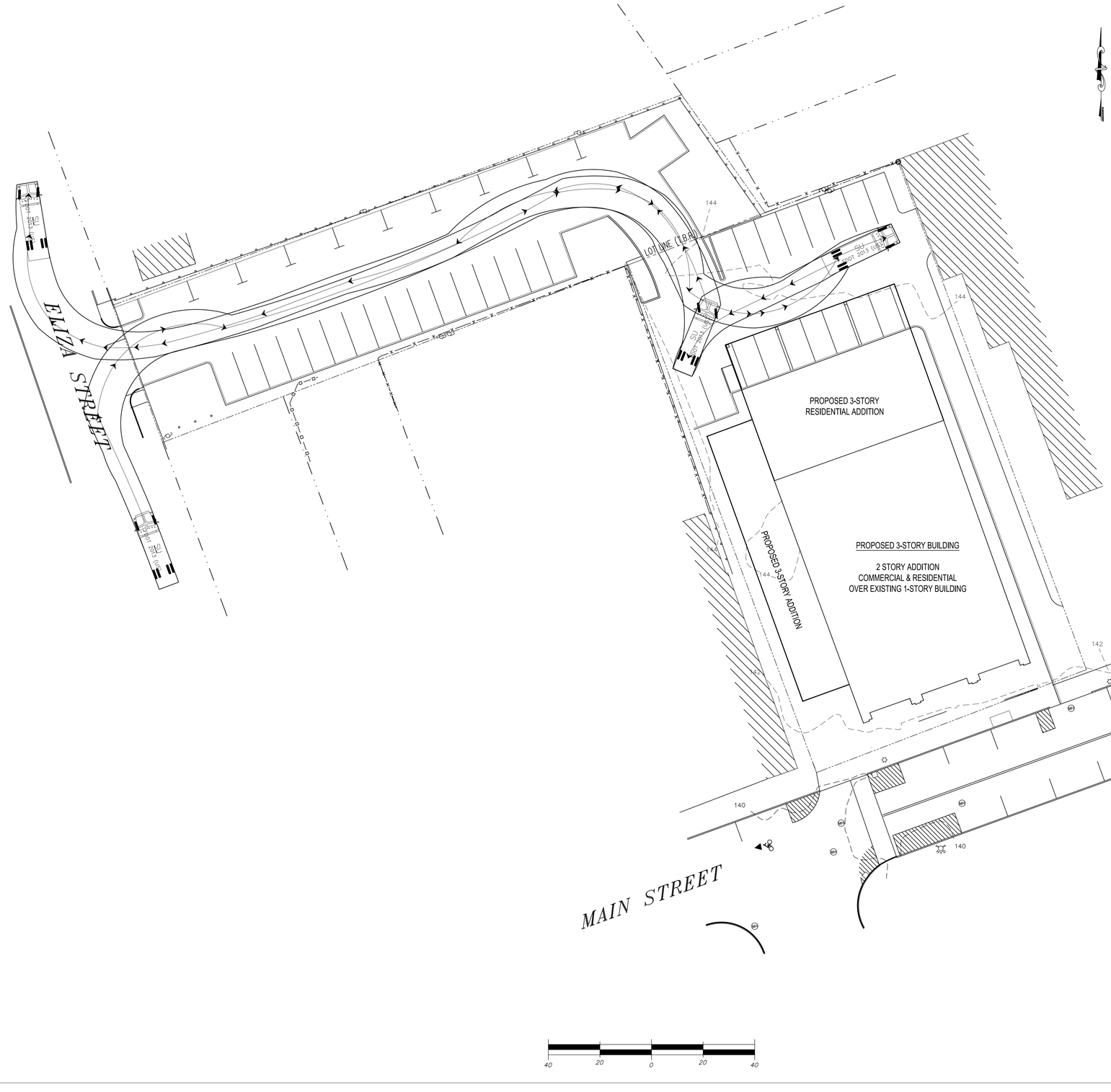
STATE OF NEW YORK · MARK A. DAY · 069646 · LICENSED PROFESSIONAL ENGINEER

DAY | STOKOSA
ENGINEERING P.C.
3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
Refuse Truck Movement Plan

SCALE	DRAWN BY	DRAWING No.
1" = 20'	MAD	VM.1
DATE	CHECKED BY	8 of 14
04-02-21	MAD	



PARKING AND ACCESS EASEMENTS:

THERE SHALL BE A BLANKET ACCESS AND PARKING EASEMENT OVER BOTH LOTS ALLOWING BOTH ACCESS AND PARKING FOR EACH LOT OVER THE OTHER LOT.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS, SPECIFICATIONS, OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

	Mark A. Day, PE
02-17-21	
01-07-21	
12-21-21	
11-27-21	
08-27-21	
Revisions 07-20-21	
Project No. 2020.475	License No. 069646

STATE OF NEW YORK · MARK A. DAY · 069646 · LICENSED PROFESSIONAL ENGINEER

DAY | STOKOSA
ENGINEERING P.C.
3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

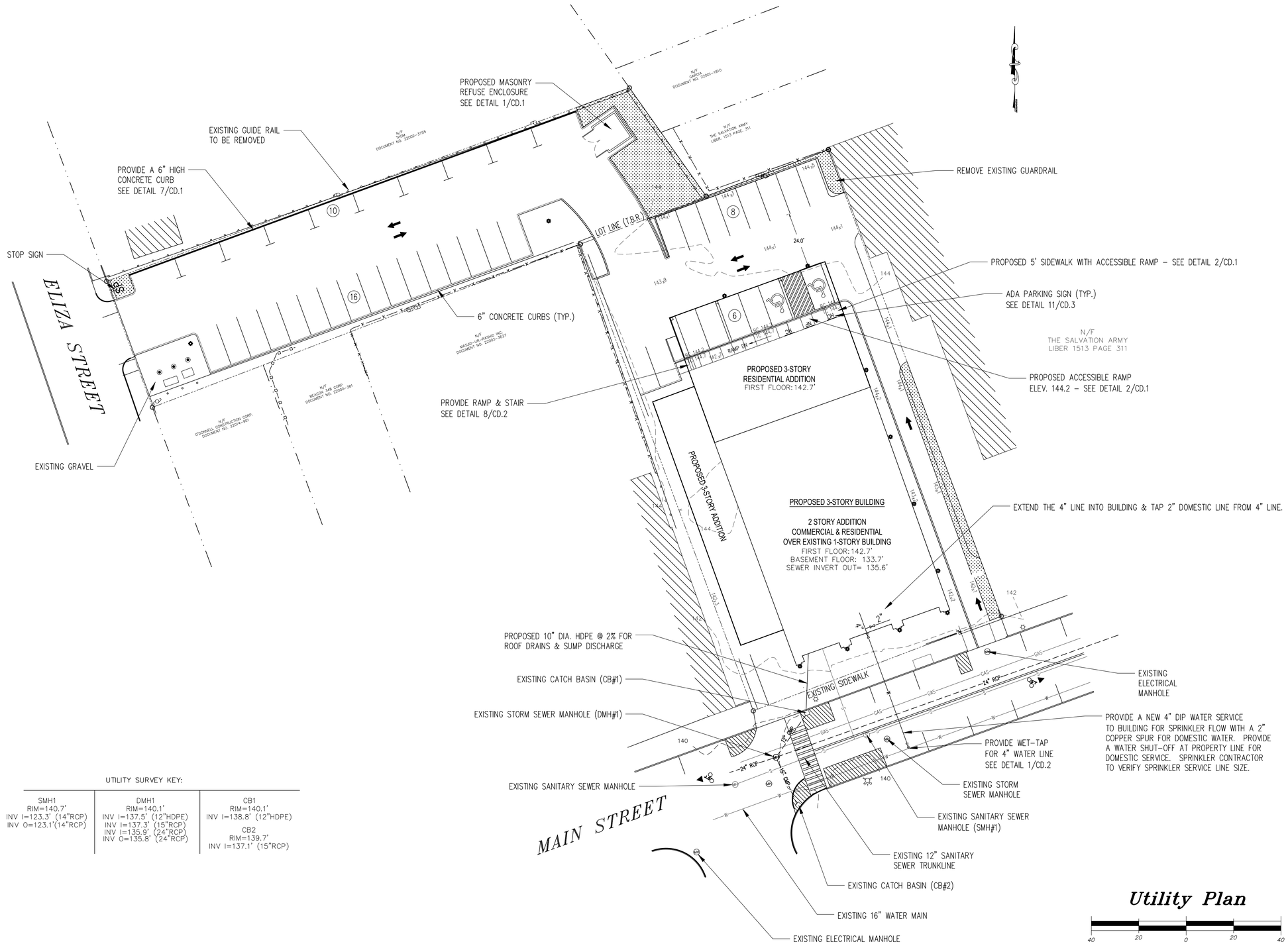
PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
30' Truck Movement Plan

SCALE	DRAWN BY	DRAWING No.
1" = 20'	MAD	VM.2
DATE 04-02-21	CHECKED BY MAD	9 of 14

PARKING AND ACCESS EASEMENTS:

THERE SHALL BE A BLANKET ACCESS AND PARKING EASEMENT OVER BOTH LOTS ALLOWING BOTH ACCESS AND PARKING FOR EACH LOT OVER THE OTHER LOT.



UTILITY SURVEY KEY:

SMH1 RIM=140.7' INV I=123.3' (14"RCP) INV O=123.1'(14"RCP)	DMH1 RIM=140.1' INV I=137.5' (12"HDPE) INV I=137.3' (15"RCP) INV I=135.9' (24"RCP) INV O=135.8' (24"RCP)	CB1 RIM=140.1' INV I=138.8' (12"HDPE) CB2 RIM=139.7' INV I=137.1' (15"RCP)

Utility Plan

40 20 0 20 40

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS, SPECIFICATIONS, OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

	Mark A. Day, PE
02-17-21	
01-07-21	
12-21-21	
11-27-21	
08-27-21	
Revisions 07-20-21	
Project No. 2020.475	License No. 069646

STATE OF NEW YORK · MARK A. DAY · LICENSED PROFESSIONAL ENGINEER · No. 069646

DAY | STOKOSA
ENGINEERING P.C.
3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
Utility Plan

SCALE	DRAWN BY	DRAWING No.
1" = 20'	MAD	UP.1
DATE 04-02-21	CHECKED BY MAD	6 of 14

PROPERTY DESCRIPTION:

DESCRIPTION OF A CERTAIN PARCEL OF LAND SITUATED IN THE CITY OF BEACON, COUNTY OF DUTCHESS AND THE STATE OF NEW YORK.

BEGINNING AT A POINT ALONG THE EASTERLY LINE OF ELIZA STREET AND SAID POINT BEING THE SOUTHWESTERLY CORNER OF THE HEREIN DESCRIBED PARCEL WITH THE NORTHWESTERLY CORNER OF THE LANDS OF NOW OR FORMERLY O'DONNELL CONSTRUCTION CORP. DOCUMENT NO. 22014–901 THENCE IN A NORTHERLY DIRECTION THE EASTERLY LINE OF ELIZA STREET, NORTH 19–59–35 WEST 56.60 FEET TO NORTHWESTERLY CORNER OF THE HEREIN DESCRIBED PARCEL WITH THE SOUTHWESTERLY CORNER OF THE LANDS OF NOW OR FORMERLY THOM, DOCUMENT NO. 22002–3755, THENCE IN A EASTERLY DIRECTION ALONG THE SOUTHERLY LINE OF THOM, NORTH 69–41–49 EAST 235.20 FEET TO THE NORTHEASTERLY CORNER OF THE HEREIN DESCRIBED PARCEL AND THE WESTERLY LINE OF THE LANDS OF NOW OR FORMERLY GARCIA, DOCUMENT NO. 2001–1810, THENCE ON A SOUTHERLY DIRECTION ALONG THE WESTERLY LINE OF GARCIA AND THE WESTERLY LINE OF THE LANDS OF NOW OR THE SALVATION ARMY LIBER 1513 PAGE 311, SOUTH 35–17–35 EAST 56.00 FEET TO SOUTHEASTERLY CORNER OF THE HEREIN DESCRIBED PARCEL WITH THE NORTHERLY LINE OF THE LANDS OF NOW OR FORMERLY CRE JV FIVE BRANCH HOLDINGS, LLC, DOCUMENT NO. 22006–9740, THENCE IN A WESTERLY DIRECTION ALONG THE NORTHERLY LINE OF CRE JV FIVE BRANCH HOLDING, LLC AND THE LANDS OF NOW OR FORMERLY MASJID–UR–RASHID INC., DOCUMENT NO. 22003–3827, AND THE LANDS OF NOW OR FORMERLY BEACON 348 CORP., DOCUMENT 22000–381 AND THE AFORESAID LANDS OF O'DONNELL CONSTRUCTION CORP, SOUTH 69–07–22 WEST 250.00 FEET TO THE POINT OF BEGINNING. CONTAINING 0.15 ACRES OF LAND MORE OR LESS

CERTIFICATION:
TO O'DONNELL CONSTRUCTION CORP. , TEG FEDERAL CREDIT UNION,
AND FIRST AMERICAN TITLE INSURANCE COMPANY
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY
ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016
MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE
SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS,
INCLUDES ITEMS 2,3,4,8,13,14,16,18, AND 19 OF TABLE A THEROF.
THE FIELDWORK WAS COMPLETED ON FEBRUARY 20, 2017

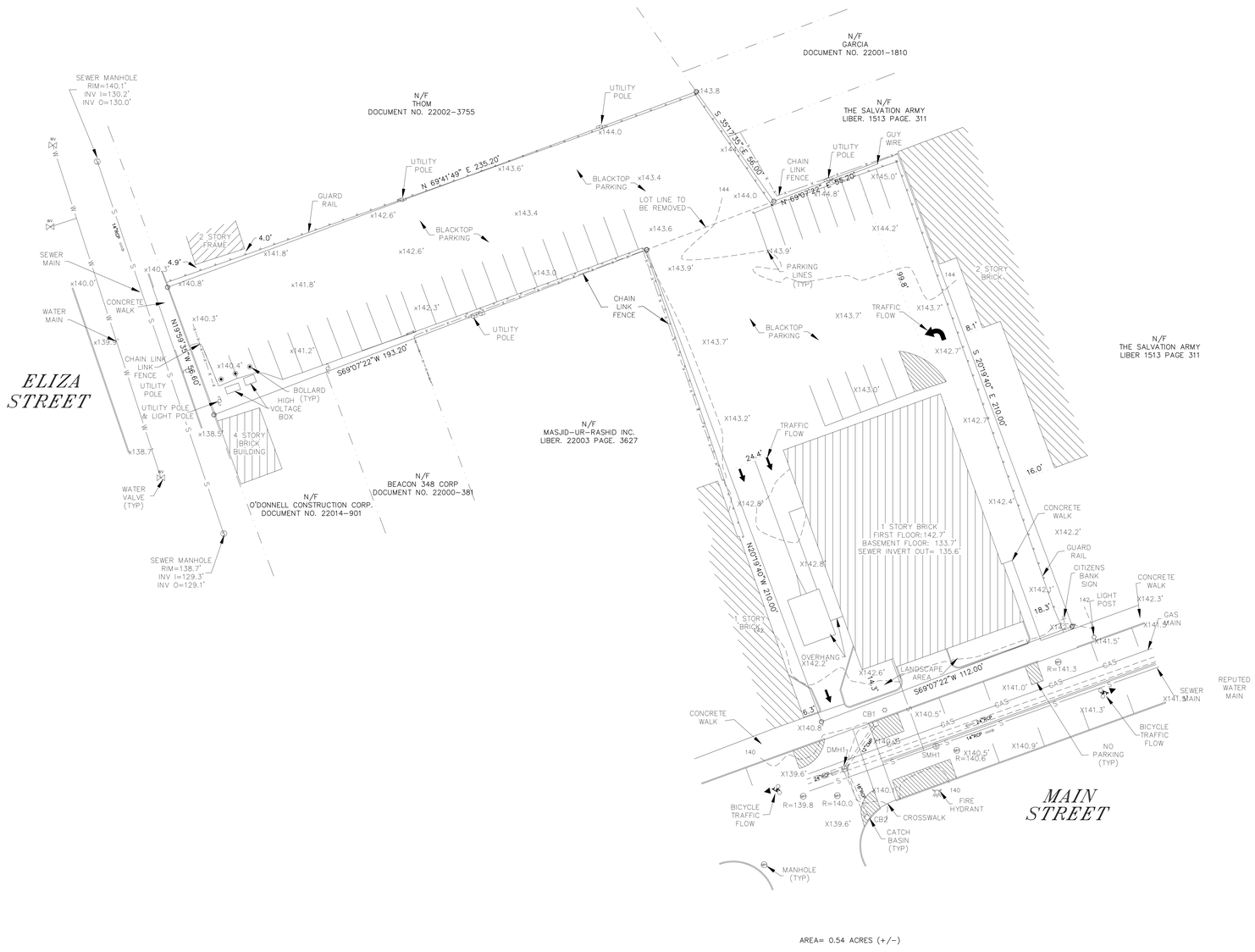
PROPERTY INFO:
ELIZA STREET, BEACON NEW YORK, 12504

ENCROACHMENTS:
AT THE TIME OF THE SURVEY THERE ARE NO VISIBLE
ENCROACHMENTS ONTO THE SUBJECT PROPERTY

GENERAL NOTES:
1. THERE IS NO EVIDENCE OF RECENT EARTH MOVING WORK
BUILDING CONSTRUCTION, OR BUILDING ADDITIONS
OBSERVED IN THE PROCESS OF CONDUCTING FIELDWORK
2. THERE ARE NO WETLANDS ON THIS PARCEL OF LAND
3. THERE IS DIRECT ACCESS TO THE SUBJECT PROPERTY
VIA ELIZA STREET, A PUBLIC RIGHT OF WAY

PARKING:
17 REGULAR PARKING SPACES
NO HANDICAP PARKING SPACES

SURVEYORS LEGAL:
1. THERE IS NO EVIDENCE OF RECENT EARTH MOVING WORK
BUILDING CONSTRUCTION, OR BUILDING ADDITIONS
OBSERVED IN THE PROCESS OF CONDUCTING FIELDWORK



AREA= 0.54 ACRES (+/–)



PROPERTY DESCRIPTION:

DESCRIPTION OF A CERTAIN PARCEL OF LAND SITUATED IN THE CITY OF BEACON, COUNTY OF DUTCHESS AND THE STATE OF NEW YORK.

BEGINNING AT A POINT ALONG THE NORTHERLY LINE OF MAIN STREET AND SAID POINT BEING THE SOUTHEASTERLY CORNER OF THE HEREIN DESCRIBED PARCEL WITH THE SOUTHWESTERLY CORNER OF THE LANDS OF NOW OR FORMERLY THE SALVATION ARMY LIBER 1513 PAGE 311, THENCE IN A WESTERLY DIRECTION ALONG THE NORTHERLY LINE OF MAIN STREET, SOUTH 69–07–22 WEST 112.00 FEET TO THE SOUTHWESTERLY CORNER OF THE HEREIN DESCRIBED PARCEL WITH THE LANDS OF NOW OR FORMERLY MASJID–UR–RASHID, INC., LIBER 22003 PAGE 3627, THENCE IN A NORTHERLY DIRECTION ALONG THE EASTERLY LINE OF MASJID–UR–RASHID, INC., NORTH 20–19–40 WEST 210.00 FEET THE NORTHWESTERLY CORNER OF THE HEREIN DESCRIBED PARCEL WITH THE SOUTHERLY LINE OF THE LANDS OF NOW OF FORMERLY CRE JV FIVE BRANCH HOLDINGS LLC DOCUMENT NO. 22006–9740, THENCE IN A EASTERLY DIRECTION ALONG THE SOUTHERLY LINE OF CRE JV FIVE BRANCH HOLDINGS, LLC AND THE AFORESAID LANDS OF THE SALVATION ARMY, NORTH 69–07–22 EAST 112.00 FEET TO THE NORTHEASTERLY CORNER OF THE HEREIN DESCRIBED PARCEL AND THE AFORESAID LANDS OF THE SALVATION ARMY, THENCE IN SOUTHERLY DIRECTION ALONG THE WESTERLY LINE OF THE LANDS OF THE SALVATION ARMY, SOUTH 20–19–40 EAST 210.00 FEET TO THE POINT OF BEGINNING. CONTAINING 0.54 ACRES OF LAND MORE OR LESS.

CERTIFICATION:
TO O'DONNELL CONSTRUCTION CORP. , TEG FEDERAL CREDIT UNION,
AND FIRST AMERICAN TITLE INSURANCE COMPANY
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY
ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016
MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE
SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS,
INCLUDES ITEMS 2,3,4,8,13,14,16,18, AND 19 OF TABLE A THEROF.
THE FIELDWORK WAS COMPLETED ON FEBRUARY 20, 2017

PROPERTY INFO:
364 MAIN STREET, BEACON NEW YORK, 12504

ENCROACHMENTS:
AT THE TIME OF THE SURVEY THERE ARE NO VISIBLE
ENCROACHMENTS ONTO THE SUBJECT PROPERTY

GENERAL NOTES:
1. THERE IS NO EVIDENCE OF RECENT EARTH MOVING WORK
BUILDING CONSTRUCTION, OR BUILDING ADDITIONS
OBSERVED IN THE PROCESS OF CONDUCTING FIELDWORK
2. THERE ARE NO WETLANDS ON THIS PARCEL OF LAND
3. THERE IS DIRECT ACCESS TO THE SUBJECT PROPERTY
VIA MAIN STREET, A PUBLIC RIGHT OF WAY

PARKING:
13 REGULAR PARKING SPACES
NO HANDICAP PARKING SPACES

SURVEYORS LEGAL:
1. THERE IS NO EVIDENCE OF RECENT EARTH MOVING WORK
BUILDING CONSTRUCTION, OR BUILDING ADDITIONS
OBSERVED IN THE PROCESS OF CONDUCTING FIELDWORK

SURVEY KEY:

SMH1	DMH1	CB1
RIM=140.7'	RIM=140.1'	RIM=140.1'
INV I=123.3' (14"RCP)	INV I=137.5' (12"HDPE)	INV I=138.8' (12"HDPE)
INV O=123.1'(14"RCP)	INV I=137.3' (15"RCP)	
	INV I=135.9' (24"RCP)	CB2
	INV O=135.8' (24"RCP)	RIM=139.7'
		INV I=137.1' (15"RCP)

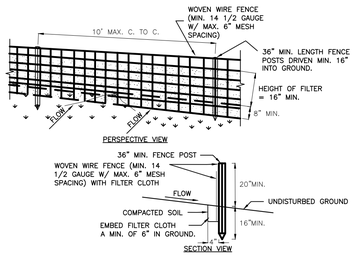
CERTIFIED TO:
1. O'DONNELL CONSTRUCTION CORP.
2. TEG FEDERAL CREDIT UNION
3. FIRST AMERICAN TITLE INSURANCE COMPANY
4.

NOTES:
1. BEING THE SAME PARCEL AS DESCRIBED IN THE DOCUMENT NO. 2006–9740 AND SUBJECT TO RESTRICTIONS AND CONDITIONS THEREIN.
2. TOGETHER WITH ANY RIGHT, TITLE OR INTEREST IN AND TO THE CENTER OF THE PUBLIC ROADS SHOWN HEREON.
3. N/A.
4. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYORS SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
5. ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.
6. CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THE PERSONS FOR WHOM THE SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION, AND SHALL NOT BE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.
7. THIS SURVEY IS SUBJECT TO ANY FINDINGS OF A TITLE SEARCH.
8. SUBSURFACE STRUCTURES AND UTILITIES WHICH WERE NOT VISIBLE AT THE TIME OF THE SURVEY HAVE NOT BEEN SHOWN.
9. ©ALL RIGHTS RESERVED. COPYING OR REPRODUCTION OF THIS PLAN OR ANY PORTION THEREOF PROHIBITED WITHOUT THE WRITTEN PERMISSION OF THE DESIGN ENGINEER / SURVEYOR.

FILE NO. 2017-015

LOTLINE CHANGE
FOR
THE LANDS OF
O'DONNELL CONSTRUCTION CORP.
CITY OF BEACON *DUTCHESS CO.,N.Y.*
SCALE: 1" = 20' *FEBRUARY 20, 2017*
UPDATE UTILITIES: JUNE 18, 2021
UPDATE SPOT ELEVATIONS: DECEMBER 13, 2021
ENGINEER'S COMMENTS: DECEMBER 17, 2021
UTILITY AND LIGHT POLE: JAUNARY 24, 2022
EASEMENT FEBRUARY 21, 2022

ROBERT V. OSWALD
LAND SURVEYING
175 WALSH ROAD, LAGRANGEVILLE NEW YORK, 12540
(845)–226–6436 FAX (845) 226–1315
NEW YORK STATE
LICENSE NO. 50031



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. 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 EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

1 SILT FENCE DETAIL

NOT TO SCALE

3 TYPICAL ORANGE CONSTRUCTION FENCE DETAIL

NOT TO SCALE

EROSION AND SEDIMENT CONTROL MEASURES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IN STRICT COMPLIANCE WITH "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", AUGUST 2005.
2. DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
3. SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISRUPTION.
4. PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL POINTS OF ENTRY ONTO THE PROJECT SITE.
6. SEEDED AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.
8. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST BY SPRINKLING EXPOSED SOIL AREAS PERIODICALLY WITH WATER AS REQUIRED. THE CONTRACTOR IS TO SUPPLY ALL EQUIPMENT AND WATER.
9. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES:

A. PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

B. STABILIZED CONSTRUCTION ENTRANCE:
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. RESHAPE PAD AS NEEDED FOR DRAINAGE AND 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.

C. SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO 1/3 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.

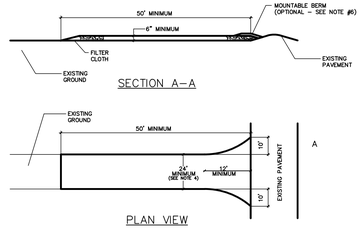
D. INLET PROTECTION:
INSPECT INLET PROTECTION FOR DAMAGE EVERY SEVEN DAYS. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT AS NECESSARY TO PROVIDE FOR ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS.

E. 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.

5 EROSION & SEDIMENT CONTROL NOTES

NOT TO SCALE



NOTES:

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED 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 OF 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, DRIPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-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.

2 ANTI-TRACKING PAD DETAIL

NOT TO SCALE

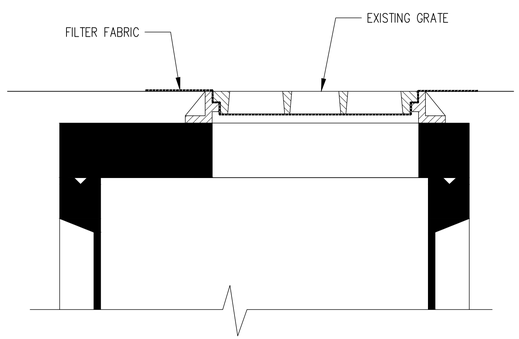
1. ALL SEDIMENT & EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THESE PLANS & DETAILS. CHANGES, OMISSIONS AND/OR OTHER ALTERATIONS CAN NOT BE MADE TO THESE PLANS WITHOUT THE CONSENT OF THE DESIGN ENGINEER.
2. SILT FENCE SHALL BE INSTALLED AS SHOWN ON THIS DRAWING PRIOR TO BEGINNING ANY CLEARING, GRUBBING AND EARTHWORK.
3. EXPOSED SLOPES AND ALL GRADED AREAS SHALL BE SEEDED WITH THE FOLLOWING GRASS SEED MIX IMMEDIATELY UPON COMPLETION OF ITS CONSTRUCTION, OR IF PLANNED TO BE LEFT UNDISTURBED FOR MORE THAN 21 DAYS. GRASS SEED MIX TO BE APPLIED AT A RATE OF 50 POUNDS PER ACRE IN THE FOLLOWING PROPORTIONS:

KENTUCKY BLUEGRASS	40%	CREEPING RED FESCUE	40%
RYE GRASS	20%		

4. GRASS SEED MIX MAY BE APPLIED BY EITHER MECHANICAL OR HYDROSEEDING METHODS. HYDROSEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITION OF THE NYSDOT STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, SECTION 610-3.02, METHOD No. 1.
5. SEEDED AREAS SHALL BE MULCHED WITH STRAW AT A RATE OF 2 TONS PER ACRE, OR 90 LBS. PER 1,000 SQUARE FEET, SUCH THAT IT FORMS A CONTINUOUS BLANKET.
6. SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS BY THE OWNER's FIELD REPRESENTATIVE.
7. DUST SHALL BE CONTROLLED BY SPRINKLING OF WATER OR OTHER APPROVED METHODS AS NECESSARY AS DIRECTED BY THE OWNER's FIELD REPRESENTATIVE.
8. CUTS AND FILLS SHALL NOT ENDANGER ADJOINING PROPERTY, NOR DIVERT SURFACE WATER ONTO ADJOINING PROPERTIES.
9. ALL FILLS SHALL BE COMPACTED TO PROVIDE STABILITY OF MATERIALS AND TO PREVENT SETTLEMENT.
10. EXCAVATIONS AND FILLS TO BE ROLLED, SEALED AND STABILIZED AT COMPLETION OF EACH DAY's WORK.
11. THE OWNER's FIELD REPRESENTATIVE SHALL INSPECT THE DOWNSTREAM CONDITIONS FOR EVIDENCE OF SEDIMENTATION ON A WEEKLY BASIS AND AFTER RAINSTORMS.
12. AS WARRANTED BY FIELD CONDITIONS, SPECIAL ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES MAY BE ADDED TO THIS PLAN BY THE SITE ENGINEER, TOWN ENGINEER AND HIGHWAY SUPERINTENDENT. ANY REVISIONS TO THIS PLAN MUST BE SUBMITTED TO THE SITE ENGINEER. ANY CHANGES DEEMED NECESSARY TO THIS PLAN SHALL BE DICTATED BY THE SITE ENGINEER AS NECESSARY TO CARRY-OUT THE INTENT OF THIS PLAN.

4 SEEDING & MULCHING NOTES

NOT TO SCALE



1. THE FILTER FABRIC SHALL HAVE AN EOS OF 40–85.
2. THE FILTER SHALL BE PLACED UNDER THE EXISTING GRATE AND HELD FIRMLY AT THE FRAME BY THE WEIGHT OF THE GRATE.
3. THE FILTER SHALL BE A CONTINUOUS PIECE WITH NO JOINTS OR SEAMS.

6 FILTER FABRIC DROP INLET PROTECTION DETAIL

NOT TO SCALE

Construction Waste Management Plan

Construction waste management practices are designed to maintain a clean and orderly work environment. This will reduce the potential for significant materials to come into contact with stormwater. A maintenance schedule shall be developed for these areas. The general contractor shall implement the following practices:

1. Material resulting from the clearing and grubbing operation will be stockpiled up slope from adequate sedimentation controls.
2. Equipment cleaning, maintenance, and repair areas shall be designated and protected by a temporary perimeter berm.
3. The use of detergents for large scale washing is prohibited (i.e., vehicles, buildings, pavement surfaces, etc.).
4. Spill Prevention and Response
   A Spill Prevention and Response Plan shall be developed for the site by the general contractor. The plan shall detail the steps needed to be followed in the event of an accidental spill and shall identify contact names and phone numbers of people and agencies that must be notified.

   The plan shall include Material Safety Data Sheets (MSDS) for all materials to be stored on-site. All workers on-site will be required to be trained on safe handling and spill prevention procedures for all materials used during construction. Regular tailgate safety meetings shall be held and all workers that are expected on the site during the week shall be required to attend.
5. Material Storage
   Construction materials shall be stored in a dedicated staging area. The staging area shall be located in an area that minimizes the impacts of the construction materials effecting stormwater quality.

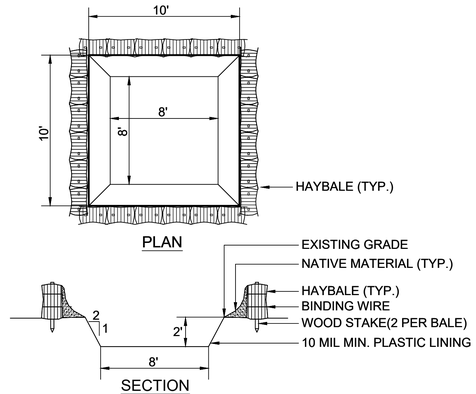
   Chemicals, paints, solvents, fertilizers, and other toxic material must be stored in waterproof containers. Except during application, the contents must be kept in trucks or within storage facilities. Runoff containing such material must be collected, removed from the site, treated and disposed at an approved solid waste or chemical disposal facility.
6. Temporary Concrete Washout Facility
   Temporary concrete washout facilities should be located a minimum of 50 ft from storm drain inlets, open drainage facilities, and watercourses. Each facility should be located away from construction traffic or access areas to prevent disturbance or tracking. A sign should be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.

   When temporary concrete washout facilities are no longer required for the work, the hardened concrete shall be removed and disposed of. Materials used to construct the temporary concrete washout facilities shall be removed from the site and disposed of. Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities shall be backfilled and/or repaired and seeded and mulched for final stabilization.
7. Solid Waste Disposal
   No solid materials, including building materials, are allowed to be discharged from the site with stormwater. All solid waste, including disposable materials incidental to the major construction activities, must be collected and placed in containers. The containers will be emptied periodically by a contract trash disposal service and hauled away from the site.

   Substances that have the potential for polluting surface and/or groundwater must be controlled by whatever means necessary in order to ensure that they do not discharge from the site. As an example, special care must be exercised during equipment fueling and servicing operations. If a spill occurs, it must be contained and disposed so that it will not flow from the site or enter groundwater, even if this requires removal, treatment, and disposal of soil. In this regard, potentially polluting substances should be handled in a manner consistent with the impact they represent.
8. Water Source
   Non-stormwater components of site discharge must be clean water. Water used for construction, which discharges from the site, must originate from a public water supply or private well approved by the Health Department. Water used for construction that does not originate from an approved public supply must not discharge from the site. It can be retained in the ponds until it infiltrates and evaporates.

7 CONSTRUCTION WASTE MANAGEMENT PLAN

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1) THE LINER SHALL BE PLASTIC SHEETING WITH A MINIMUM THICKNESS OF 10 MILS WITH NO HOLES OR TEARS, AND ANCHORED BEYOND THE TOP OF THE PIT WITH AN EARTHEN BERM, SAND BAGS, STONE, OR OTHER STRUCTURAL APPURTENANCE EXCEPT AT THE ACCESS POINT.

2) LOCATE THE FACILITY A MINIMUM OF 100 FEET FROM DRAINAGE SWALES, STORM DRAIN INLETS, WETLANDS, STREAMS AND OTHER SURFACE WATERS. PREVENT SURFACE WATER FROM ENTERING THE STRUCTURE EXCEPT FOR THE ACCESS ROAD. PROVIDE APPROPRIATE ACCESS WITH A GRAVEL ACCESS ROAD SLOPED DOWN TO THE STRUCTURE. SIGNS SHALL BE PLACED TO DIRECT DRIVERS TO THE FACILITY AFTER THEIR LOAD IS DISCHARGED. .

3) ALL CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAILY. DAMAGED OR LEAKING FACILITIES SHALL BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. EXCESS RAINWATER THAT HAS ACCUMULATED OVER HARDENED CONCRETE SHOULD BE PUMPED TO A STABILIZED AREA, SUCH AS A GRASS FILTER STRIP.

4) ACCUMULATED HARDENED MATERIAL SHALL BE REMOVED WHEN 75% OF THE STORAGE CAPACITY OF THE STRUCTURE IS FILLED. ANY EXCESS WASH WATER SHALL BE PUMPED INTO A CONTAINMENT VESSEL AND PROPERLY DISPOSED OF OFF SITE.

5) DISPOSE OF THE HARDENED MATERIAL OFF-SITE IN A CONSTRUCTION/DEMOLITION LANDFILL. ON-SITE DISPOSAL MAY BE ALLOWED IF THIS HAS BEEN APPROVED AND ACCEPTED AS PART OF THE PROJECTS SWPPP. IN THAT CASE, THE MATERIAL SHOULD BE RECYCLED AS SPECIFIED, OR BURIED AND COVERED WITH A MINIMUM OF 2 FEET OF CLEAN COMPACTED EARTHFILL THAT IS PERMANENTLY STABILIZED TO PREVENT EROSION.

6) THE PLASTIC LINER SHALL BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

7) INSPECT THE PROJECT SITE FREQUENTLY TO ENSURE THAT NO CONCRETE DISCHARGES ARE TAKING PLACE IN NON-DESIGNATED AREAS.

8 TEMPORARY CONCRETE WASHOUT BASIN DETAIL

NOT TO SCALE

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS, SPECIFICATIONS, OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

Revisions	Mark A. Day, PE
02-17-21	
01-07-21	
12-21-21	
11-27-21	
08-27-21	
07-20-21	
Project No. 2020.475	License No. 069646

DAY | STOKOSA ENGINEERING P.C.
3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

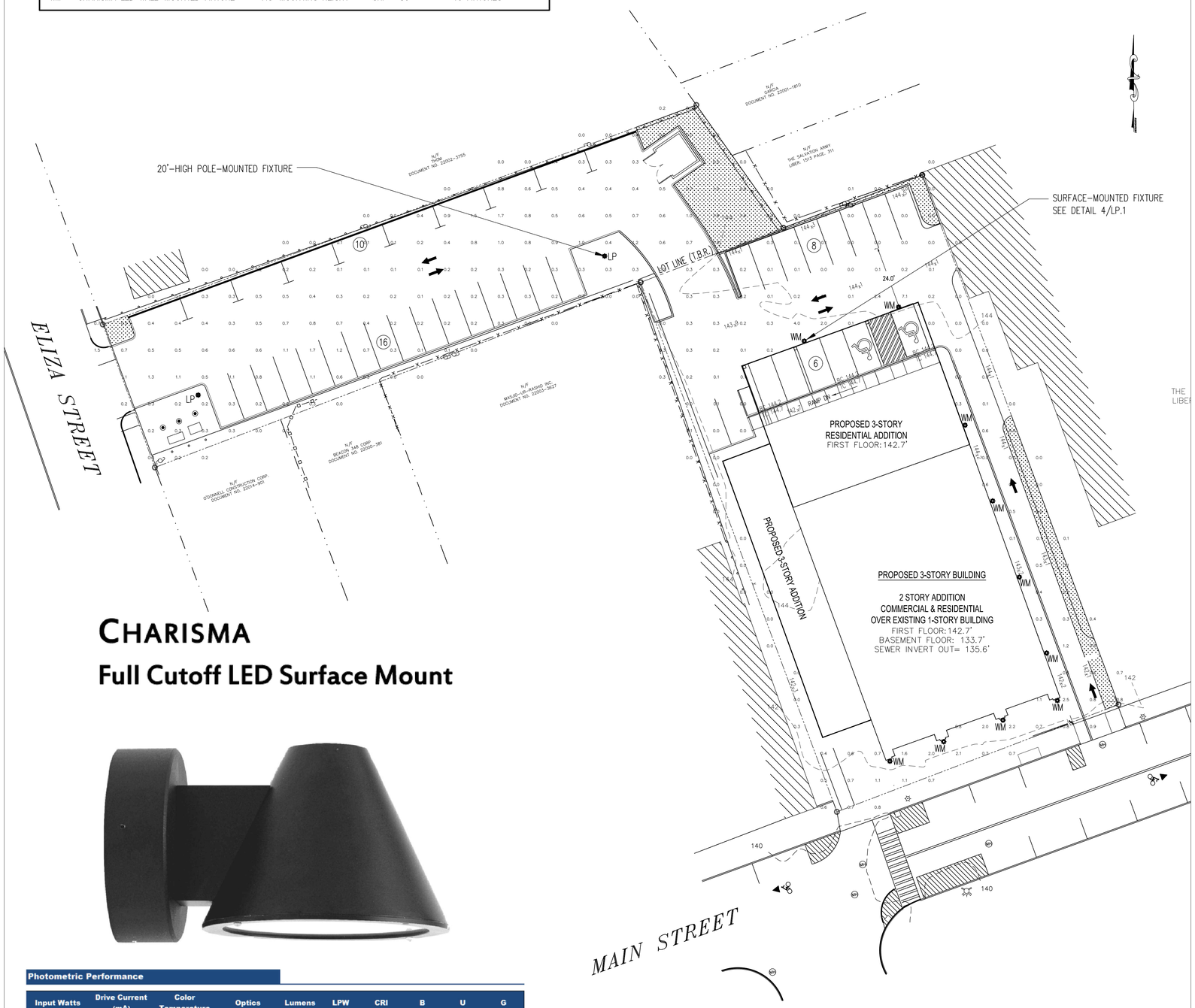
PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
Erosion & Sediment Control Details

SCALE	DRAWN BY	DRAWING No.
As Noted	MAD	ESC.2
DATE 04-02-21	CHECKED BY MAD	14 of 14

LIGHTING FIXTURE SCHEDULE

LP	ANP LED POLE-MOUNTED FIXTURE	20' POLE	CRI > 90	2 FIXTURES
WM	CHARISMA LED WALL-MOUNTED FIXTURE	7.5' MOUNTING HEIGHT	CRI = 80	10 FIXTURES



CHARISMA

Full Cutoff LED Surface Mount

Photometric Performance

Input Watts	Drive Current (mA)	Color Temperature	Optics	Lumens	LPW	CRI	B	U	G
20.0w	1050mA	3000K	Lens	1,459	76	80	2	0	0

4 20-WATT WALL-MOUNTED LIGHT FIXTURE DETAIL
NOT TO SCALE

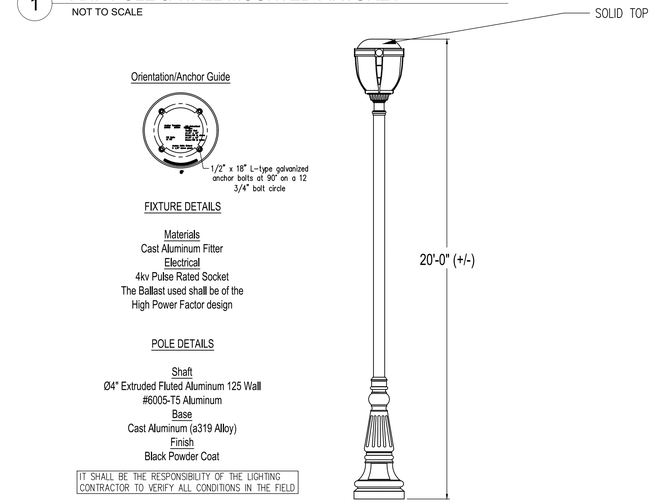
LIGHTING PLAN





ANP POLE MOUNTED LED FIXTURE
LA792-1-P046LD4-D-T3-35K-PC-PA5151-41
WM5161 WALL MOUNT BRACKET
COLOR TEMPERATURE - 3500K
FULL CUTOFF/DOWNLIGHT
POLE COLOR - BLACK

1 ANP POLE & WALL MOUNTED FIXTURES
NOT TO SCALE



FIXTURE DETAILS

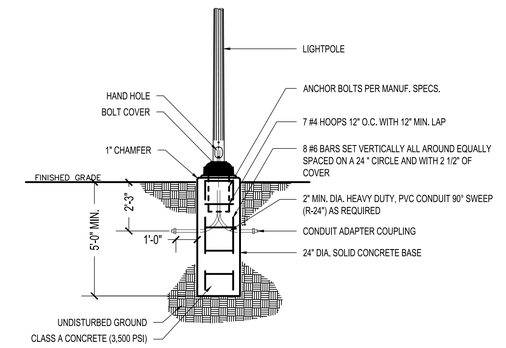
Materials
Cast Aluminum Fitter
Electrical
4kv Pulse Rated Socket
The Ballast used shall be of the High Power Factor design

POLE DETAILS

Shaft
Ø4" Extruded Fluted Aluminum 125 Wall #6005-T5 Aluminum
Base
Cast Aluminum (a319 Alloy)
Finish
Black Powder Coat

IT SHALL BE THE RESPONSIBILITY OF THE LIGHTING CONTRACTOR TO VERIFY ALL CONDITIONS IN THE FIELD

2 LIGHT POLE DETAIL
NOT TO SCALE



NOTE:

1. CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI, WITH AIR-ENTRAINMENT OF 5-7%
2. CHAMFER EXPOSED EDGES OF ALL FOUNDATIONS.
3. COLOR OF FIXTURE SHALL MATCH COLOR OF POLE

IT SHALL BE THE RESPONSIBILITY OF THE LIGHTING CONTRACTOR TO VERIFY ALL CONDITIONS IN THE FIELD

3 LIGHTPOLE DETAIL
NOT TO SCALE

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS, SPECIFICATIONS, OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

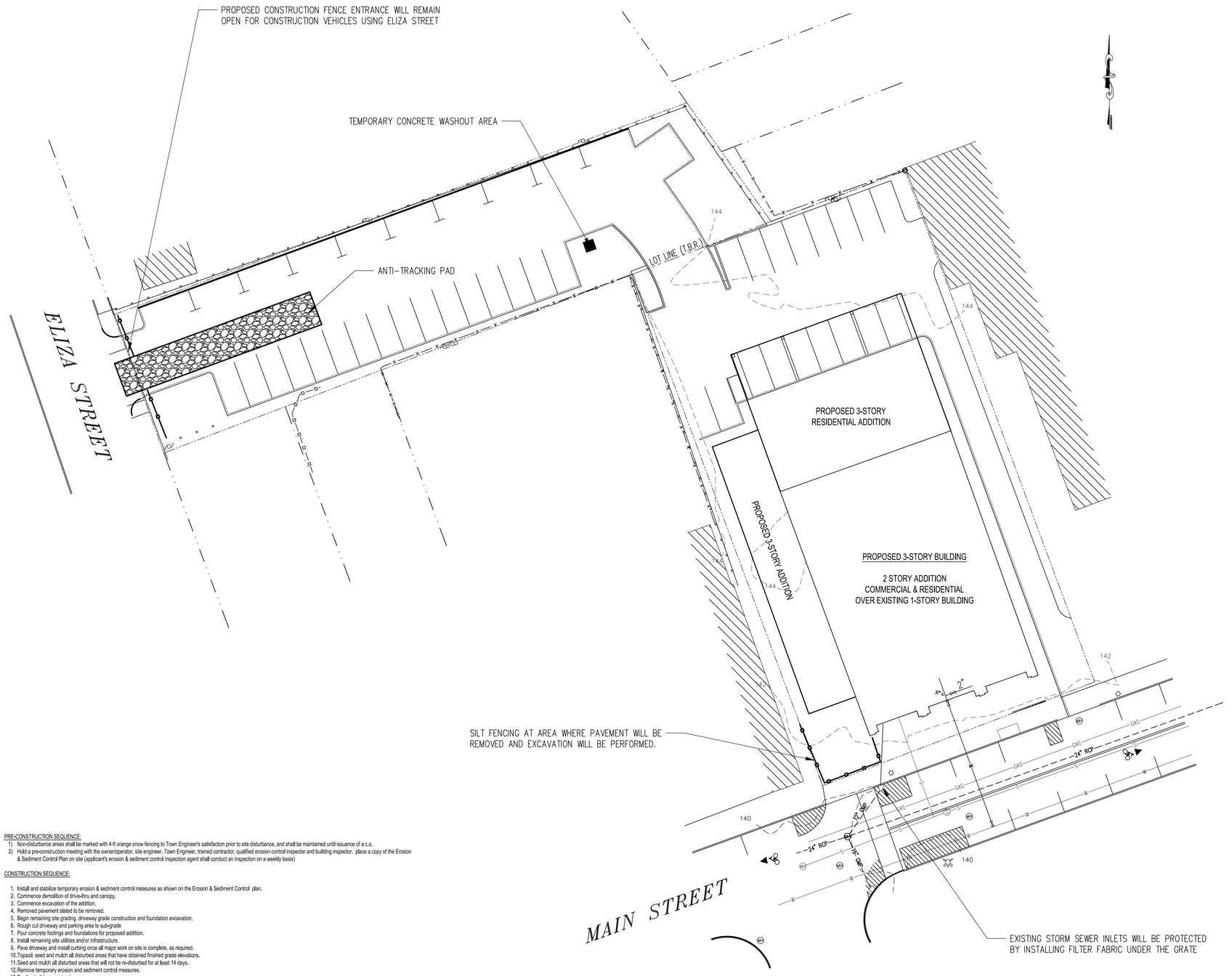
Revisions	Mark A. Day, PE
02-17-21	
01-07-21	
12-21-21	
11-27-21	
08-27-21	
07-20-21	
Project No. 2020.475	License No. 069646

DAY | STOKOSA
ENGINEERING P.C.
3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
Lighting Plan

SCALE	DRAWN BY	DRAWING No.
1" = 20'	MAD	LP.1
DATE 04-02-21	CHECKED BY MAD	7 of 14



PRE-CONSTRUCTION SEQUENCE:

1) Non-disturbance areas shall be marked with 4-ft orange snow fencing to Town Engineer's satisfaction prior to site disturbance, and shall be maintained until issuance of a c.o.
2) Hold a pre-construction meeting with the owner/operator, site engineer, Town Engineer, trained contractor, qualified erosion control inspector and building inspector. place a copy of the Erosion & Sediment Control Plan on site (applicant's erosion & sediment control inspection agent shall conduct an inspection on a weekly basis)

CONSTRUCTION SEQUENCE:

1. Install and stabilize temporary erosion & sediment control measures as shown on the Erosion & Sediment Control plan.
2. Commence demolition of drive-thru and canopy.
3. Commence excavation of the addition.
4. Removed pavement slated to be removed.
5. Begin remaining site grading, driveway grade construction and foundation excavation.
6. Rough cut driveway and parking area to sub-grade
7. Pour concrete footings and foundations for proposed addition.
8. Install remaining site utilities and/or infrastructure.
9. Pave driveway and install curbing once all major work on site is complete, as required.
10. Topsoil, seed and mulch all disturbed areas that have obtained finished grade elevations,
11. Seed and mulch all disturbed areas that will not be re-disturbed for at least 14 days.
12. Remove temporary erosion and sediment control measures.
13. Finalize building construction.
14. Pave parking area and drives with final top-coat of asphalt.
15. Strip parking spaces, as required by the Site Plan,
16. Main Street and Eliza Street shall be swept daily during construction if and when site-generated debris is deposited on the streets.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS, SPECIFICATIONS, OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

Revisions	
	Mark A. Day, PE
02-17-21	
01-07-21	
12-21-21	
11-27-21	
08-27-21	
07-20-21	
Project No: 2020.475	License No. 069646

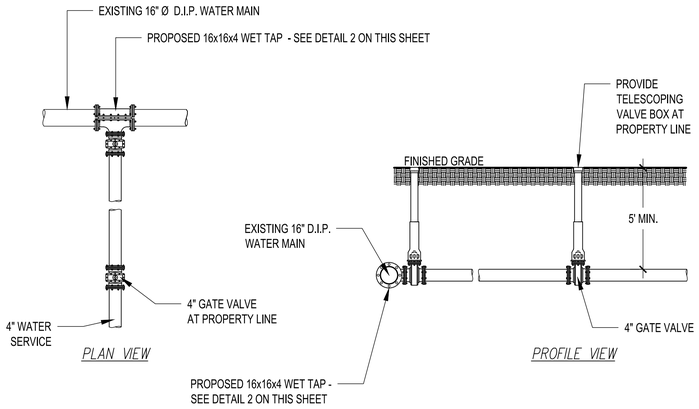
STATE OF NEW YORK · MARK A. DAY · 069646 · LICENSED PROFESSIONAL ENGINEER

DAY | STOKOSA
ENGINEERING P.C.
3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
Erosion & Sediment Control Plan

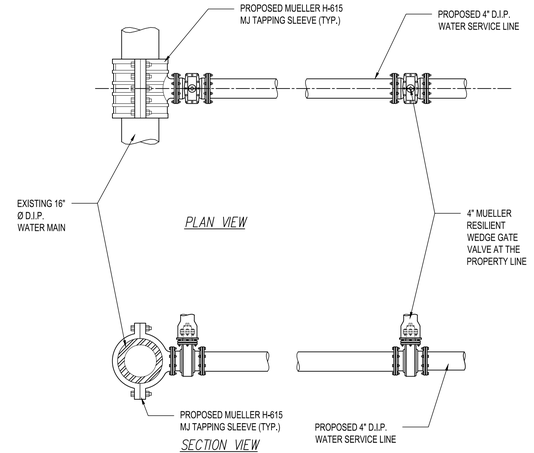
SCALE	DRAWN BY	DRAWING No.
1" = 20'	MAD	ESC.1
DATE	CHECKED BY	13 of 14
04-02-21	MAD	



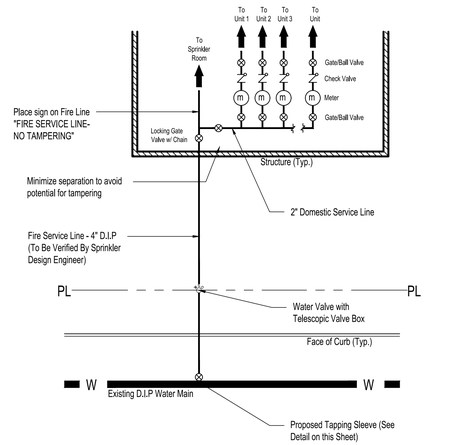
NOTES:

1. PRESSURE AND LEAKAGE TESTING SHALL BE DONE IN ACCORDANCE WITH THE LATEST AWWA SPECIFICATIONS.
2. ALL MECHANICAL JOINT FITTINGS SHALL BE SUPPLIED WITH RETAINER GLANDS. ALL FITTINGS SHALL BE COMPACT DUCTILE IRON TYPE MANUFACTURED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS. FOREIGN-MADE FITTINGS SHALL NOT BE ALLOWED.
3. THE CONTRACTOR SHALL NOTIFY THE LOCAL WATER DEPARTMENT PRIOR TO CONSTRUCTION.
4. ALL WATER LINE INSTALLED SHALL BE DISINFECTED IN ACCORDANCE WITH CURRENT AWWA SPECIFICATIONS FOR DISINFECTION OF WATER LINES (WITH THE EXCEPTION OF THE TABLET METHOD). DISINFECTED WATER SHALL REMAIN IN THE NEWLY INSTALLED PIPING FOR A MINIMUM OF 24 HOURS. THE LINES SHALL BE FLUSHED AND BACTERIOLOGICAL TEST TAKEN. THIS PROCEDURE SHALL BE REPEATED UNTIL AN ACCEPTABLE BACTERIOLOGICAL TESTS ARE TAKEN.
5. ALL NEW WATER LINE INSTALLED SHALL BE FILLED WITH WATER FOR A MINIMUM PERIOD OF 48 HOURS PRIOR TO A MINIMUM 2 HOUR HYDROSTATIC PRESSURE TEST OF 1.5 TIMES THE NORMAL WORKING PRESSURE AT THE LOWEST ELEVATION OF THE NEWLY INSTALLED PIPE.

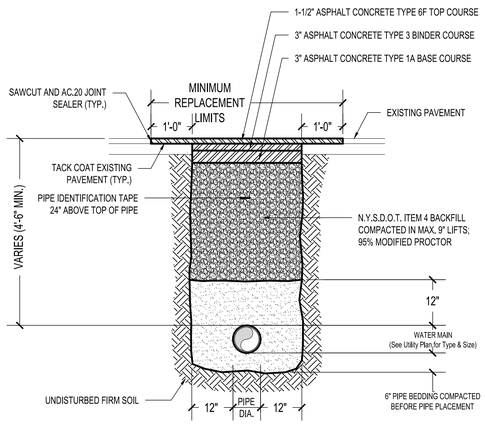
1 WET TAP AND VALVE INSTALLATION DETAIL
NOT TO SCALE



2 TAPPING SLEEVE AND VALVE INSTALLATION DETAIL
NOT TO SCALE

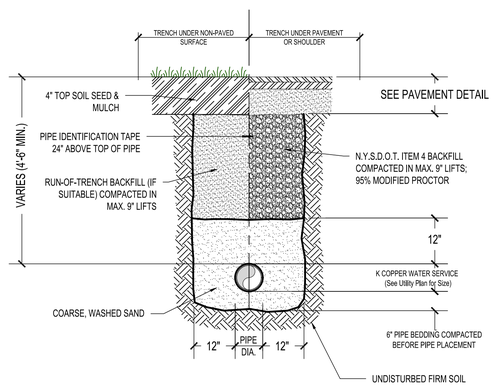


3 WATER SERVICE DETAIL
NOT TO SCALE



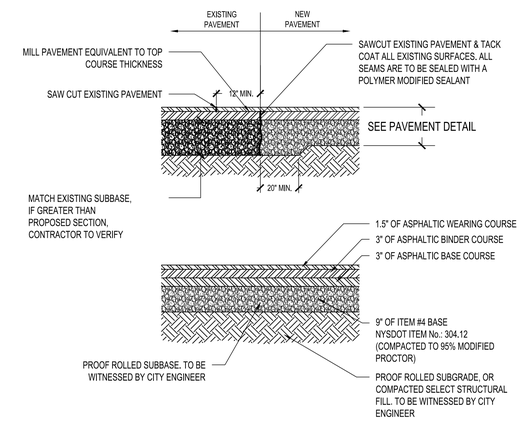
PORTIONS OF MAIN STREET HAVE CONCRETE UNDER THE ASPHALT. PAVEMENT THICKNESS SHALL BE INCREASED TO THE THICKNESS OF THE CONCRETE PLUS ASPHALT.

4 UTILITY TRENCH DETAIL (Below Existing Pavement)
NOT TO SCALE



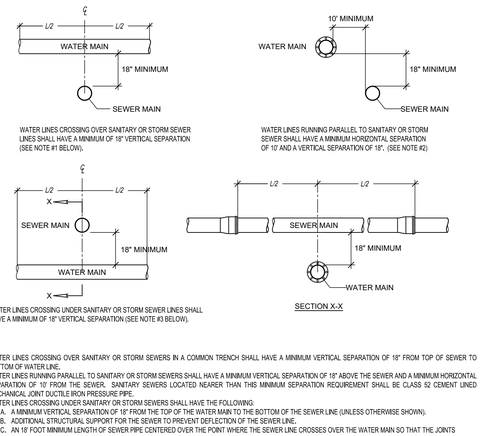
PORTIONS OF MAIN STREET HAVE CONCRETE UNDER THE ASPHALT. PAVEMENT THICKNESS SHALL BE INCREASED TO THE THICKNESS OF THE CONCRETE PLUS ASPHALT.

5 TYPICAL WATER SERVICE (BELOW 2" DIA.) DETAIL
NOT TO SCALE



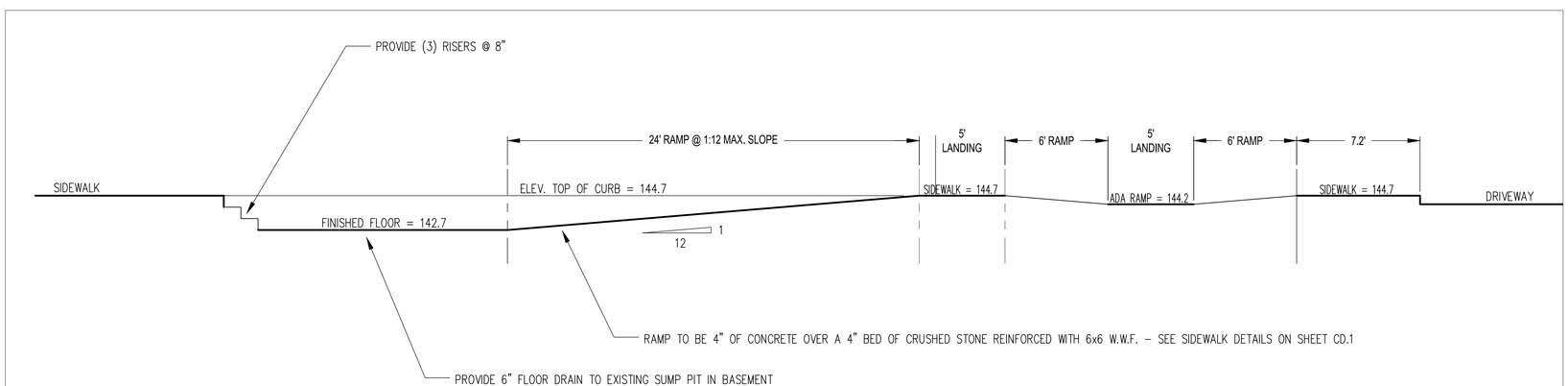
PORTIONS OF MAIN STREET HAVE CONCRETE UNDER THE ASPHALT. PAVEMENT THICKNESS SHALL BE INCREASED TO THE THICKNESS OF THE CONCRETE PLUS ASPHALT.

6 PAVEMENT SECTION
NOT TO SCALE



NOTES:
1. WATER LINES CROSSING OVER SANITARY OR STORM SEWERS IN A COMMON TRENCH SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" FROM TOP OF SEWER TO BOTTOM OF WATER LINE.
2. WATER LINES RUNNING PARALLEL TO SANITARY OR STORM SEWERS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" ABOVE THE SEWER AND A MINIMUM HORIZONTAL SEPARATION OF 10' FROM THE SEWER. SANITARY SEWERS LOCATED NEARER THAN THIS MINIMUM SEPARATION REQUIREMENT SHALL BE CLASS 52 CEMENT LINED MECHANICAL JOINT DUCTILE IRON PRESSURE PIPE.
3. WATER LINES CROSSING UNDER SANITARY OR STORM SEWERS SHALL HAVE THE FOLLOWING:
   A. A MINIMUM VERTICAL SEPARATION OF 18" FROM THE TOP OF THE WATER MAIN TO THE BOTTOM OF THE SEWER LINE (UNLESS OTHERWISE SHOWN).
   B. ADDITIONAL STRUCTURAL SUPPORT FOR THE SEWER TO PREVENT DEFLECTION OF THE SEWER LINE.
   C. AN 18' FOOT MINIMUM LENGTH OF SEWER PIPE CENTERED OVER THE POINT WHERE THE SEWER LINE CROSSES OVER THE WATER MAIN SO THAT THE JOINTS OF THE SEWER MAIN ARE EQUIDISTANT FROM THE CENTERLINE OF THE WATER MAIN.

7 WATER & SEWER SEPARATION
NOT TO SCALE



8 RAMP PROFILE AT REAR OF BUILDING
NOT TO SCALE

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS, SPECIFICATIONS, OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

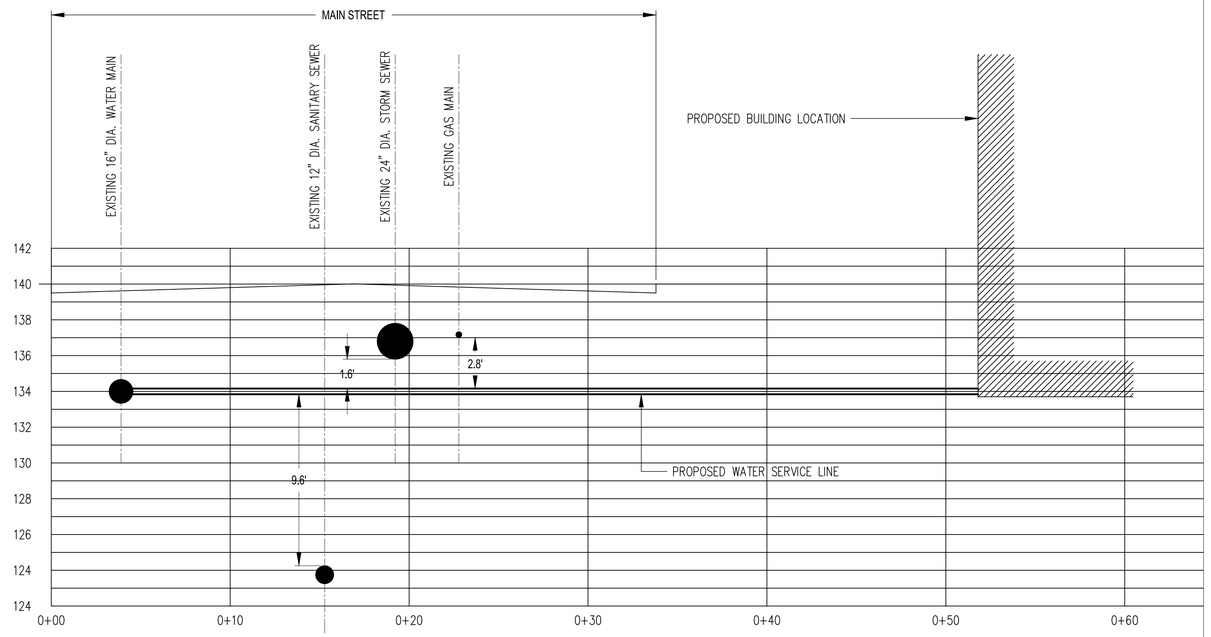
	Mark A. Day, PE
02-17-21	
01-07-21	
12-21-21	
11-27-21	
08-27-21	
Revisions 07-20-21	
Project No. 2020.475	License No. 069646

DAY | STOKOSA ENGINEERING P.C.
3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

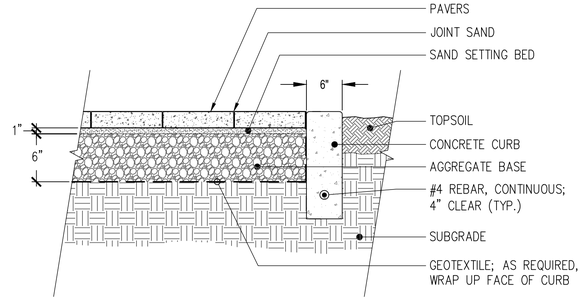
PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
Construction Details

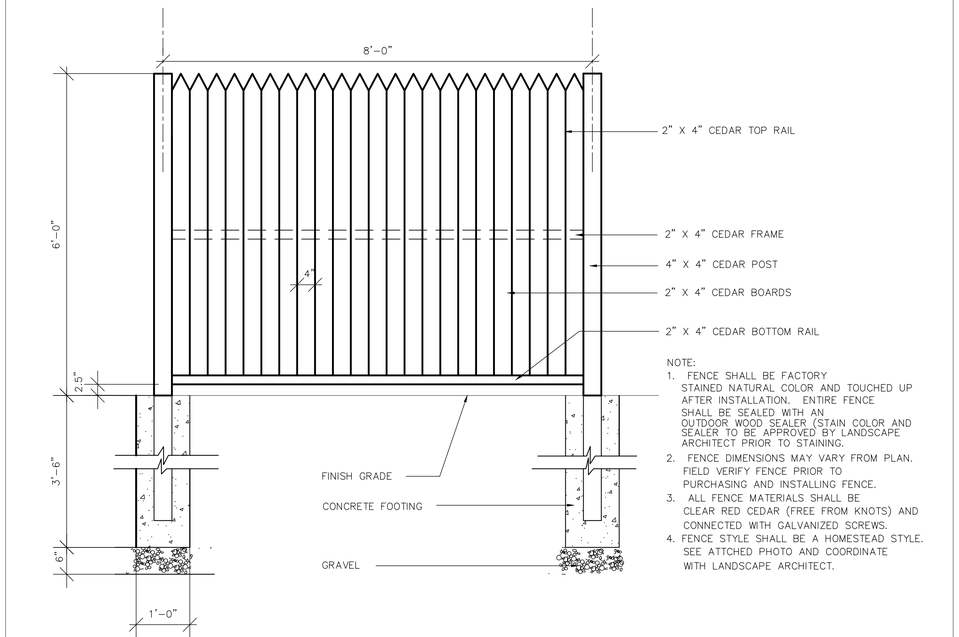
SCALE	DRAWN BY	DRAWING No.
As Noted	MAD	CD.2
DATE 04-02-21	CHECKED BY MAD	11 of 14



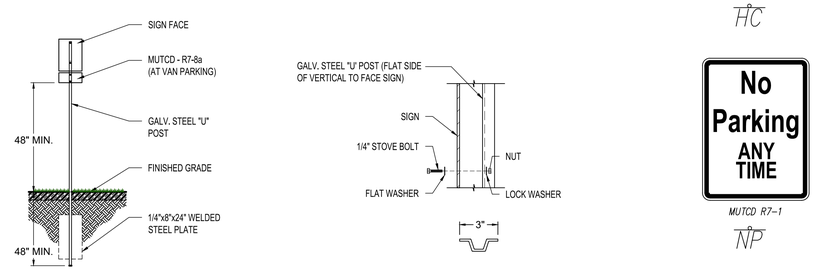
8 WATER LINE PROFILE
1" = 4' (HORIZONTAL & VERTICAL)



9 BRICK PAVER DETAIL
NOT TO SCALE



10 WOOD STOCKADE FENCE DETAIL
N.T.S.





11 ADA PARKING SIGN & POST DETAIL
N.T.S.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS, SPECIFICATIONS, OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

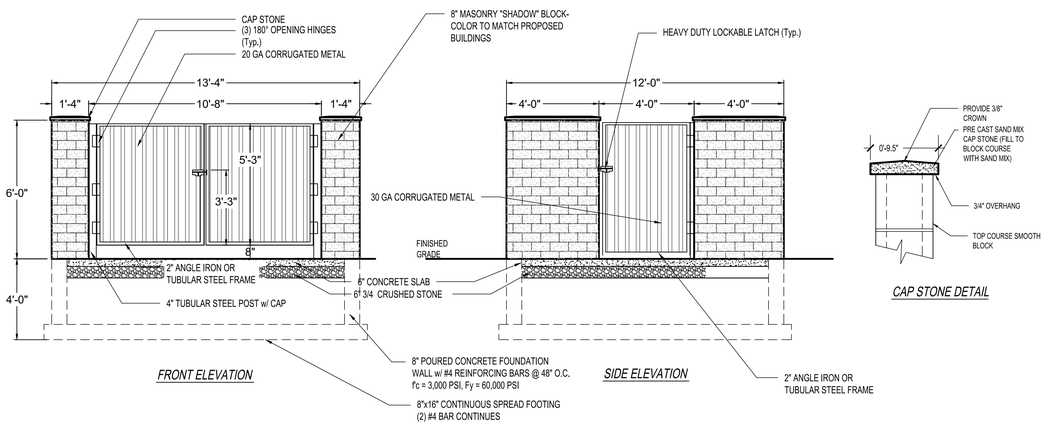
	Mark A. Day, PE
02-17-21	
01-07-21	
12-21-21	
11-27-21	
08-27-21	
Revisions 07-20-21	
Project No. 2020.475	License No. 069646

DAY | STOKOSA
ENGINEERING P.C.
3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

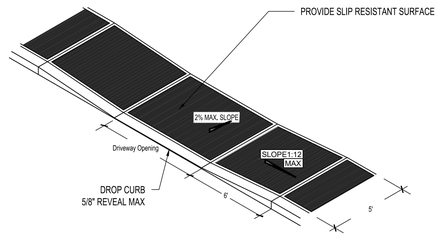
PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
Construction Details

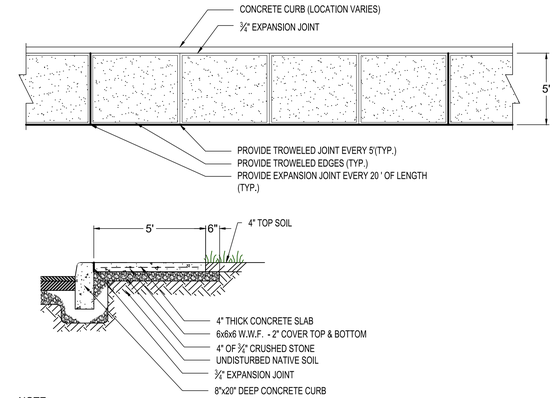
SCALE	DRAWN BY	DRAWING No.
As Noted	MAD	CD.3
DATE 04-02-21	CHECKED BY MAD	12 of 14



1 REFUSE ENCLOSURE DETAIL
NOT TO SCALE

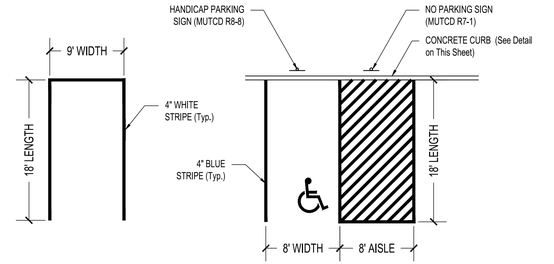


2 ADA RAMP & SIDEWALK DETAIL
NOT TO SCALE

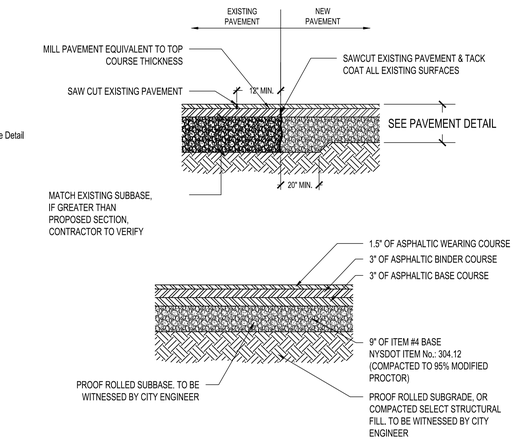


NOTE:
1. ALL CONCRETE SHALL HAVE A 28 COMPRESSIVE STRENGTH OF 4,000 PSI
2. ALL EXPOSED SURFACES SHALL HAVE A BROOM TEXTURED FINISH
3. ALL SIDEWALK SHALL BE 6" THICK AT DRIVEWAY CROSSINGS
4. EXPANSION JOINTS SHALL BE LOCATED AS MAXIMUM OF 20'-0" ON CENTER, OR AS INDICATED ON PLANS.

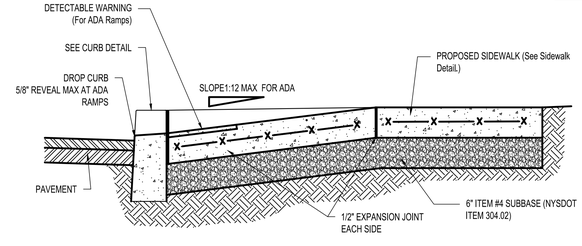
3 SIDEWALK & CURB DETAILS
NOT TO SCALE



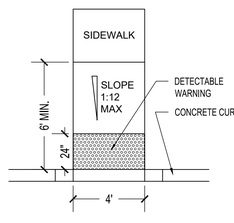
4 PARKING STALL DETAIL
NOT TO SCALE



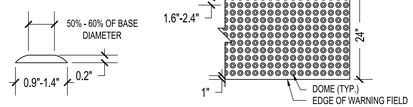
5 PARKING LOT PAVEMENT SECTION
NOT TO SCALE

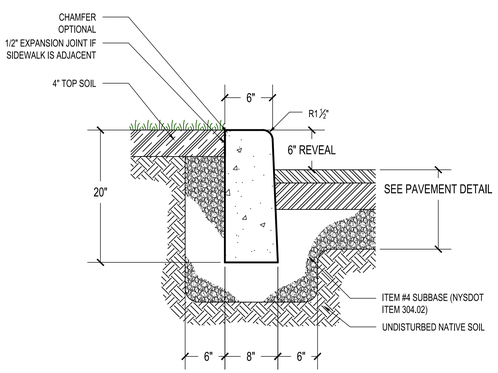


6 ADA RAMP DETAIL
NOT TO SCALE



NOTES:
1. THE SIZE OF THE DETECTABLE WARNING FIELD SHALL BE 24" IN THE DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, EXCLUSIVE OF SIDE FLARES.
2. THE ROWS OF DOMES SHALL BE ALIGNED TO BE PERPENDICULAR OR RADIAL TO THE GRADE BREAK BETWEEN THE RAMP LANDING OR CURB RAMP AND THE STREET.
3. WHERE DOMES ARE ARRAYED RADIALLY THEY MAY DIFFER IN DOME DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON THIS SHEET.
4. DETECTABLE WARNING SHALL BE LOCATED SO THAT THE EDGE OR CORNER OF THE WARNING FIELD NEAREST TO THE ROADWAY IS 5" TO 9" FROM THE CURB TO THE ROADWAY EDGE.





NOTE:
1. CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI
2. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL NE INSTALLED WHERE REQUIRED (AT CURB BOXES, CATCH BASINS, BRIDGES, ETC.). CONSTRUCTION (CONTROL) JOINTS SHALL BE INSTALLED AT 20' INTERVALS

7 CAST-IN-PLACE CONCRETE CURB DETAIL
NOT TO SCALE

SIGN SCHEDULE

SYMBOL	MUTCD NUMBER	PANEL	SIZE (WxH)	QUANTITY
HC	NY R7-8	RESERVED PARKING	12 x 18	8
		PERMIT REQUIRED TOWNWIDE ZONE	12 x 6	8
NP	R7-1	NO PARKING ANY TIME	12 x 18	3
SP	R1-1	STOP	36x36	3
OW	R6-2L	ONE WAY	12" x 18"	1
DNE	R3-15C	DO NOT ENTER	30"x 30"	1

8 PROPOSED SIGNAGE
NOT TO SCALE

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSONS TO ALTER THESE PLANS, SPECIFICATIONS, OR REPORTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

	Mark A. Day, PE
02-17-21	
01-07-21	
12-21-21	
11-27-21	
08-27-21	
Revisions 07-20-21	
Project No. 2020.475	License No. 069646

DAY | STOKOSA ENGINEERING P.C.
3 Van Wyck
Lane Suite 2
Wappingers Falls, New York
(845)-223-3202

PROJECT
364 Main Street
City of Beacon Dutchess County, New York

DRAWING
Construction Details

SCALE	DRAWN BY	DRAWING No.
As Noted	MAD	CD.1
DATE 04-02-21	CHECKED BY MAD	10 of 14

LANC & TULLY
ENGINEERING AND SURVEYING, P.C.

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

February 28, 2022

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

RE: 364 Main Street
Tax No. 6054-29-006819
Subdivision & Site Plan
City of Beacon

Dear Mr. Gunn:

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

- Correspondence dated February 22, 2022, from Taylor Palmer, Esq. of Cuddy & Feder, LLP.
- Response correspondence dated February 22, 2022, from Aryeh Siegel, Architect.
- Response correspondence dated February 21, 2022, from Day/Stokosa Engineering.
- Response correspondence dated February 21, 2022, from Colliers Engineering.
- A Full Environmental Assessment Form (EAF) dated February 18, 2022.
- Plan titled "Lot Line Change for The Lands of O'Donnell Construction Corp.", with the latest revision date of February 21, 2022, as prepared by Robert Oswald Land Surveying.
- Plans titled "364 Main Street", consisting of Sheets 1 through 5 of 14, with the latest revision date of February 22, 2022, as prepared by Aryeh Siegel, Architect, and Sheets 6 through 14 of 14 with the latest revision date of February 17, 2022, as prepared by Day & Stokosa Engineering.

The proposed project is comprised of two parcels, totaling 0.85± acres, with the main parcel being located on Main Street and the 2nd parcel be located on Eliza Street. The parcel on Main Street is located in the "CMS" (Central Main Street) zoning district, whereas the parcel on Eliza Street is located within the "T" (Transitional) zoning district. The applicant is seeking to merge the 2 parcels into a single parcel at this time, and to develop a mixed-use commercial and multi-family residential development, with commercial space (8,892 sf) and a residential common area (1,607 sf) on the 1st floor, and 20 residential

apartments to be located on the 2nd and 3rd, floors totaling 25,120 square feet, with a total bedroom count of 31.

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

General Comments:

1. With regards to the SEQRA document, question E.1.d., on page 10 of 13, shall be revised to reflect an answer of "Yes", as you are listing a facility in response to this question.

Lot Line Change Plan:

1. Is there a utility easement associated with the number of utility poles that run along the south side of the parking lot off of Eliza Street? If so, this should be shown on the plan. ***The applicant's Attorney has noted that this is currently under review.***

Site Plan – Sheet 1 of 14:

1. It is recommended that the accessible parking signs and no parking sign be relocated and mounted to the side of the building. As presently shown, the "No Parking" sign is located in the center of the access isle of the accessible parking spaces.

2. All signage on the plan shall be darkened so that it is legible, and the plan shall accurately show where each sign is proposed.

3. The plan shall be updated to show the location of all site lighting.

4. The utility poles along the south side of the parking lot off of Eliza Street shall be shown on the plan, as it may impact the landscaping layout along edge of the parking lot.

Landscape Plan – Sheet 3 of 14:

1. It appears that the 3 trees to be planted in the easterly island in the parking lot off of Eliza Street may be in conflict with the proposed light pole in this area. The Landscaping plan shall be coordinated with the Lighting plan.

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

Very truly,

LANC & TULLY, P.C.

John Russo, P.E.

cc: John Clarke, Planner
Jennifer Gray, Esq.
David Buckley, Building Inspector

John Clarke Planning and Design jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: March 3, 2022
Re: **364 Main Street Site Plan and Lot Merger Subdivision**

I have reviewed the February 22, 2022 cover letter from Cuddy+Feder, revised Site Plan Application, February 21, 2022 response letter from Day Stokosa Engineering, February 22, 2022 response letter from Aryeh Siegel, Revised February 18, 2022 Long EAF Part 1, February 21, 2022 response letter by Colliers Engineering and Design, February 21, 2021 Lot Line Change sheet, and a 14-sheet Site Plan set, with sheets 1-5 dated February 22, 2022 and sheets 6-14 dated February 17, 2022.

Proposal
The applicant is proposing to construct a 3-story, mixed-use building on a 0.54-acre parcel in the Central Main Street (CMS) district, including 8,892 square feet of first floor commercial space and 20 apartments. An adjoining 0.31-acre parcel in the Transitional (T) district will be used for parking and merged into one combined lot by subdivision approval.

Comments and Recommendations

1. For the Sheet 1 Site Plan:

    a. Details should be provided for the front gate and east side railing.

    b. A note should be added to the plan that the project will comply with the 10% below-market-rate requirements in Article IVB, Affordable-Workforce Housing.

2. For the updated Sheet 3 Landscape Plan:

    a. If the planted areas shown in front of the building are raised planters, a detail with dimensions and materials should be included.

    b. The trees along the south side of the Eliza parking lot should be chosen to be compatible with the narrow planting area and the overhead utility wires. The Bear Oak is considered a slow-growing, short-lived, shrub-like tree that will not likely provide suitable shading for the parking lot.

    c. The Planting Schedule should be consistent with the Section 223-26 C(3) requirement that trees in parking areas be a minimum 3-inch caliper.

3. The project architect has met twice with the Architectural Review Subcommittee and scheduled another meeting on March 11, 2022. A streetscape view of the new building that includes the adjacent church and 378-382 Main Street and a view of the west side in context have been requested.

4. The Roof Plan should consider including green plantings on the unused areas.

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

John Clarke, Beacon Planning Consultant

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



City of Beacon
Planning Board Subcommittee on Architectural Review
Recommendation and Report

DRAFT 2/14/22

Description: Proposed 3-story mixed-use building in CMS district with ground floor commercial storefronts and 20 apartments on upper floors.

Project Name: _____

Project Address: 364 Main Street

Date of Meeting(s) of ARB Subcommittee: February 11, 2022

Attendees: Kevin Byrne, Len Warner, Dave Buckley, John Clarke

Aryeh Siegel, Project Architect

On the above-referenced dates, the Architectural Review Subcommittee reviewed the above-referenced project at which meeting the applicant and its representatives were provided an opportunity to be heard. The sole focus of the Committee was to review the architecture of the proposed building(s). The Committee reviewed the following plans and materials:

Updated color renderings showing all sides

For its future submission to the Planning Board, the applicant will provide proposed 3D streetscape view of the new building that includes the church and 378-382 Main, as well as a view of the west side in context from near the Veterans Place/Post Office corner.

The Architectural Review Committee offers the following specific comments, as applicable as indicted:

1) Doors and windows: Front section windows, designed to emulate 378-382 Main with arched lintels and projecting sills, are now continued on all elevations. This gives the windows better context and depth. Cast sill material will give more color contrast. The windows also have slightly larger size and a more varied pattern that will match the floor plans.

2) Roof: No final roof plan yet, but Architect will provide in a future submission, including roof elements shown on elevations.

3) Projections, such as rooftop elevators, stairwells, balconies, beams, etc.: The renderings showed a stairwell tower on the east side above the residential entrance that looked like a 4th-floor room. Zoning allows for a stair bulkhead, but it should not appear to be occupied 4th-floor space, maybe by showing less than a full story and using a more distinctive window that reads as a stairway.

4) North elevation: Elevation shown very plain, needs at least a cornice element and façade break every 35 feet.

5) South elevation: Front storefronts have a deeper recesses than before, central doors, and larger store windows. The recesses provide a stronger dimensional effect and give more room for outdoor displays or tables.

6) West elevation: This very visible elevation still looks flat, without a cornice or breaks at least every 35 feet, but the varied window pattern and surrounds were much better. Some indentations are possible, especially for the two middle units with only west-facing windows so close to the property line.

7) East elevation: The side residential entrance was given more emphasis by the raised and bracketed cornice above, but looks too much like 4 stories. Now has vertical breaks at least every 35 feet, cornices, good window surrounds, and a varied window pattern. The cornice brackets should perhaps turn the corner on at least the front section of the

8) ~~Signs:~~ building.

9) Color and material type: Now better as an all brick building, but the proposed grey color appears to emphasize the massing on such a large structure. The architect should try traditional and varied brick colors, perhaps by looking at the building on the other side of the church greenspace. Full dimensional brick will be used.

In addition to the above specific comments, the Architectural Review Subcommittee offers the following general comments/recommendations:

There is a lot of public interest in this proposed building because of its prominent location next to the historic church and former carriage factory to the east. The adjacent greenspace makes the east-side very visible and particularly important. The need for the side driveway was briefly discussed and the potential economic and streetscape benefits of having outdoor patio space and landscaping there instead.

This Report was reviewed and adopted by the Architectural Review Subcommittee by vote of _____ to _____ at its meeting on If deemed necessary after the next Planning Board meeting, the Subcommittee will meet again for this application on March 11, 2022 at 10 am.

****NOTE: Adoption of this Report does not constitute architectural review approval for the Project. Architectural review approval must be obtained from the Planning Board. It is recommended that any approval resolution by the Planning Board reference the final elevations and any other relevant plans relied upon in the architectural review of the Project.**

City of Beacon Planning Board Agenda
03/08/2022

Title:

Continue review of application for Special Use Permit and Site Plan Approval, hotel and event space, 1113 Wolcott Avenue, submitted by Prophecy Theater, LLC

ATTACHMENTS

1113 Wolcott Avenue Cover Letter.pdf

1113 Wolcott Avenue Architect Response Letter.pdf

1113 Wolcott Avenue Engineer Response Letter.pdf

1113 Wolcott Avenue Traffic & Parking Management Plan.pdf

1113 Wolcott Avenue Traffic and Parking Study 2-21-22.pdf

1113 Wolcott Avenue Traffice Engineer Response Letter.pdf

Site Plans - Sheet 1-13 dated 2-22-22.pdf

Engineer Review Letter.pdf

Planner Review Letter.pdf

Traffic Engineer Review Letter.pdf

1113 Wolcott ARB 1.19.22.pdf

CUDDY +FEDER LLP

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

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

February 22, 2022

VIA E-MAIL
AND HAND DELIVERY
Hon. John Gunn
And Members of the Planning Board
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: Supplemental Submission – Application for Site Plan and Special Use Permit Approval
Premises: 1113 Wolcott Avenue, Beacon, New York 12508
Tax Parcel ID: (5054-26-6511901)

Dear Chairman Gunn and Members of the Planning Board:

On behalf of Prophecy Theater, LLC (the "Applicant"), the owner of the above-referenced Premises, we respectfully submit this letter and the referenced enclosures in furtherance of the Applicant's pending Applications for Site Plan Approval and Special Permit Approval (the "Application") to adaptively re-use the Premises for a hotel and accessory conference/event space and café (the "Project").

Since last appearing before the Planning Board on February 8, 2022, the Applicant has removed the proposed loop drive from in front of the existing church building and has further updated the site circulation in response to the comments raised by the Board at that meeting and in response to the comments contained in the memoranda prepared by the City's Engineering Consultant, Lanc & Tully, dated February 1, 2022 (the "Engineering Comments Memorandum"); the City's Planning Consultant, John Clarke Planning and Design, dated February 3, 2022 (the "Planning Comments Memorandum"); and the City's Traffic Consultant, Creighton Manning, dated February 7, 2022 (the "Traffic Comments Memorandum").

THE REVISED SITE PLAN & UPDATED SITE CIRCULATION:

As noted, based on the Board's comments at the February 8th meeting, the Applicant has revised the Site Plan to eliminate the proposed loop drive in front of the church. The Applicant's traffic and engineering consultants also devised new site circulation details around the hotel building and in the proposed parking area to address drop-off/pick-up operations and vehicles entering and existing the Premises. In addition to eliminating the previously proposed loop driveway in front of the existing church building, the revised site plan eliminates the existing southern exit driveway connection to Wolcott Avenue adjacent to the River Ridge Views development.

This loop has been replaced with the reestablishment of the existing northern driveway to the property to develop a one-way exit only driveway connecting to the proposed parking area behind the hotel building. The circulation flow of the main driveway remains two-way, with the northern driveway acting as egress only. During events, it is proposed that Premises will function under a one-way clockwise circulation pattern with all vehicles entering at the main access driveway and exiting at the northerly exit only driveway. As is discussed more fully herein, these updated site operational details are now incorporated into the Applicant's draft Traffic and Parking Management Plan (the "Draft Parking Management Plan"), which was prepared by the Applicant's traffic and parking consultant, Colliers Engineering & Design ("Colliers"). *See* **Exhibit D**.

Additionally, the Applicant notes that while the reestablishment of the northern driveway eliminates two (2) parking spaces previously proposed in the parking lot in the rear of the proposed hotel building, the updated Site Plan adds three (3) parallel parking spaces along the driveway and hotel, representing a net gain of one (1) parking space. Thus, the Project now includes thirty-two (32) proposed off-street parking spaces.

In support of this Application and consistent with the pattern of street trees in front of adjacent properties, canopy trees and additional low landscaping have also been added in front of the hotel.[1] Bike racks for twenty-five (25) bikes have been added along the south side of the church and deck seating for the café in the rear of the church is now shown in the revised Site Plan set. In addition, after receiving additional survey information for the cemetery, the path connecting the Premises through to Beekman Street has been updated and the concrete sidewalk along the east side of Beekman Street has been more fully identified.[2]

REVISED TRAFFIC STUDY AND DRAFT TRAFFIC & PARKING MANAGEMENT PLAN:

In further support of this Application, the Applicant's traffic consultant, Colliers, has provided responses to the Traffic Comment Memorandum, as well as prepared a revised Traffic and Parking Study and a Draft Parking Management Plan to account for the updated site circulation and to provide an efficient and ongoing method of managing traffic flows, on-site and off-site parking, and other transportation related aspects of the Project. *See* **Exhibit C** – Response to Comments Memorandum prepared by Colliers, dated February 21, 2022; **Exhibit D** – Draft Traffic and

[1] Note: The landscaping will be revised for the next submission to reflect the new drive location north of the hotel building.

[2] Note: There is no proposed grading of the pedestrian path to keep the disturbance to a minimum. Stairs are proposed where existing grades are too steep for a walking path. Stairs will be elevated above grade on pier foundations where possible. The trail and stair configuration and lighting provided therein will be refined in a subsequent submission.

Parking Management Plan prepared by Colliers, dated February 21, 2022; **Exhibit E** – Traffic and Parking Study prepared by Colliers, dated February 21, 2022.

As detailed within Colliers' Response to Comments Memorandum, both the main driveway and the proposed north one (1)-way exit-only driveway configurations are now shown to be consistent with the New York State Department of Transportation ("NYS DOT") Type Four (4) driveway configuration. *See* **Exhibit C**.[3] This provides additional area for vehicle maneuvers entering and exiting the site at both locations. Based on the revised turning maneuvers shown on Site Plans, which have been analyzed for a refuse truck, shuttle bus, and single unit thirty (30)-foot box truck, there is not expected to be any significant encroachment of larger vehicles into opposing traffic lanes when entering or exiting the site. Moreover, drop-off/pick-up is now proposed to occur along the main driveway with vehicles ultimately circulating through the parking area behind the hotel and exiting the site at the northern driveway location. The main driveway will be curbed, which will eliminate the possibility of parking along the edges of the driveway.

As with the previously submitted Traffic and Parking Study, the revised Study when taking into account the updated circulation, likewise concludes that the Project is not anticipated to have a significant impact on traffic conditions in the vicinity of the Project site. *See* **Exhibit E**. As is noted therein, in total there are approximately 343 total parking spaces within 2,000 feet of walking distance to the Premises, which can be utilized to accommodate the parking needs of the Project under the event conditions. Each of the identified areas of public parking were observed during the anticipated peak event periods to determine the parking availability in the area. These observations indicated that there is sufficient public parking within the Tomkins Lot, the Municipal Plaza Lot, and along Beekman Street to accommodate the parking needs of the Project during event conditions.

In order to properly maintain and manage the traffic flows within the site and surrounding area, Colliers prepared the enclosed Draft Parking Management Plan. *See* **Exhibit D**. As is detailed more fully therein, the traffic and parking conditions on the Premises and in the near vicinity will be managed through a combination of additional staffing and directional signage on the Premises, dissemination of public transportation and shuttle information by the Applicant, and the provision of pedestrian and bicycle access to the Premises.

During events, all additional parking needs will need to be accommodated by off-site public parking in the area and drop-off/pick-up operations will likely be needed within the Site. In order to manage these drop-off/pick-up operations, the Applicant will provide staff and directional

[3] Note: Colliers will be submitting these details to the NYS DOT on February 23, 2022. A copy will be provided to the City under separate cover.

signage within the onsite driveways and parking area to ensure efficient flow of traffic within the Site. As noted above, the main access driveway will be a two-way driveway; however, during events, it is proposed that Premises will function as under a one-way clockwise circulation pattern with all vehicles entering at the main access driveway and exiting at the northerly exit only driveway. With respect to the parking spaces provided on site, during events these will be reserved for the exclusive use of hotel guests and employees only and coned off. In the event that hotel guests desire to enter or exit during the event times, they will be assisted by on-site staff with entering and exiting the parking spaces.

The Applicant will be responsible for disseminating parking information to event attendees to identify appropriate available parking areas. This will be accomplished through the Applicant's website that will have a visual map indicating the preferred areas of public parking, which map will also be distributed electronically to all attendees for ticketed events. On the day of events, the on-site parking attendants provide additional copies of this map. Of note, this map will provide *no* reference to other areas of on-street parking, specifically those that may be located within residential neighborhoods near the Project.

The Applicant will also disseminate and encourage the use of public transportation by event attendees in order to reduce the overall parking demand of the Project, as well as the Project traffic generation. This will include links to information on available metro-north train schedules, Duchess County bus schedules, and any other relevant public transportation information to be provided through the Project's website. This information map will also be distributed electronically to all event attendees for ticketed events as well as for other non-ticketed events by the Event representative or coordinator for those events. Additionally, the use of shuttles for events such as conferences, where attendees arriving from other area hotels, will be strongly encouraged by the Applicant and information on available area shuttle bus companies will be provided to event coordinators at the start of the planning process.

REFERRAL TO THE ARB SUBCOMMITTEE AND ZONING BOARD OF APPEALS:

As this Board is aware, the Project was referred to the Architectural Review Board ("ARB") Subcommittee. The Applicant has since appeared before the ARB Subcommittee on January 19, 2022 and February 11, 2022. At its last meeting, the ARB determined that the Project was ready to bring back to the full Planning Board for discussion.

As this Board is also aware, on February 3, 2022, the Applicant submitted a request for determination to the Building Inspector in connection with the total number of off-street parking spaces that are required for the Project. While the Applicant's request for a determination is being reviewed by the Building Inspector, this Board as Lead Agency in the coordinated SEQRA

environmental review of the Project referred the Project to the Zoning Board of Appeals ("ZBA")—an involved agency—for discussion regarding the SEQRA review and the off-street parking proposal for consideration at the ZBA's March 15, 2022 meeting Agenda.

ADDITIONAL RESPONSES TO COMMENTS MEMORANDA:

To further assist this Board in its review of the Application, the Applicant respectfully submits the following memoranda prepared by its Consultants providing annotated responses to the applicable comments noted in the Engineering, Planning, and Traffic Comments Memoranda:

- Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated February 22, 2022, (the "Architect Response to Comments Memorandum"). *See* **Exhibit A** – Architect Response to Comments Memorandum;
- Response to Comments Memorandum prepared by Hudson Land Design Professional Engineering, P.C. ("HLD") dated February 22, 2022 (the "HLD Response to Comments Memorandum"). *See* **Exhibit B** – HLD Response to Comments Memorandum; and
- Response to Comments Memorandum prepared by Colliers Engineering & Design dated February 21, 2022 (the "Colliers Response to Comments Memorandum"). *See* **Exhibit C** – Colliers Response to Comments Memorandum.

UPDATED SITE PLAN SET:

In support of this supplemental submission and in response to the comments contained in the City Planning and Engineering Comments Memoranda, we respectfully submit revised site plans and renderings entitled "Special Use Permit Application", prepared by Hudson Land Design Professional Engineering, P.C. and Aryeh Siegel, Architect, dated June 29, 2021, last revised February 22, 2022, numbered and titled as follows:

- Sheet 1 of 13 Site Plan;
- Sheet 2 of 13 Full Site Plan;
- Sheet 3 of 12 Existing Conditions & Demolition Plan;
- Sheet 4 of 13 Landscape Plan & Planting Schedule;
- Sheet 5 of 12 Hotel Building Plans & Elevations;
- Sheet 6 of 12 Conference Center Plans;
- Sheet 7 of 12 Conference Center Elevations;

- Sheet 8 of 13 Grading & Utility Plans;
- Sheet 9 of 13 Erosion and Sediment Control Plan;
- Sheet 10 of 13 Vehicle Tracking Plan;
- Sheet 11 of 13 Site Details;
- Sheet 12 of 13 Stormwater Details; and
- Sheet 13 of 13 Water & Sewer Details.

INDEX OF ENCLOSURES:

In support of this supplemental submission, please find enclosed five (5) sets of the instant letter with the following materials:

Exhibit A: Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated February 22, 2022, providing responses to the Planning Comments Memorandum;

Exhibit B: Response to Comments Memorandum prepared by Hudson Land Design Professional Engineering, P.C. dated February 22, 2022, providing responses to the Engineering Comments Memorandum;

Exhibit C: Response to Comments Memorandum prepared by Colliers Engineering & Design, P.C., dated February 21, 2022, providing responses to the Traffic Comments Memorandum;

Exhibit D: Draft Traffic and Parking Management Plan prepared by Colliers Engineering & Design P.C., dated February 21, 2022; and

Exhibit E: Traffic and Parking Study prepared by Colliers Engineering & Design P.C., dated February 21, 2022.

We look forward to appearing at the Planning Board's March 8th regular meeting to continue the review of the Project and to continue the environmental review process, at which point the Applicant respectfully request the Board consider setting the public hearing on the Application.

In the meantime, should the Planning 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.
John Clarke Planning and Design
Lanc & Tully, P.C.
Aryeh J. Siegel Architect
Michael A. Bodendorf, P.E. – Hudson Land Design Professional Engineering, P.C.
Colliers Engineering & Design, P.C.
Allison Fausner, Esq.

ARYEH SIEGEL
ARCHITECT

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

Re: 1113 Wolcott Avenue, Beacon, New York
Site Plan Application – Responses to Comments

February 22, 2022

Dear Chairman Gunn and Members of the Planning Board,

Below please find our responses to the comments included in John Clarke Planning and Design's Memorandum, dated February 3. 2022. Please refer to Hudson Land Design's response letter regarding Lanc & Tully's letter dated February 3, 2022.

John Clarke Planning and Design Comment Responses:

1. Comment acknowledged. Discussion of the uses will continue with the Planning Board.

2. Comment acknowledged.

    a The Applicant is reviewing parking solutions to present to the Planning Board. Note that the site plan now shows a new drive to the north of the hotel building, and there are parallel parking spaces to the side of this drive. There are now 32 parking spaces on the site.

    b Additional details regarding the path between Beekman Street and the site through the cemetery are being developed.

    c Comment acknowledged. Please refer to the traffic consultants response.

    d We are providing 2 ADA spaces for the hotel, and will look into the possibility of providing additional ADA spaces without losing the capacity to park for the hotel on site, at a minimum.

    e The loop driveway in front of the church building has been eliminated. There is now a loop connection drive to the north of the hotel building.

    f Deck seating is shown on the plans.

84 Mason Circle | ajs@ajsarch.com | *Tel* 845 838 2490
Beacon, New York 12508 | www.ajsarch.com | *Fax* 845 838 2657

3. For Sheet 4
    a Canopy street trees and additional low landscaping have been added in front of the hotel. The landscaping will be revised for the next submission to reflect the new drive location north of the hotel building.
    b Path lights are complementary with the historic nature of the site, although they are more modern in design

4. Exterior construction will require a Certificate of Appropriateness. The Applicant met with the ARB Subcommittee on February 11, 2022. The Subcommittee determined that the project was ready to bring back to the full Planning Board. Additional changes are being made to the design per the ARB comments.

Lanc & Tully Comment Responses:

Sheet 1 – Site Plan

1. The note has been eliminated, along with the walk
2. The lighting is shown on the site plan

Sheet 2 – Full Site Plan

1. Lighting along the pedestrian path to Beekman Street will be reviewed, and lighting will be shown on the full site plan along the path. We have received additional survey information for the cemetery, and updated the path location on the site plan. We will address the path lighting and submit that for the following meeting.

Sheet 4 – Landscape Plan

1. The pedestrian path has been coordinated on all sheets.

Please refer to Hudson Land Design's letter for responses to additional engineering comments.

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

Sincerely,



Aryeh Siegel
Aryeh Siegel, Architect

HUDSON LAND DESIGN

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

February 22, 2022

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

Re: 1113 Wolcott Avenue, Site Plan and Special Use Permit
1113 Wolcott Avenue
Tax Parcel: 5954-26-651901, ±2.28 ac.
City of Beacon, NY

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) has revised the plan set in response to Lanc & Tully's February 1, 2022 comment letter. Below is a point-by-point response to the comments received. Please note that Aryeh Siegel has prepared Sheets 1 through 7 of the plan set and has responded to comments that pertain his sheets under separate cover, as well as John Clarke Planning and Design's February 3, 2022 comment letter.

Lanc & Tully February 1, 2022 Comment Letter

General Comments

1. A conceptual layout for the Tompkins Parking Lot has been provided in the Revised Traffic & Parking Study dated February 21, 2022 prepared by Colliers Engineering & Design.
2. A submission to NYSDOT is being made by Colliers Engineering Design on February 23, 2022. A copy will be provided to the City under separate cover.
3. The plans have been updated to show the location of concrete sidewalk along the east side of Beekman Street.

Sheet 1 of 13 – Full Site Plan

1. Aryeh Siegel has responded to this comment under separate cover.
2. Aryeh Siegel has responded to this comment under separate cover.

Sheet 2 of 13 – Full Site Plan

1. Aryeh Siegel has responded to this comment under separate cover.

Sheet 4 of 13 – Landscape & Lighting Plan

1. Aryeh Siegel has responded to this comment under separate cover.

Sheet 8 of 13 – Grading & Utility Plan

1. There is no proposed grading of the pedestrian path to keep the disturbance to a minimum. Stairs are proposed where existing grades are too steep for a walking path. Stairs will be elevated above grade on pier foundations where possible. We continue to refine the trail and stair configuration and will provide updates to the design in future submittals.
2. A submission to NYSDOT is being made by Colliers Engineering Design on February 23, 2022. A copy will be provided to the City under separate cover.
3. The soil testing will be coordinated with Lanc & Tully's office as soon as possible and weather permitting. We will continue to watch the weather in the next several weeks for a warming trend.

Sheet 9 of 13 – Erosion & Sediment Control

2. Erosion control is now shown for the new trail location. Much of the trail construction will be minor clearing of forest litter and topping with stone dust. Therefore, silt fence won't be required in those locations. Silt fence is shown on the path where feasible below where stairs are proposed.

Sheet 11 of 12 – Site and E&SC Details

1. The paver detail has been updated to reference the 2020 New York State Fire Code.

Five (5) copies of a full set of revised plans are provided with this submission for review. 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,

Michael A. Bodendorf, P.E.
Principal

cc: Prophecy Theater, LLC
Taylor M. Palmer, Esq.
Aryeh Siegel, AIA
Richard D'Andrea, P.E., PTOE
Daniel G. Koehler, P.E. (HLD file)

Colliers
Engineering
& Design

Traffic & Parking Management Plan

DRAFT

February 21, 2022

1113 Wolcott Avenue

City of Beacon
Dutchess County, New York

Prepared for:

Prophecy Theatre LLC
369 Main Street, Unit 493 Beacon,
NY 12508

Prepared by:

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

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

Project No. 21004333A

Colliers Engineering & Design

Table of contents

Introduction and Background 1

On-Site Parking and Circulation 2

Off-Site Parking 3
Off-Site Parking Locations 3
Dissemination of Parking Information 5

Dissemination of Public Transportation Information 5

Shuttles 5

Pedestrian and Bicycle Access 6

Ongoing Monitoring and Coordination 7

DRAFT

Colliers Engineering & Design

Introduction and Background

The 1113 Wolcott Avenue Project ("the Project") is a proposed redevelopment of the property located at 1113 Wolcott Avenue (NYS Route 9D) in the City of Beacon, Dutchess County, New York. The former rectory building and church, which was most recently occupied by the Reformed Church of Beacon, are proposed to be redeveloped as a 30-room hotel contained in an expanded rectory building along with accessory conference center and dining facility (café/restaurant/bar) uses within the church building. In addition, the existing cemetery located behind (west of) the church and rectory building will be restored to be opened as a public park including a walking path from Beekman Street to Wolcott avenue.

The hotel will operate 365 days per year, and the dining facilities will be situated in the rear of the existing church. The dining facilities will serve as a reception for guests of the hotel and offer breakfast, lunch and dinner to the hotel guests, as well as members of the public. In addition, it will operate as a bar for hotel guests and for accessory conference center programming and events. The dining facilities are expected to operate seven (7) days a week in support of the hotel operations and guests with a maximum capacity of 50 seats including deck seating.

The conference center accessory use will operate less frequently, utilizing the former church building for various cultural, educational, or professional programs, including weddings, conferences, art exhibitions, performances, lectures, seminars and workshops. The expected maximum capacity for the occasional weekend programming for the hotel conference center is a maximum of 350 people including required staff to support these events, however these larger programs, which will occur on weekends, will typically have fewer people, ranging between 125-200 people. Furthermore, smaller functions, such as seminars, workshops or retreats with attendance ranging between 50 to 200 people will occur on weekdays generally Wednesday – Friday.

Access to the Project is proposed via an existing access connection from Wolcott Avenue that will provide access to the main parking area. A secondary, exit only driveway is also proposed at the northern property line of the Site, which will be a reestablishment of the existing driveway in this location. A total of 32 off-street parking spaces will be provided primarily for use by hotel guests and employees. The existing Site is also provided a third driveway connection to Wolcott Avenue south of the existing church building. This existing southern driveway is proposed to be eliminated as part of the Project.

During events, all event related parking will be required to be accommodated by off-site public parking in the vicinity of the Project. This is anticipated to create a need for the management of on-site drop-off and pick-up operations. In addition, it was determined that specific parking strategies were needed to ensure event parking occurs in desired locations, to reduce parking as practicable and manage on-site parking.

Based on the above, and associated with the review of the Project by the City of Beacon Planning Board and its consultants, this Traffic & Parking Management plan has been prepared in order to provide an efficient and ongoing method of managing traffic flows, on-site and off-site parking, and other transportation related aspects of the Project.

DRAFT

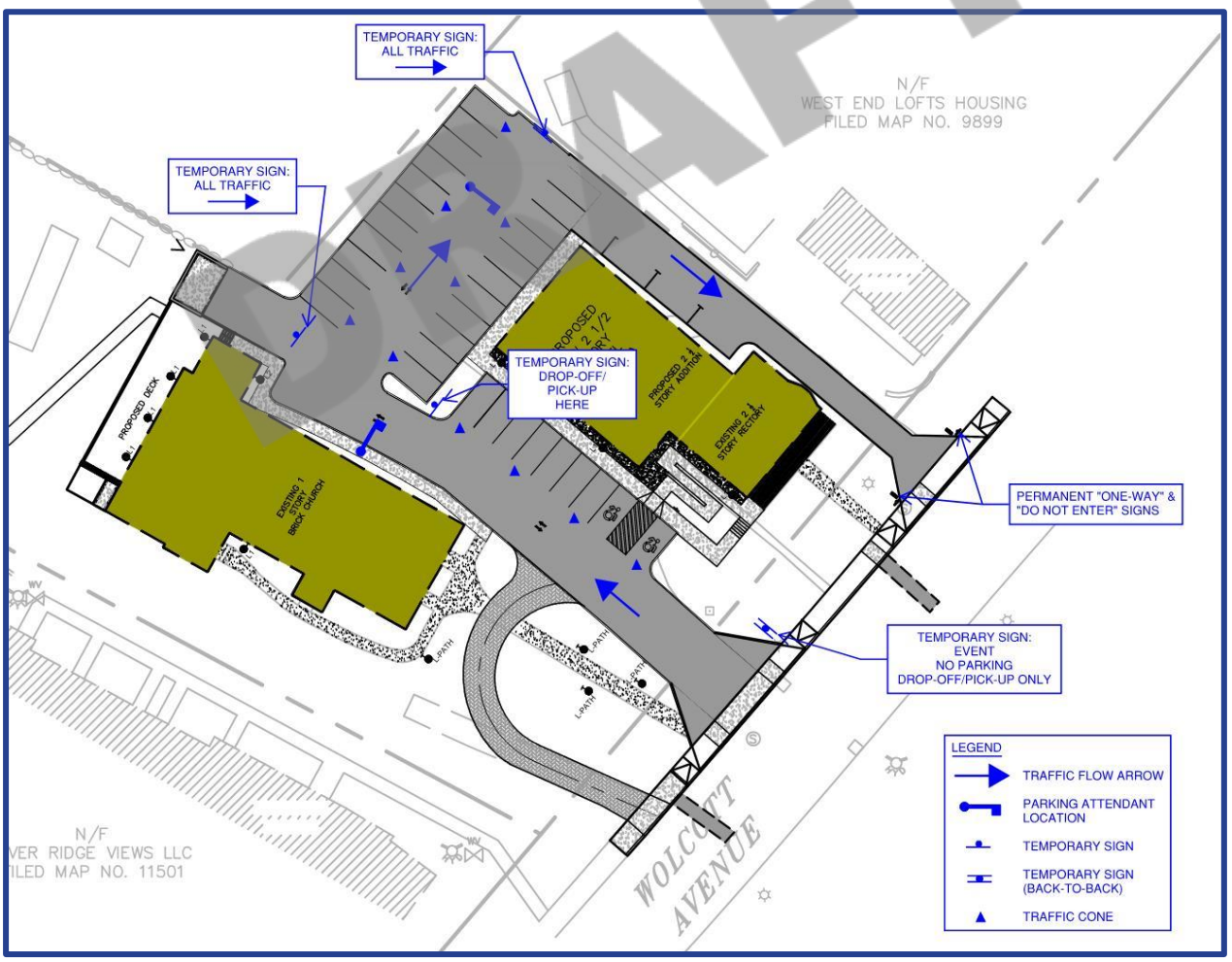
The purpose of this program is to allow input and coordination with other agencies, including the New York State Department of Transportation (NYSDOT) and the City of Beacon and allow for ongoing revisions to this plan upon implementation of the Project.

On-Site Parking and Circulation

The Project site will provide a total of 32 parking spaces. These spaces will primarily be designated for the use of the Hotel guests. Therefore, during Event Conditions all additional parking needs will need to be accommodated by off-site public parking in the area. It is anticipated that this will result in a need for drop-off/pick-up operations within the Site.

In order to manage these drop-off/pick-up operations the Applicant will provide staff within the on-site driveways and parking area to ensure efficient flow of traffic within the Site. Exhibit No. 1 below indicates the drop-off/pick-up location as well as locations of staff for traffic direction and anticipated directional signage.

Exhibit No. 1 - Event Site Circulation Plan



DRAFT

As indicated previously, the Main (southerly) access driveway will be a two-way driveway. However, during events it is proposed that Site will function as under a one-way clockwise circulation pattern with all vehicles entering at the Main access driveway and exiting at the northerly exit only driveway. This is also indicated on the diagram below. Temporary signage is also proposed to indicate this flow pattern within the Site as indicated on Exhibit No. 1 above.

The on-site parking during events will be reserved for the exclusive use of hotel guests and employees of the Project only. These parking spaces will be coned off during events. In the event that hotel guests desire to enter or exit during the event times, they will be assisted by on-site staff with entering and exiting the parking spaces. Hotel guests will also be provided with printed parking passes or tags to signify their ability to park in these spaces. It is anticipated that majority, if not all, of the hotel guests will also be attendees of the events limiting amount of hotel related entries and exits during the event periods.

As discussed further below, event parking attendants will also be provided with information regarding parking areas to be utilized by event attendees.

DRAFT

Off-Site Parking

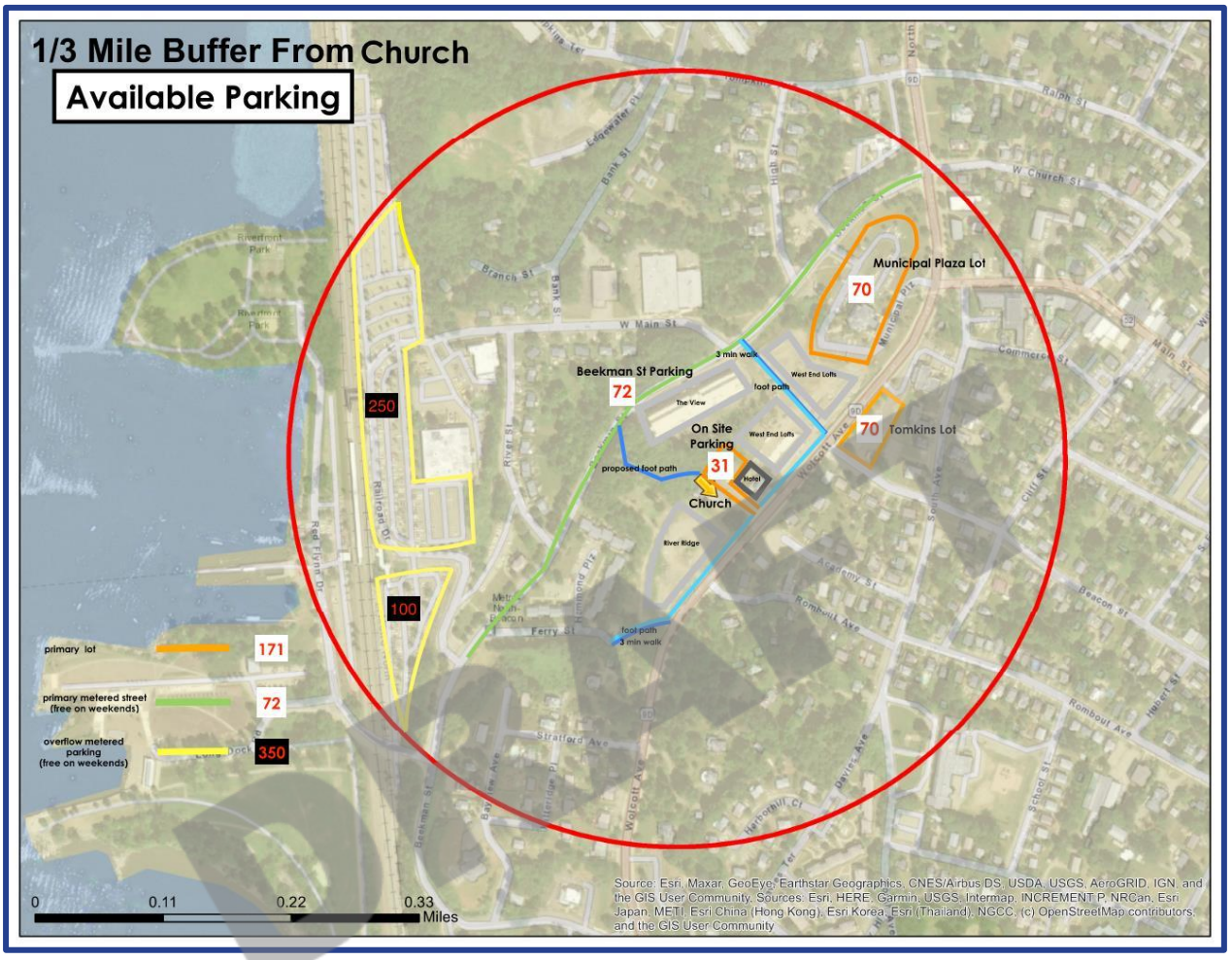
Off-Site Parking Locations

The Project proposes to provide 32 off-street parking spaces on the Site primarily for the use of Hotel guests and employees as required by the City of Beacon code for that use. All additional parking required for event attendees will be accommodated by off-site public parking in the vicinity of the Site. The closest public parking in the area include the below listed locations in order of proximity to the Project:

- **Tomkins Firehouse Parking Lot** – 68± Parking Spaces
- **City of Beacon Municipal Plaza (City Hall) Parking Lots** – 76 Parking Spaces
- **Beekman Street Metro North on-street parking between Railroad Drive and Wolcott Avenue** - 70± on-street metered parking spaces
  This parking is operated by LAZ parking, parking can be paid electronically via LAZgo Parking App.
- **Cross Lot** – 18 Parking Spaces (24 Hour Free Parking – City Lot)
- **Cliff Lot** – 19 Parking Spaces (24 Hour Free Parking – City Lot)
- **Beacon Center Lot** – 92 Parking Spaces (24 Hour Free Parking – City Lot)
- **Beacon Metro North Train Station Parking lots metered parking spaces**
  This parking is operated by LAZ parking, parking can be paid electronically via LAZgo Parking App.

Exhibit No. 2 below identifies the locations of parking within 1/3 of mile of the Project location.

Exhibit No. 2 – Off-Site Parking Locations



The Tomkins Firehouse and City of Beacon Municipal Plaza parking lots are within 500 and 1,000 ft. respectively of the Project Site making these the most accessible public parking for the Project. As previously noted, a walkway connection to Beekman Street is proposed to be provided through the Site as part of the Project with signage at Beekman Street directing patrons to the Site. This will provide more convenient access to the Beekman Street on-street metered parking spaces of which the nearest spaces will be within the 350 ft. of the Hotel and Café/Event spaces with the more remote spaces approximately 1,200 ft. from these buildings. This pathway will also provide more convenient access to parking available at the Beacon Metro north station, however these metered spaces are more remote, in excess of 2,000 ft. from the Project site, and less likely to be utilized. The Cross Street lot, Cliff Lot and Beacon Center Lot are more remove parking locations located within 1,500 – 1,900 ft. from the Project site.

In total there are approximately 343 total parking spaces within 2,000 ft. walking distance of the Project site which can be utilized to accommodate the parking needs of the Project under the event conditions. Each of the identified areas of public parking were observed during the anticipated peak

event periods to determine the parking availability in the area. These observations indicated that there is sufficient public parking within the Tomkins Lot, the Municipal Plaza Lot and along Beekman Street to accommodate the parking needs of the Project Event conditions.

Dissemination of Parking Information

Prophecy Theater, LLC as owners of the Project will be responsible to disseminate parking information to Event attendees to identify appropriate available parking areas. This will be accomplished in several ways.

The Project's website will provide parking information including a map indicating the preferred areas of public parking. These will include the Tompkins Lot, the Municipal Plaza Lot and the on-street metered parking along Beekman Street. This map will be similar to that provided in Exhibit 3 below. In addition, the map will indicate other more remote parking locations as identified above.

This map will also be distributed electronically to all event attendees for ticketed events. Distribution of this map for other non-ticketed events will be can be done via the Event representative or coordinator for those specific events.

On the day of the event the on-site parking attendants will be provided with copies of this map which can be provided to any attendees that may enter the Site for drop-off and/or looking for parking.

It should be noted that this map will provide no reference to other areas of on-street parking specifically those that may be located within residential neighborhoods near the Project.

Exhibit No. 3 - Preferred Parking Area Map

TO BE PROVIDED

DRAFT

Dissemination of Public Transportation Information

Similar to the above, the Project owners will also disseminate and encourage the use of public transportation by event attendees in order to reduce the overall parking demand of the Project, as well as the Project traffic generation. This will include links to information on available metro-north train schedules, Duchess County bus schedules and any other relevant public transportation information to be provided through the Project's website. This information map will also be distributed electronically to all event attendees for ticketed events as well as for other non-ticketed events by the Event representative or coordinator for those events.

Shuttles

Events such as conferences or weddings may allow for the use of shuttle buses for attendees arriving from other area hotels. The use of shuttles will be strongly encouraged by the Project owners. Information on available area shuttle bus companies will be provided to event coordinators at the start of the planning process to assist in this effort. The use of shuttles for attendees arriving from other consolidated locations will reduce the overall parking needs for certain types of events.

Pedestrian and Bicycle Access

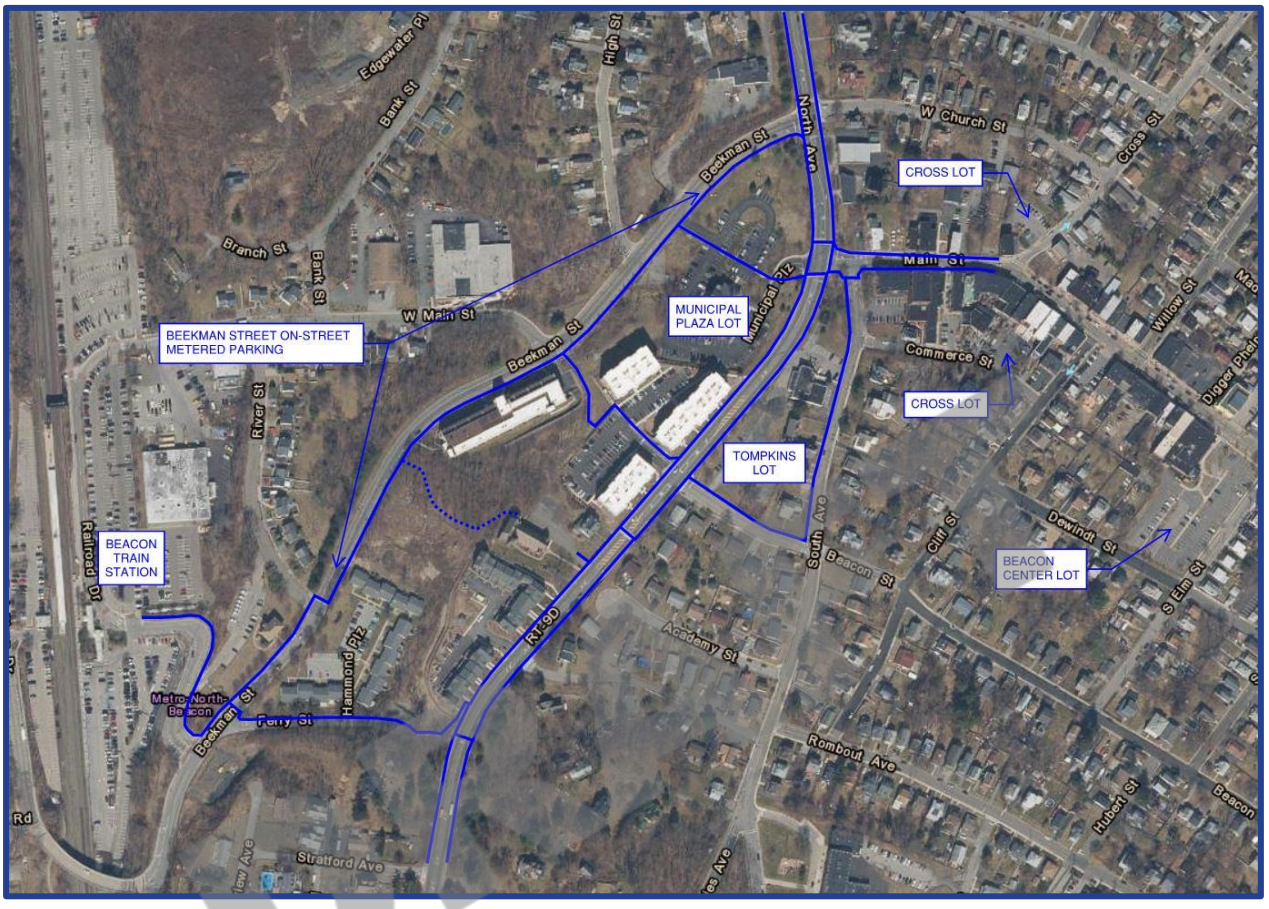
Access to the Project by pedestrians, including event attendees parking off-site, is provided in several manners. There are existing sidewalks along all area roadways surrounding the Project that can be utilized to access various parking areas or pedestrians arriving from other destinations. There are existing signalized crosswalks of Wolcott Avenue both at its signalized intersections with Beekman Street and Main Street providing signalized pedestrian access from the east side of Wolcott Avenue to the west side where the Project site is located. In addition, there are existing crosswalks crossing Wolcott Avenue that are supplemented with pedestrian activated Rectangular Rapid Flashing Beacon (RRFB) signs located at the northern property line of the Project site as well as at a location approximately 150 ft. south of Rombout Avenue at approximately the southern property line of the River Ridge property. Any patrons utilizing the public parking available at the Tompkins lot on the east side of Wolcott Avenue would be likely to use the RRFB crosswalk at the northern property line of the Project site to cross Wolcott Avenue. Similarly, any pedestrians coming from the Main Street area would be likely to utilize either the signalized pedestrian crossing at the Wolcott Avenue/Main Street intersection or the RRFB crosswalk at the northern property line to cross to the west side of the roadway.

Pedestrians arriving from the Beacon Train Station or utilizing parking along Beekman Street would also be provided several opportunities to access the Project site. There are existing public pedestrian pathway connections between Beekman Street and Wolcott Avenue through the River Ridge and West End Lofts developments that could be utilized. In addition to these pathways, the Project also proposes to provide a pedestrian pathway between Beekman Street and Wolcott Avenue for direct access to the Project Site. Signage is proposed to be provided at the connection of the on-site path with Beekman Street to direct patrons to the Site. Exhibit No. 4 below provides a map of the existing and future pedestrian accommodations in the vicinity of the Project that would be anticipated to be utilized by Event attendees.

Bicycle racks are also proposed to be provided on the Site for any event attendees that may arrive via bicycle.

DRAFT

Exhibit No. 4 – Existing & Proposed Pedestrian Pathways



Ongoing Monitoring and Coordination

This Traffic & Parking Management Plan is meant to be a living document that can regularly be referred and updated by the operators of the Project. This document provides the basis for managing and directing traffic and parking for the anticipated Events to be held at the facility. This document may be updated and modified based on the future needs of the Project and in coordination with the City of Beacon to best serve the Project and the City as traffic and parking conditions in the vicinity of the Project may change over time.

Colliers Engineering & Design

Colliers Engineering & Design is a trusted provider of multi-discipline engineering, design and consulting services providing customized solutions for public and private clients through a network of offices nationwide.

For a full listing of our office locations, please visit colliersengineering.com

DRAFT

1 877 627 3772

Civil/Site • Traffic/Transportation • Governmental • Survey/Geospatial
Infrastructure • Geotechnical/Environmental • Telecommunications • Utilities/Energy

Colliers
Engineering
& Design

Traffic & Parking Study

February 21, 2022

1113 Wolcott Avenue

City of Beacon
Dutchess County, New York

Prepared for:

Prophecy Theatre LLC
369 Main Street, Unit 493 Beacon,
NY 12508

Prepared by:

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

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

Project No. 21004333A

Maser Consulting is now Colliers Engineering & Design

Colliers Engineering & Design

Table of contents

I. Introduction 1
A. Project Description and Location 1
B. Scope of Study 2

II. Existing Roadway and Traffic Descriptions 3
A. Project Description and Location 3
1. Wolcott Avenue (NYS Route 9D) 3
2. Main Street 3
3. Beekman Street 3
B. 2021 Existing Traffic Volumes 4

III. Evaluation of Future Traffic Conditions 5
A. 2024 No-Build Traffic Volumes 5
B. Site Generated Traffic Volumes 5
C. Arrival/Departure Distribution 7
D. 2024 Build Conditions Traffic Volumes 7
E. Description of Analysis Procedures 8
Signalized Intersection Capacity Analysis 8
Unsignalized Intersection Capacity Analysis 8
F. Results of Analysis 8
1. Wolcott Avenue and Verplanck Avenue 9
2. Wolcott Avenue and Beekman Street/W. Church Street 9
3. Wolcott Avenue and Main Street/City Hall Driveway 10
4. Wolcott Avenue and Beacon Street/West End Lofts Driveway 10
5. Wolcott Avenue and Site Access 11
6. Wolcott Avenue and South Avenue 12
G. Pedestrian Access 12
H. Site Circulation and Operations 13

IV. Parking Evaluation 14
A. Project Related Code Parking Requirements 14
B. Review of Off-Site Parking Locations 15
C. Parking Recommendations 17
Dissemination of Parking Information 18
Dissemination of Public Transportation Information 18
Provision of Valet Parking 18

V. Summary and Conclusion 19

Appendices

APPENDIX A ..... FIGURES
APPENDIX B ..... TABLES
APPENDIX C ..... LEVEL OF SERVICE STANDARDS
APPENDIX D ..... CAPACITY ANALYSIS
APPENDIX E ..... TRAFFIC VOLUME DATA

Colliers Engineering & Design

I. Introduction

A. Project Description and Location

(Figure No. 1)

This report has been prepared to evaluate the potential traffic and parking related impacts associated with the proposed redevelopment of the property located at 1113 Wolcott Avenue (NYS Route 9D) in the City of Beacon, Dutchess County, New York (the "Project"). The former rectory building and church, which was most recently occupied by the Reformed Church of Beacon, are proposed to be redeveloped as a 30-room hotel contained in an expanded rectory building along with accessory conference center and dining facility (café/restaurant/bar) uses within the church building. In addition, the existing cemetery located behind (west of) the church and rectory building will be restored to be opened as a public park including a walking path from Beekman Street to Wolcott avenue.

The hotel will operate 365 days per year, and the dining facilities will be situated in the rear of the existing church. The dining facilities will serve as a reception for guests of the hotel and offer breakfast, lunch and dinner to the hotel guests, as well as members of the public. In addition, it will operate as a bar for hotel guests and for accessory conference center programming and events. The dining facilities are expected to operate seven (7) days a week in support of the hotel operations and guests with a maximum capacity of 50 seats including deck seating.

The conference center accessory use will operate less frequently, utilizing the former church building for various cultural, educational, or professional programs, including weddings, conferences, art exhibitions, performances, lectures, seminars and workshops. The expected maximum capacity for the occasional weekend programming for the hotel conference center is a maximum of 350 people including required staff to support these events, however these larger programs, which will occur on weekends, will typically have fewer people, ranging between 125-200 people. Furthermore, smaller functions, such as seminars, workshops or retreats with attendance ranging between 50 to 200 people will occur on weekdays generally Wednesday – Friday.

As shown on Figure No. 1, access to the development is proposed via an existing access connection from Wolcott Avenue that will provide access to the main parking area. A secondary, exit only driveway is also proposed at the northern property line of the Site, which will be a reestablishment of the existing driveway in this location. This driveway is proposed to provide for improved on-site circulation for deliveries and emergency vehicles as well as to assist with event drop-off & pick-up operations. A total of 32 off-street parking spaces will be provided primarily for use by hotel guests and employees. The existing Site is also provided a third driveway connection to wall street south of the existing church building. This existing southern driveway is proposed to be eliminated as part of the Project.

B. Scope of Study

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

All available traffic count data for the study area intersections were obtained from previous reports prepared by our office. These data were supplemented with new traffic counts collected by representatives of Colliers Engineering & Design CT, P.C. These data were also compared to count data obtained from the New York State Department of Transportation (NYSDOT). Together these data were utilized to establish the Year 2021 Existing Traffic Volumes representing existing traffic conditions in the vicinity of the site. In addition, observations of the existing parking conditions in the vicinity of the Project were also conducted.

The 2021 Existing Traffic Volumes were then projected to a 2024 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 2024 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 2024 No-Build Traffic Volumes resulting in the 2024 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, the anticipated parking demand of the Project was computed based on the City Code requirements. The anticipated demand was compared to the observed available parking in the vicinity of the Project site. Recommendations to accommodate the anticipated parking demands for the Project were identified.

II. Existing Roadway and Traffic Descriptions

A. Project Description and Location

As shown on Figure No. 1, the proposed residential development will be accessed from Wolcott Avenue via an existing driveway connection. A secondary, exit only driveway is also proposed at the northern property line of the Site, which will be a reestablishment of the existing driveway in this location. 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. Wolcott Avenue (NYS Route 9D)

Wolcott Avenue (NYS Route 9D) is a classified as a urban minor arterial roadway, which traverses in a generally north south direction throughout the City of Beacon. In the immediate vicinity of the Project, Wolcott Avenue consists of one lane in each direction with a center turn lane. There is no on-street parking along the roadway, but sidewalks are provided on both sides of the roadway. Within the study area Wolcott Avenue has signalized intersection with Verplanck Avenue, Beekman Street, Main Street and South Avenue. The posted speed limit within the City limits is 30 MPH.

2. Main Street

Main Street is a two-lane City roadway classified as an urban Major Collector roadway that generally traverses in an east/west direction beginning at its signalized intersection with Wolcott Avenue. On-street parking and separate sidewalks are provided along both sides of the roadway.

3. Beekman Street

Beekman Street is a two-lane City roadway classified as an urban Major Collector roadway that originates at a signalized intersection with Wolcott Avenue north of the Project site. The roadway serves as a main access connection between Wolcott Avenue and the Beacon Metro North Train Station. Sidewalks are provided along the roadway on alternating sides of the roadway throughout its entire length. On-street parking is also provided along the east side of the roadway between Wolcott Avenue and River Street and then on the west side of the roadway between River Street and Railroad Avenue.

B. 2021 Existing Traffic Volumes

(Figures No. 2. and 3, Appendix E)

Turning movement traffic counts were collected by representatives of Colliers Engineering & Design CT, P.C. on Friday September 24, 2021 and Saturday September 25, 2021 between the hours of 12:00 PM and 8:00 PM each day to collect data for the Friday PM and Saturday Peak Hours to determine the existing traffic volume conditions at the study area intersections during the anticipated peak operation of the Project. The traffic volume data is provided in Appenidx E of this report for reference. 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 Wolcott Avenue corridor. All relevant traffic volume data is provided in Appendix E for referenced. Based on this information, the 2021 Existing Traffic Volumes were established for the Friday PM Peak Hour and Saturday Peak Hour at the following study area intersections.

- Wolcott Avenue and Verplanck Avenue
- Wolcott Avenue and Beekman Street/W. Church Street
- Wolcott Avenue and Main Street/City Hall
- Wolcott Avenue and Beacon Street/West End Lofts
- Wolcott Avenue and South Avenue

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

- Friday PM Peak Hour 4:30 PM – 5:30 PM
- Saturday Peak Hour 1:00 PM – 2:00 PM

The resulting 2021 Existing Traffic Volumes are shown on Figures No. 2 and 3 for the Friday PM Peak Hour and Saturday Peak Hour, respectively.

It should be noted that based on observations of the existing parking conditions in the vicinity of the Site, parking at the Beacon Metro-North Train Station is significantly underutilized when compared with historic levels of parking at the train station. This is discussed further in Section IV of this report. These lower levels of parking utilization at the train station are likely due to the ongoing impacts of the COVID-19 pandemic. As a result of these of these lower parking levels of train station parking and based on a review of the available historical traffic volume data for the study area, it was determined that the traffic volumes from the train station along Beekman Street and along Wolcott Avenue between Beekman Street and the Interstate 84 ramps are lower than historically experienced during the Friday PM Peak Hour. To account for this, these volumes have been adjusted by approximately 60 vehicles exiting Beekman Street and traveling north on Route 9D to ensure the traffic volumes at the intersections of Wolcott Avenue at Beekman Street and Wolcott Avenue at Verplanck Avenue are representative of peak conditions pre-COVID.

III. Evaluation of Future Traffic Conditions

A. 2024 No-Build Traffic Volumes

(Figure No. 4 through 9)

The 2021 Existing Traffic Volumes were increased by a growth factor of 2% per year to account for general background growth resulting in the 2024 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 and/or approved developments in the area including the potential 364 Main Street project, the Craig House development and the recently approved 416-420 Main 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 2024 Projected Traffic Volumes resulting in the Year 2024 No-Build Traffic Volumes which are shown on Figures No. 8 and 9 for the Friday PM Peak Hour and Saturday Peak Hour, respectively.

B. Site Generated Traffic Volumes

(Table No. 1)

Estimates of the amount of traffic to be generated by the Project during each of the peak hours under Typical Conditions (no event) were developed based on information published by the Institute of Transportation Engineers (ITE) as contained in the report entitled ***Trip Generation, 11th Edition, 2021***, based on Land Use Category – 310 – Hotel and Land Use Category – 932 – High-Turnover (Sit Down) Restaurant. Table No. 1 summarizes the trip generation rates and corresponding site generated traffic volumes for the Friday PM Peak Hour and Saturday Peak Hour under these Typical Conditions. As noted previously, the café will be an accessory use to the Hotel and will provide breakfast, lunch and dinner options for hotel guests, therefore it is anticipated that a significant portion of the café generated traffic will actually come from the Hotel, reducing the overall traffic generation for the development. Therefore, an internal trip credit of 25% has been applied to the Café use traffic generation estimates under typical conditions to account for this.

Similarly, traffic generation estimates were developed for the event conditions for each of the peak hours. The event conditions estimates were developed for the Friday PM and Saturday Peak Hour Entry Periods as well as the Friday PM and Saturday Peak Hour Exit Periods. During events it is anticipated that the Café use will be a non-simultaneous use, meaning that the café area will be fully accessory to the events and therefore will not generate any traffic of its own. It is anticipated that the Hotel will be fully occupied during events and as much as 100% of hotel guests will also be attending the events, although for the purposes of providing a somewhat conservative traffic analysis it has been assumed that only 50% of the Hotel traffic generation will be attributable to the events. The same Hotel traffic generated as indicated under the Typical conditions has been assumed for the event conditions periods, although it is unlikely that the peak hour of Hotel generation will actually overlap with the event periods.

ITE does not provide data comparable to the proposed event space that will accommodate various cultural, educational, or professional programs, including weddings, conferences, art exhibitions, performances, lectures, seminars and workshops. Therefore, it was necessary to establish traffic generation estimates for the event space based on the anticipated attendance. As previously indicated, the maximum anticipated attendance for the larger weekend events is 350 people including required staff. Typical vehicle occupancy for the anticipated event types can vary significantly depending on the specific event. However, the for the purposes of the analysis a 2.75 persons per vehicle car occupancy has been utilized, which is at the low end of the anticipated vehicle occupancy for the events. Applying this to the anticipated maximum occupancy of 350 persons, including required staff, for the larger weekend events results in the anticipated peak entering and exiting traffic volumes as summarized in Table No. 1. It has been assumed that all traffic will either enter or exit during a one-hour period.

It is also anticipated that a portion of the event attendees for the larger weekend events will arrive via other modes of transportation. This includes attendees attracted from the local area and therefore would be likely to arrive by non-vehicular transportation. 10% of the event attendees will be attracted from the local area and therefore would be likely to arrive by non-vehicular transportation. The Project also anticipates promoting the use of public transportation including use of Metro-North trains to the Beacon train station, which is within walking distance to the Project site. In addition, the Project will also promote the use of Dutchess County Buses, including the Poughkeepsie Transit Hub to Beacon bus route, the Beacon to Hopewell Junction bus route and the Beacon Free Loop bus, each of which have designated stops along Main Street and pass the Project site on Route 9D. Based on this, the anticipated event traffic generation has been reduced by 10% during each of the peak hours. Finally, in order to account for drop-off/pick-up trips during the entry and exit hours it has been assumed that 20% of the total entering or exiting traffic will be drop-off or pick-up trips and therefore will both enter and exit during the peak entry and peak exit periods. The resulting event conditions “new trips” accounting for these credits are summarized in Table No. 1.

It should be noted that the use of the 10% credit identified above is supported by 2019 American Community Survey Commuting data which indicates a Public Transportation usage of approximately 10% for the City of Beacon, with carpooling usage of approximately 10% and approximately 5% walking or bicycling. As indicated above, the Applicant plans to advertise and promote the use of public transportation and other non-vehicular means of transportation for event attendees and therefore the 10% credit was utilized, which may actually provide a somewhat conservative analysis.

As indicated previously, the 350-person maximum occupancy of the events will include employees and vendors servicing the events. It is anticipated that vendors and employees would arrive before or depart after the events and therefore would not be coincident with peak arrival hour and peak exit hour of attendees. Furthermore, the analysis contained herein, conservatively assumes all attendees will arrive and depart within the one-hour period prior to or following events. Typically, arrivals and departures are spread over a greater time period. The analysis also assumes that all event entering and/or exiting traffic will be coincident with the Friday or Saturday Peak Hours of traffic, which is possible based on event timing, but is not anticipated to be a regular occurrence for the larger events. Therefore, it is our opinion that the analysis contained herein is representative of the future traffic conditions after completion of the Project and is actually somewhat conservative.

C. Arrival/Departure Distribution

(Figures No. 10 through 13)

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. Separate distributions were developed for the Hotel and the Café/Event space since it is anticipated there will be slight variations on the arrival and departure distributions for each portion of the development including the fact that the onsite parking is anticipated to only accommodate the Hotel use.

The resulting anticipated arrival and departure distributions for the Hotel use are shown on Figures No. 10 and 11, respectively. Similarly Figures No. 12 and 13 provide the arrival and departure distributions for the Café/Event Space.

Note that for the purposes of the analysis, it has been assumed that all traffic will enter and exit the Site access driveway location, however as discussed further in Section IV of this report, only 32 parking spaces will be provided on the Project site for the use of Hotel guests only. Therefore, additional café guests or event attendees will be required to utilize off-site parking and therefore will not actually enter the Site unless dropping off and/or picking up.

D. 2024 Build Conditions Traffic Volumes

(Figures No. 14 through 25)

The site generated traffic volumes were assigned to the roadway network based on the arrival and departure distributions referenced above. The resulting typical conditions site generated traffic volumes for each of the study area intersections are shown on Figures No. 14 and 15 for each of the peak hours, respectively. The site generated traffic volumes for the Friday PM Event Entry Period and Friday PM Event Exit Period are identified on Figures No. 16 and 17 while the site generated traffic volumes for the Saturday Event Entry and Event Exit Period are identified on Figures No. 18 and 19. The site generated traffic volumes were then added to the 2024 No-Build Traffic Volumes to obtain the 2024 Build Traffic Volumes. The resulting Year 2024 Build Traffic Volumes are shown on Figures No. 20 through 25.

E. Description of Analysis Procedures

(Appendix C)

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

Signalized Intersection Capacity Analysis

The capacity analysis for a signalized intersection was performed in accordance with the procedures described in the Highway Capacity Manual, 6th Edition, dated 2016, published by the Transportation Research Board. The terminology used in identifying traffic flow conditions is Levels of Service. A Level of Service "A" represents the best condition and a Level of Service "F" represents the worst condition. A Level of Service "C" is generally used as a design standard while a Level of Service "D" is acceptable during peak periods. A Level of Service "E" represents an operation near capacity. In order to identify an intersection's Level of Service, the average amount of vehicle delay is computed for each approach to the intersection as well as for the overall intersection.

Unsignalized Intersection Capacity Analysis

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

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

F. Results of Analysis

(Tables No. 2 and 3)

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

Table No. 2 summarizes the results of the capacity analysis for the 2021 Existing, 2024 No-Build and 2024 Build Conditions. Appendix "D" contains copies of the capacity analysis which also indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. **Wolcott Avenue and Verplanck Avenue**

   Wolcott Avenue and Verplanck Avenue intersect at a "T"-shaped signalized intersection. The northbound Wolcott Avenue approach consists of a single through lane. The southbound Wolcott Avenue approach consists a through lane and separate left turn lane with approximately 340 ft. of storage distance. The westbound Verplanck Avenue approach consists of an 85 ft. long separate left turn lane and a separate right turn lane. The intersection also has signalized pedestrian actuated crossings of the northbound and westbound approaches.

   Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "C" during the Friday PM Peak Hours while an overall Level of Service "B" is experienced during the Saturday Peak Hour.

   The capacity analysis was recomputed using the 2024 No-Build Traffic volumes. These results indicate that the intersection is expected to experience an overall Level of Service "C" during each of the peak hours under future conditions without the project. Under the future build conditions, both Typical and Event conditions, similar overall Levels of Service are anticipated to be experienced during of the time periods with the exception of the event Friday PM Event Exit period during which the intersection will operate at an overall Level of Service "D". Since this will only occur occasionally when full capacity Weekday or Friday evening events are held, this should not be considered a significant impact.

2. **Wolcott Avenue and Beekman Street/W. Church Street**

   Wolcott Avenue intersects with Beekman Street and W. Church Street at a full movement signalized intersection. The northbound and southbound approaches each consist of a separate left turn lane in each direction with a shared through/right turn lane. The Beekman Street eastbound approach consists of a shared left turn/through lane and an approximately 95 ft. long separate right turn lane. The westbound W. Church Street approach consists of a single lane for all movements. The intersection also has signalized pedestrian actuated crossings of the southbound, eastbound and westbound approaches. There is no pedestrian crossing on the northbound Wolcott Avenue approach.

   Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "F" during the Friday PM Peak Hour while an overall Level of Service "A" is currently experienced during the Saturday Peak Hour. It should be noted that during the Friday PM Peak hour all intersection movements/lane groups currently operate at a Level of Service "C" or better with the exception of the eastbound left/through lane. This is a result of the traffic exiting the Beacon Metro-North train station during the Friday PM Peak Hour destined to the north on Route 9D towards the Interstate 84 interchange. Similar levels of service are expected to be experienced under future conditions during each of the peak hours both with and without the Project.

While the Project generated traffic is not anticipated to result in significant impacts to the operation of this intersection during either of the peak hours analyzed, potential traffic signal phasing and timing improvements have been identified for the Friday PM Peak Hour to address the significant delays experienced by traffic exiting Beekman Street onto Route 9D northbound. In order to address these delays splitting the phasing for the eastbound and westbound approaches could be considered, which will reduce conflicts between eastbound and westbound traffic. Together with associated traffic signal timing modifications, the eastbound delays would be significantly reduced, and the overall intersection would be expected to experience a Level of Service "E" during the Friday PM Peak hour under both the Project typical and event conditions. This modification to the traffic signal should be considered regardless of the Project.

3. **Wolcott Avenue and Main Street/City Hall Driveway**

   Wolcott Avenue intersects Main Street and the City Hall Driveway at a full movement signalized intersection. The northbound and southbound approaches each consist of a separate left turn lane with a shared through/right turn lane. The Main Street westbound approach consists of a shared left turn/through lane and an approximately 65 ft. long separate right turn lane. The eastbound City Hall driveway approach consists of a single lane for all movements. The intersection also has signalized pedestrian actuated crossings of the northbound, eastbound and westbound approaches. There is no pedestrian crossing on the southbound Wolcott Avenue approach.

   Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "B" during the Friday PM Peak Hours and Saturday Peak Hours. The analysis was recomputed using the 2024 No-Build and Build Traffic volumes, which indicates that similar levels of service will be maintained under all conditions both with and without the Project.

4. **Wolcott Avenue and Beacon Street/West End Lofts Driveway**

   Beacon Street intersects Wolcott Avenue at a full movement unsignalized intersection with Beacon Street aligning opposite the driveway to the West End Lofts development. The northbound and southbound Wolcott Avenue approaches each consist of one travel lane in each direction with a center two-way left turn lane provided. Beacon Street and the West End Lofts Driveway each provide a single lane for all movements and there is a pedestrian crossing of each of these approaches. There is no dedicated pedestrian crossing of Wolcott Avenue at this location.

   Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at a Level of Service "C" or better on all approaches during the Friday PM and Saturday Peak Horus.

The capacity analysis was recomputed using the 2024 No-Build and Build Traffic volumes. These results indicate that the intersection is expected to experience similar Levels of Service to existing conditions under the future No-Build and future Build Typical conditions. Under event conditions a Level of Service "D" may be experienced with some small increases in delay over No-Build conditions (approximately 4 seconds per vehicle or less) as a result of the event condition Project generated traffic.

5. **Wolcott Avenue and Site Access**

As previously indicated, the Site is proposed to be access via a two-way driveway at the existing center curb cut location to Wolcott Avenue which forms an unsignalized "T"-shaped intersection. The northbound and southbound Wolcott Avenue approaches each consist of one travel lane in each direction with a center two-way left turn lane provided. In addition, a secondary exit only driveway is also proposed at the northern property line of the Site, which will be a reestablishment of the existing driveway in this location. It should be noted that the existing southern driveway and curb cut are now proposed to be eliminated as part of the Project reducing the total curb cuts provided for the Site from three (3) to two (2).

Capacity analysis was conducted for this intersection utilizing the 2024 Build Traffic volumes, conservatively assuming all traffic would exit at one location. These results indicate that the intersection is expected to experience Levels of Service "B" or better during each of the peak hours. It should be noted that some modifications to the driveways and sidewalks within the NYSDOT Right-of-Way are proposed as part of the Project and therefore will require a Highway Work Permit to be obtained from the NYSDOT.

Sight distances for the proposed main driveway location were reviewed based on American Association of State Highway and Transportation Officials (AASHTO) criteria. Field measurements conducted at the driveway location indicate existing sight distances are approximately 435 feet looking left (north) and 545 feet looking right (south) from the proposed access location. These sight distance measurements are summarized in Table No. 3 contained in Appendix B. Available NYSDOT speed data for this section of Wolcott Avenue indicates an 85th Percentile Speed of 38 MPH. Table No. 3 provides the calculated stopping and intersection sight distances based on AASHTO criteria for all relevant sight lines. As shown in the table the required intersection sight distances will be met at the Site Access location for the 38 MPH design speed. It should be noted that some pruning/clearing of the existing vegetation along the Site frontage, if proposed to remain, immediately north of the proposed driveway location on the west side of Route 9D should be completed in order to maximize the sight distance looking to the north from the Site driveway location.

Sight distance was also reviewed for the proposed northern exit only driveway. Field measurements conducted at the driveway location indicate existing sight distances are approximately 500 feet looking left (north) and 575 feet looking right (south) from the proposed access location. As indicated in Table No. 3, these available sight distances exceed the AASHTO required sight distances based on the 38 MPH 85th Percentile Speeds along the roadway. Similar to main driveway, some pruning/clearing of the existing vegetation along the Site frontage, if proposed to remain, immediately south of the proposed driveway location on the west side of Route 9D should be completed in order to maximize the sight distance looking to the south from the Site driveway location.

6. **Wolcott Avenue and South Avenue**

Wolcott Avenue and South Avenue intersect at a full movement signalized intersection. Each of the approaches to the intersection consist of a single lane in each direction. There is a striped pedestrian crosswalk on each of the four intersection approaches but there are no pedestrian actuated signals for these crosswalks.

Capacity analysis was conducted for this intersection utilizing the 2021 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "C" during both the Friday PM and Saturday Peak Hours.

The capacity analysis was recomputed using the 2024 No-Build and Build Traffic volumes. These results indicate that the intersection is expected to continue to experience an overall Level of Service "C" during each of the peak hours under all scenarios, with minimal increases in delay (less than 1.0 seconds per vehicle) resulting from the project generated traffic.

G. Pedestrian Access

Access to the Project by pedestrians, including those who may be parking offsite is provided in several manners. There are existing sidewalks along both sides of most roadways within the Study area. There are existing signalized crosswalks of Wolcott Avenue both at its signalized intersections with Beekman Street and Main Street providing signalized pedestrian access from the east side of Wolcott Avenue to the west side where the Project site is located. In addition, there are existing crosswalks crossing Wolcott Avenue which are supplemented with pedestrian activated Rectangular Rapid Flashing Beacon (RRFB) signs located at the northern property line of the Project site as well as at a location approximately 150 ft. south of Rombout Avenue at approximately the southern property line of the River Ridge property. Any patrons utilizing the public parking available at the Tompkins lot on the east side of Wolcott Avenue would be likely to use the RRFB crosswalk at the northern property line of the Project site to cross Wolcott Avenue. Similarly, any pedestrians coming from the Main Street area would be likely to utilize either the signalized pedestrian crossing at the Wolcott Avenue/Main Street intersection or the RRFB crosswalk at the northern property line to cross to the west side of the roadway.

Pedestrians arriving from the Beacon Train Station or utilizing parking along Beekman Street would also be provided several opportunities to access the Project site. There are existing pedestrian pathway connections between Beekman Street and Wolcott Avenue that have been previously constructed as part of the River Ridge and West End Lofts development that could be utilized as these are intended for public use. In addition to these pathways, the Project also proposes to provide a pedestrian pathway between Beekman Street and Wolcott Avenue for direct access to the Project Site. Signage is proposed to be provided at the connection of the on-site path with Beekman Street to direct patrons to the Site.

H. Site Circulation and Operations

As previously discussed, general vehicular access to the Project will be provided via the existing driveway connection to Wolcott Avenue and will accommodate both entering and exiting traffic. A secondary, exit only driveway is also proposed at the northern property line of the Site, which will be a reestablishment of the existing driveway in this location. The existing southern access driveway is proposed to be eliminated as part of the project. The combination of the main access driveway and the northern exit only driveway will provide the ability to vehicles to circulate through the Site without the need to turn around and eliminating a previously proposed dead-end parking situation. Under the anticipated event conditions this provides improved on-site traffic flow for drop-off & pick-up operations.

Vehicle maneuvering analyses of a refuse truck, a shuttle bus and a 30 ft. Single Unit box truck have been included on the Site Plan showing that these vehicles can be accommodated within the proposed entry & exit loop. It is noted that the Applicant anticipates that a 20 ft. single unit box truck will be the largest vehicle utilized for deliveries to the Site. However, the maneuvering analysis was prepared for a 30 ft. box truck, indicating that this size vehicle can be accommodated in the event that a larger delivery vehicle is utilized in the future.

The anticipated drop-off and pick-up operations during event periods will require coordination and management by on-site staff during events. The operation of this is further discussed in the draft Traffic & Parking Management Plan.

In addition to the above, a designated loading zone is shown on the Site Plans at the northwest corner of the church building. This is also the location of the refuse container and where refuse pick-up will occur. Vehicle Maneuvering analyses for both a typical front-loading refuse truck and 30 ft. Single Unit box truck have also been included on this Site Plans for this area. These Vehicle Maneuvering analyses indicate that these vehicles can be adequately accommodated.

IV. Parking Evaluation

A. Project Related Code Parking Requirements

The City of Beacon Zoning Code's (the "Zoning Code") Schedule Off-Street Parking Requirements (§223-26.F) indicates the required number of off-street parking spaces to be provided for the Project. Based the Zoning Code, Table No. 2 below provides a summary of the code parking requirements and minimum number of required parking spaces for the Project.

Table No. 2 – City of Beacon Code Required Parking

Proposed Use	Size	City of Beacon Code Requirement	Required Spaces
Hotel	30 Rooms 1 Employee	1 Space/Room +1 Space/Employee	31 Spaces
Café	50 Patrons	1 Space/3 Patrons	17 Spaces[2]
Event Space	350 Persons (Seats)[1]	1 Space/4 seats	88 Spaces
		Total Required Parking Spaces	**119 Spaces[2]**

Notes:
1. The maximum proposed Event Space attendance of 350 Persons will include required staff for these events.
2. The Café' and the Event Space, which are both contained in the Church building, are non-simultaneous uses, therefore the Total Required Parking Spaces includes those required for the Hotel and the Event Space, since the Event Space represents the more conservative total of require parking spaces for the Church building uses. When events are not occurring the City Code would require 53 parking spaces for the Project.

As indicated in the above table the Project would require a total of 119 parking spaces. As noted above, the Café use is proposed to be a non-simultaneous use with the Event Space. Therefore, the calculation of total required parking spaces for the Project is based on the critical event periods during which times the Café will be used as a complimentary space to the Event space, but no additional persons outside of those attending the events will be permitted in the Café during these times. As previously indicated, the Project proposes to provide 32 off-street parking spaces to accommodate the parking needs for the proposed Hotel use. Therefore, all additional parking for the proposed Café use and event related parking would be required to be accommodated by on-street and off-street public parking in the area.

As previously discussed, it is also anticipated that a portion of the event attendees for the larger weekend events will arrive via other modes of transportation. This includes attendees attracted from the local area and therefore would be likely to arrive by non-vehicular transportation. The Project also anticipates promoting the use of public transportation including use of Metro-North trains to the Beacon train station, which is within walking distance to the Project site. In addition, the Project will also promote the use of Dutchess County Buses, including the Poughkeepsie Transit Hub to Beacon bus route, the Beacon to Hopewell Junction bus route and the Beacon Free Loop bus, each of which have designated stops along Main Street and pass the Project site

on Route 9D. Based on this, it is anticipated that the overall parking demand of the project during these event conditions could be reduced by as much as 10% as discussed in Section III.B above. Applying this 10% reduction, the total number of event occupants arriving by personal vehicle would be 315 occupants *(350 occupants X 10% non-vehicular = 315 Occupants).*

Furthermore, it is also anticipated that the uses within the proposed development would permit for some amount of "Shared Parking" resulting from hotel guests frequenting the Café and also the events held in the Church building. It is anticipated that as many as 100% of the hotel guest could be attending an event. Assuming a room occupancy of two (2) persons per room this would reduce the total occupants arriving at events by personal vehicle to 255 occupants *(30 rooms X 2 persons/room = 60 occupants in Hotel, 315 -60 = 255 occupants by personal vehicle).* Applying the code required 1 space per 4 seats (occupants) results in a total parking demand of 64 parking spaces to be accommodated by offsite parking in the vicinity of the Site.

B. Review of Off-Site Parking Locations

The Project proposes to provide 32 off-street parking spaces on the Site primarily for the use of Hotel guests and employees as required by the City of Beacon code for that use. While as indicated above, there is expected to be some amount of "shared parking" between the Hotel and café/event space under both typical and event conditions, under both scenarios there will be a need for additional parking to be accommodated by off-site public parking in the vicinity of the Project.

The closest public parking in the area include the below listed locations in order of proximity to the Project:

- **Tomkins Firehouse Parking Lot** – 68± Parking Spaces
  This lot is currently unstriped and therefore the number of parking spaces is an estimate. See below for further discussion.
- **City of Beacon Municipal Plaza (City Hall) Parking Lots** – 76 Parking Spaces
- **Beekman Street Metro North on-street parking between Railroad Drive and Wolcott Avenue** - 70± on-street metered parking spaces
  This parking is operated by LAZ parking, parking can be paid electronically via LAZgo Parking App.
- **Cross Lot** – 18 Parking Spaces (24 Hour Free Parking – City Lot)
- **Cliff Lot** – 19 Parking Spaces (24 Hour Free Parking – City Lot)
- **Beacon Center Lot** – 92 Parking Spaces (24 Hour Free Parking – City Lot)
- **Beacon Metro North Train Station Parking lots metered parking spaces**
  This parking is operated by LAZ parking, parking can be paid electronically via LAZgo Parking App.

The Tomkins Firehouse and City of Beacon Municipal Plaza parking lots have each recently been signed as available for public parking and are within 500 and 1,000 ft. respectively of the Project Site making these the most accessible public parking for the project. As previously noted, a walkway connection to Beekman Street is proposed to be provided through the Site as part of the Project with signage at Beekman Street directing patrons to the Site. This will provide more convenient access to the Beekman Street on-street metered parking spaces of which the nearest spaces will be within the 350 ft. of the Hotel and Café/Event spaces with the more remote spaces

approximately 1,200 ft. from these buildings. This will also provide more convenient access to parking available at the Beacon Metro north station, however these metered spaces are more remote, in excess of 2,000 ft. from the Project site, and less likely to be utilized. The Cross Street lot, Cliff Lot and Beacon Center Lot are all located within 1,500 – 1,900 ft. from the Project site. In total there are approximately 343 total parking spaces within 2,000 ft. walking distance of the Project site which can be utilized to accommodate the parking needs of the Project under the event conditions. There is also on-street public parking along Main Street within this distance from the Project, but this parking is known to have limited availability and therefore has been discounted from the parking analysis.

Observations of each of the parking areas noted above were conducted by representatives of Colliers Engineer & Design on Friday September 24, 2021, Saturday September 25, 2021, Friday November 5, 2021 and Saturday November 6, 2021, as well as supplemental observations conducted on Friday January 21, 2022, in order asses the availability of parking in each of these location during the anticipated peak event periods. The hourly parking observations for each parking area are summarized in Table No. 4 contained in Appendix B. The following is a summary of these parking observations for each of the of the parking locations identified above:

- **Tomkins Firehouse Parking Lot**
  - This parking lot was observed to be significantly underutilized during all time periods with 5 vehicles or less parked at any one time. This is likely due to its location further from the Main Street business district and the fact that it was only recently signed for public parking.
  - As requested by the City's Engineer, a conceptual layout of formalized striping parking spaces within this lot has been prepared. Drawing CP-1 contained in Appendix "A" identifies a possible layout of the parking within this lot. Based on this conceptual layout it is estimated that the lot could accommodate 68 parking spaces.
  - It is understood there are plans for expansion of the Tompkins Fire House for which parking for the facility will be accommodated on this property. It has been estimated that this could usurp up to 14 parking spaces of the 68 available spaces, leaving 54 spaces for public use.
- **City of Beacon Municipal Plaza (City Hall) Parking Lots**
  - There is a total of 100 parking spaces in this Municipal Plaza Lot. These include 10 handicap spaces, 10 designated police parking spaces and 4 designated spaces for City Officials. The resulting effective available public parking is 76 parking spaces
  - This parking lot was observed to be significantly underutilized outside of Beacon City Hall business hours with less than 15 vehicles parked at any one time including municipal vehicles.
  - Observations of this lot during Beacon City Hall business hours were conducted on January 21, 2021 to document the parking availability in this lot during hours when it might be utilized by patrons of the café under typical conditions.

- **Beekman Street Metro North on-street parking between Railroad Drive and Wolcott Avenue**
  - This parking was observed to be significantly underutilized during all time periods. It is noted that a review of historical aerial photography indicates a higher utilization of this parking on Weekdays prior to the COVID-19 pandemic, however it is anticipated that this parking would be mostly free on nights and weekends.
- **Cross Lot**
  - This parking was observed to be nearly fully occupied during all time periods. It is unlikely that this parking area could be relied upon for parking for the proposed project.
- **Cliff Lot**
  - This parking was observed to be nearly fully occupied during all time periods. It is unlikely that this parking area could be relied upon for parking for the proposed project.
- **Beacon Center Lot**
  - This parking was observed to be in excess of 75% utilized during most time periods but there is more of a likelihood of parking availability in this lot than the other public parking in this vicinity. While somewhat remote from the Project site in some cases event attendees may utilize this parking to visit locations on Main Street prior to or after the events.
- **Beacon Metro North Train Station Parking lots metered parking spaces**
  - Specific parking counts of train station parking lots were not conducted since these lots were found to be underutilized during all-time periods observed and it is known this is not representative of peak parking utilization prior to the COVID-19 Pandemic. Significant parking availability was observed on weeknights and weekends. It is noted that a review of historical aerial photography indicates a higher utilization of this parking on Weekdays prior to the COVID-19 pandemic, however it is anticipated that this parking would remain mostly free on weeknights and weekends if parking utilization at the train station returns to pre-pandemic levels.

The Tomkins Firehouse Parking Lot, City of Beacon Municipal Plaza parking lot as well as on street parking along Beekman Street, which are all nearest the Project each appear to have sufficient availability to accommodate the excess parking demand of the Project while still leaving additional available parking for other public uses as well. It should be noted that all proposed events are limited timeframe events that will utilize these parking spaces during the events only and these parking spaces would be available during all other times of the day.

C. Parking Recommendations

As noted above, it is the opinion of Colliers Engineering & Design that there is sufficient public parking in the vicinity of the Project to accommodate the excess parking demand associated with the events, there are several parking mitigation measures that could be implemented in order to reduce the parking demands of the Project and/or reduce the parking impacts in the surrounding area, which are identified below.

Dissemination of Parking Information

Prophecy Theater, LLC as owners of the Project should disseminate parking information to event attendees to identify appropriate available parking areas. This can be done via the facility's website, distribution of information upon purchase of event tickets (as applicable), e-mails to event attendees and information disseminated by event organizers. Day-of, on-site signage and/or distribution of flyers identifying parking locations for event attendees to be distributed by attendants at the on-site parking lot could also be utilized. This information should direct event attendees to any of the various parking locations identified above.

In addition, by providing attendees with appropriate parking areas it can help to mitigate the possibility of attendees utilizing other undesirable parking locations including the nearby residential properties directly north and south of the Project as well as those on the east side of Route 9D opposite the Project site.

Dissemination of Public Transportation Information

Similar to the above, the Project owners should also disseminate and encourage the use of public transportation by event attendees in order to reduce the overall parking demand of the Project, as well as the Project traffic generation. This can include information on available metro-north train schedules, Duchess County bus schedules and any other relevant public transportation information.

Provision of Valet Parking

For certain events, such as weddings, it may be possible and desirable to provide valet parking on the Project site utilizing the on-site parking facilities or nearby off-site parking locations. For certain events it may even be possible to accommodate all event and hotel parking on the Project Site with valet parking by using tandem parking and other areas that may not otherwise be available for parking under typical parking conditions. This could be done by utilizing outside valet parking services for those specific events for which valet parking may be possible. This could be a service provided by the Project Owners and offered to event coordinators as appropriate. This should be considered for all reasonably appropriate events in order to further limit the need for the use of off-site public parking for event attendee parking.

The above items, as well as other recommendations for the management of traffic and parking for events will be incorporated into a Traffic & Parking Management Plan to be implemented by the Applicant for management of events at the Site.

V. Summary and Conclusion

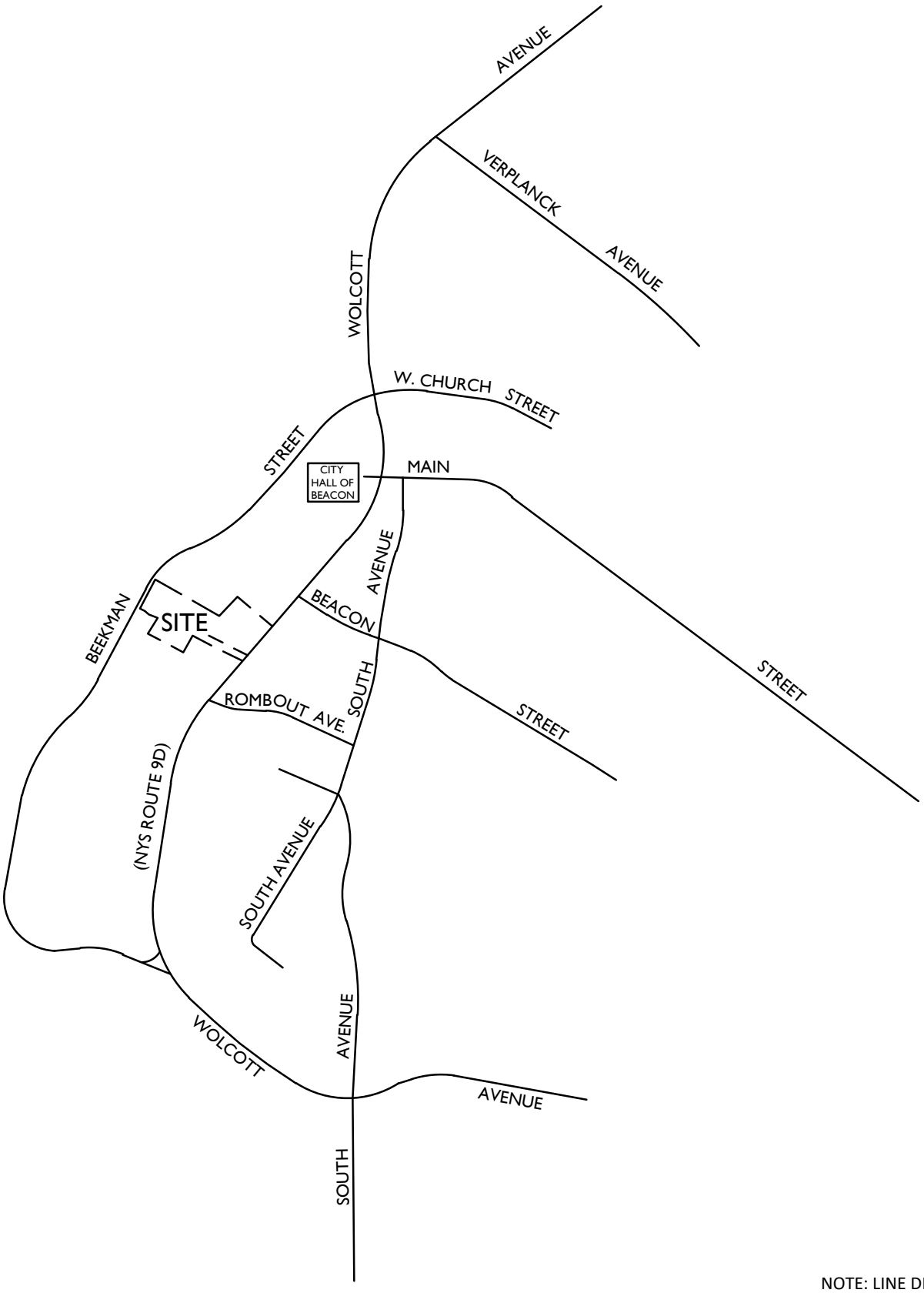
As summarized here-in the Project is not anticipated to have a significant impact on traffic conditions in the vicinity of the Project site. Recommendations for traffic signal phasing and timing modifications at the intersection of Wolcott Avenue (Route 9D) and Beekman Street should be explored regardless of the proposed Project in order to reduce delays on the eastbound Beekman Street approach. These modifications would require the review and approval of the NYSDOT who owns and maintains the traffic signal at that location.

As previously noted, any modifications to the existing Site access driveways will also require review and approval by the NYSDOT and a Highway Work Permit will need to be obtained for those modifications.

The above parking analysis indicates that the Project will provide the required parking for the proposed Hotel use, but all additional parking for the café/event space will need to be accommodated by public parking in the vicinity of the Project. As noted above there is sufficient available parking in the vicinity of the Site to accommodate the Project parking needs, however several recommendations should be implemented to reduce the use of public parking in the area to the greatest extend possible.

Appendix

Appendix A | Traffic Figures



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

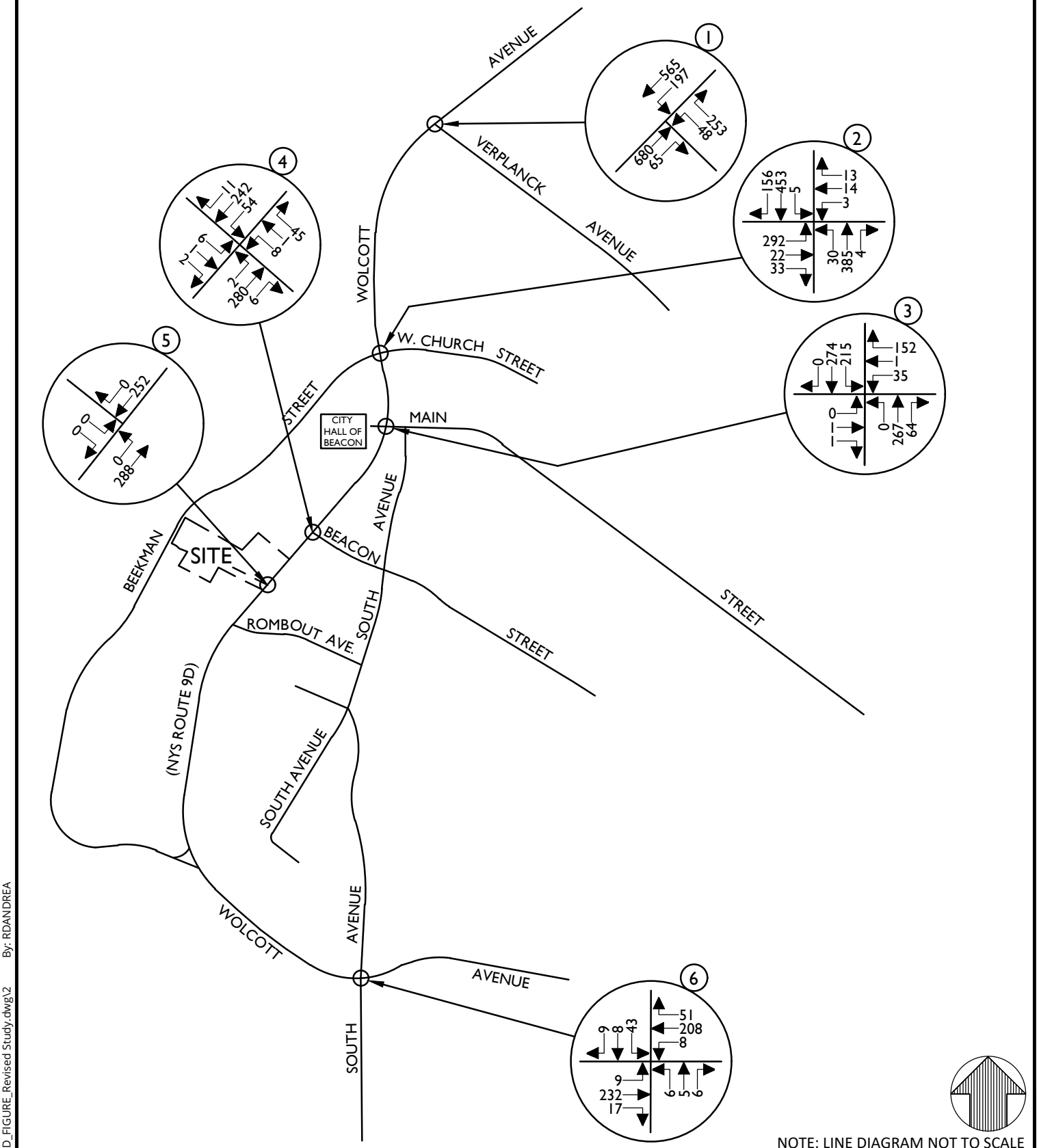
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE: SITE LOCATION MAP

SHEET NUMBER: 1

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\1 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

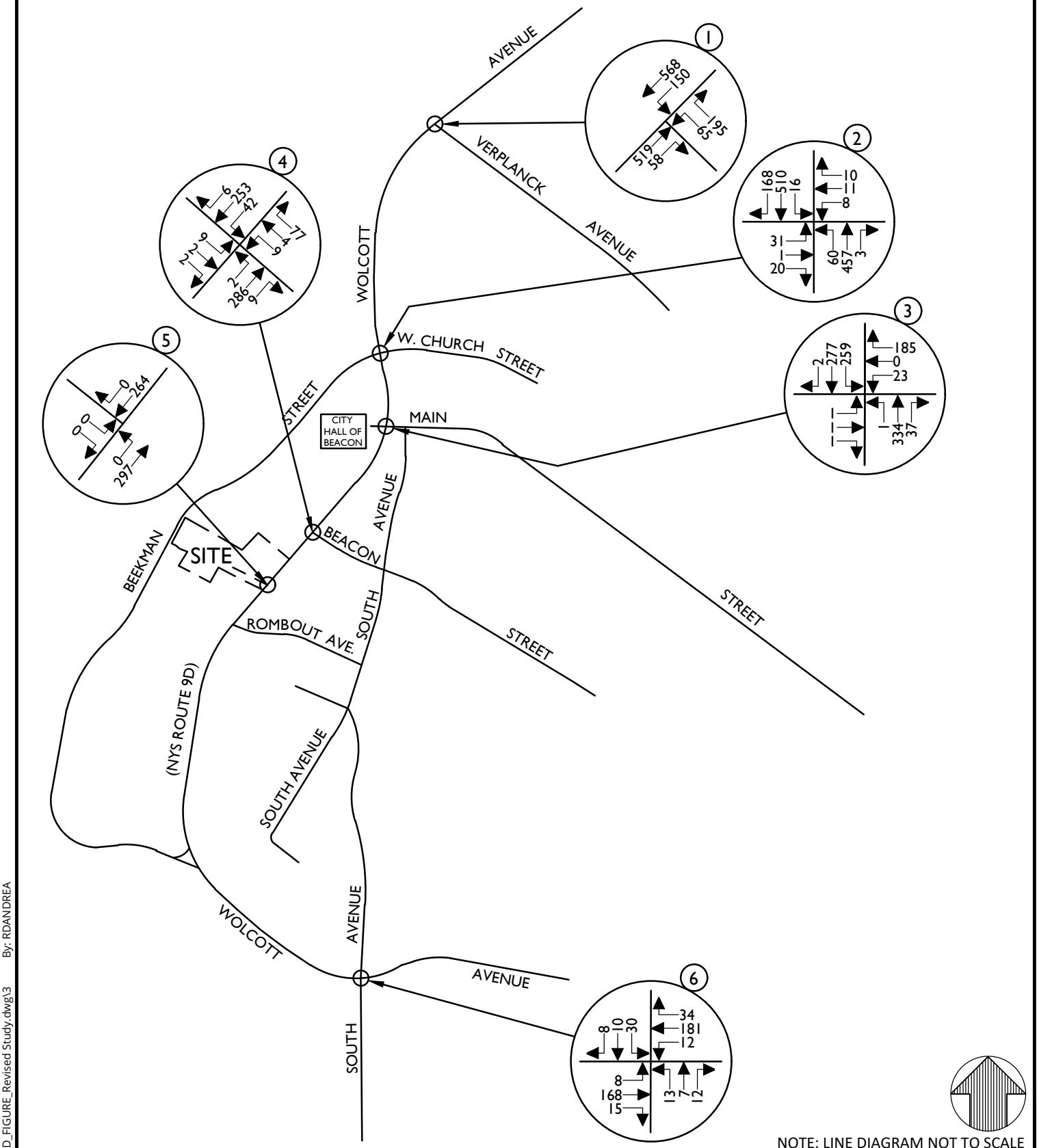
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
2021 EXISTING TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER:
2

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\2 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

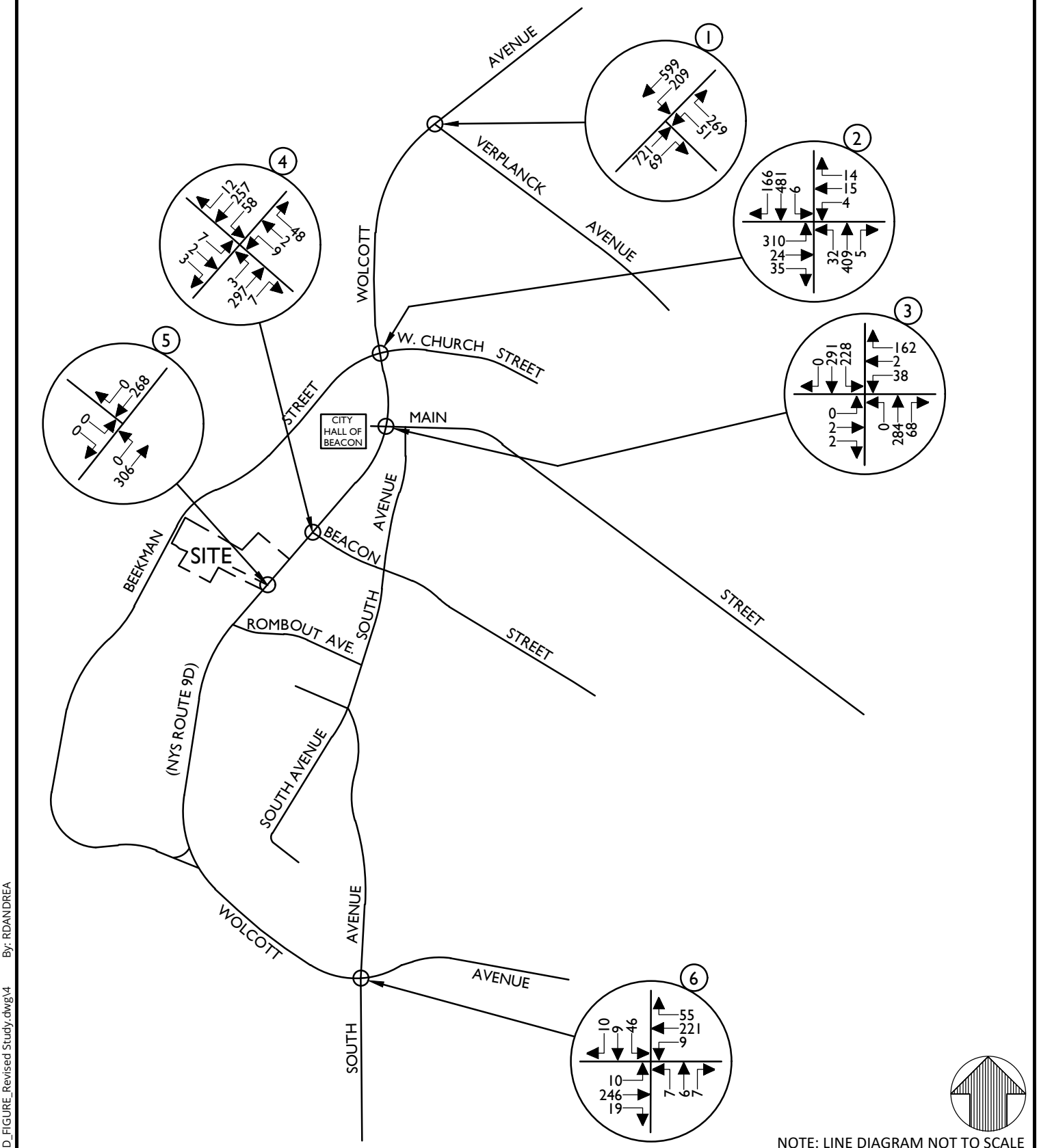
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
2021 EXISTING TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER:
3

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\3 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

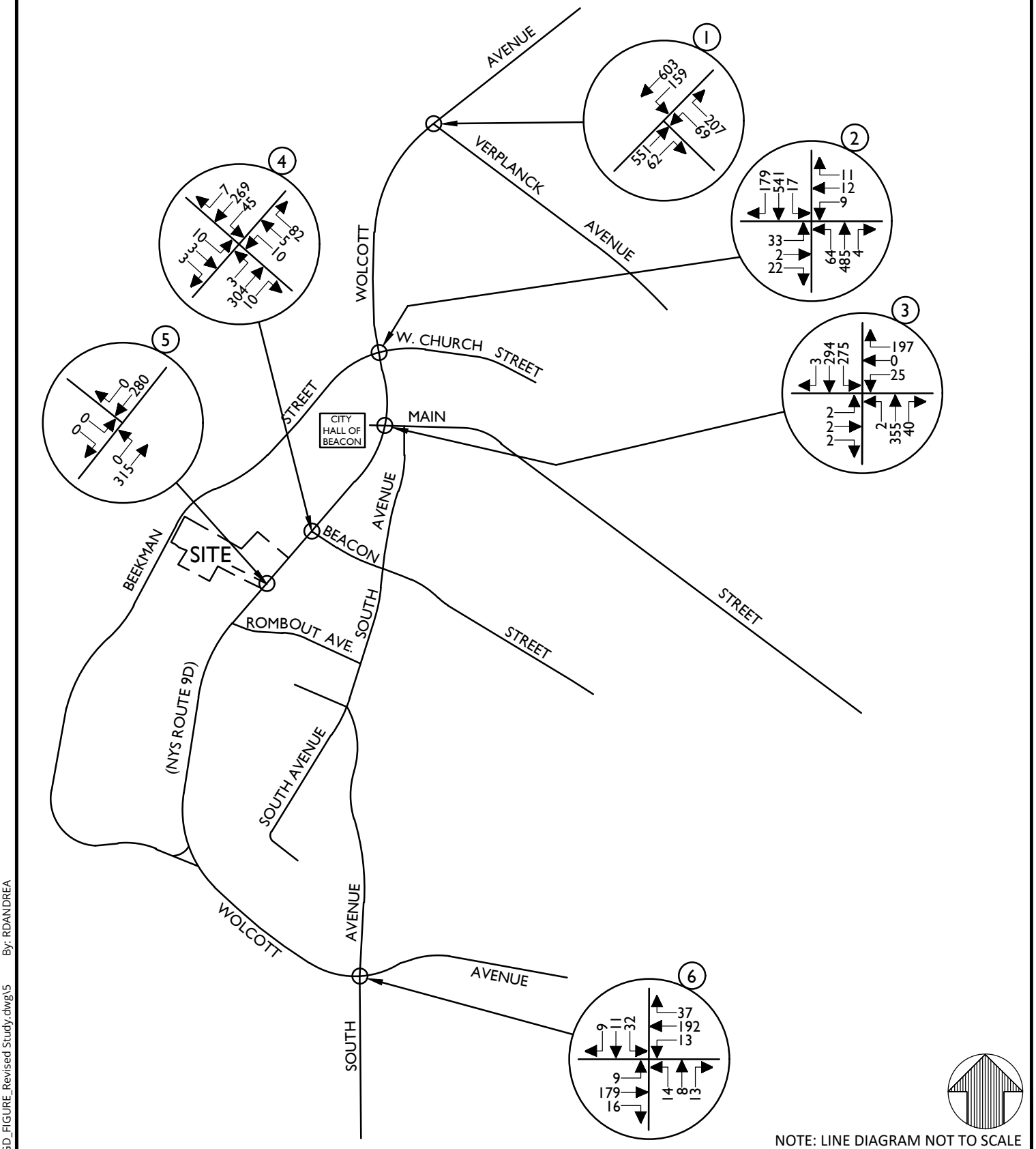
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
2024 PROJECTED TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER:
4

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\4 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

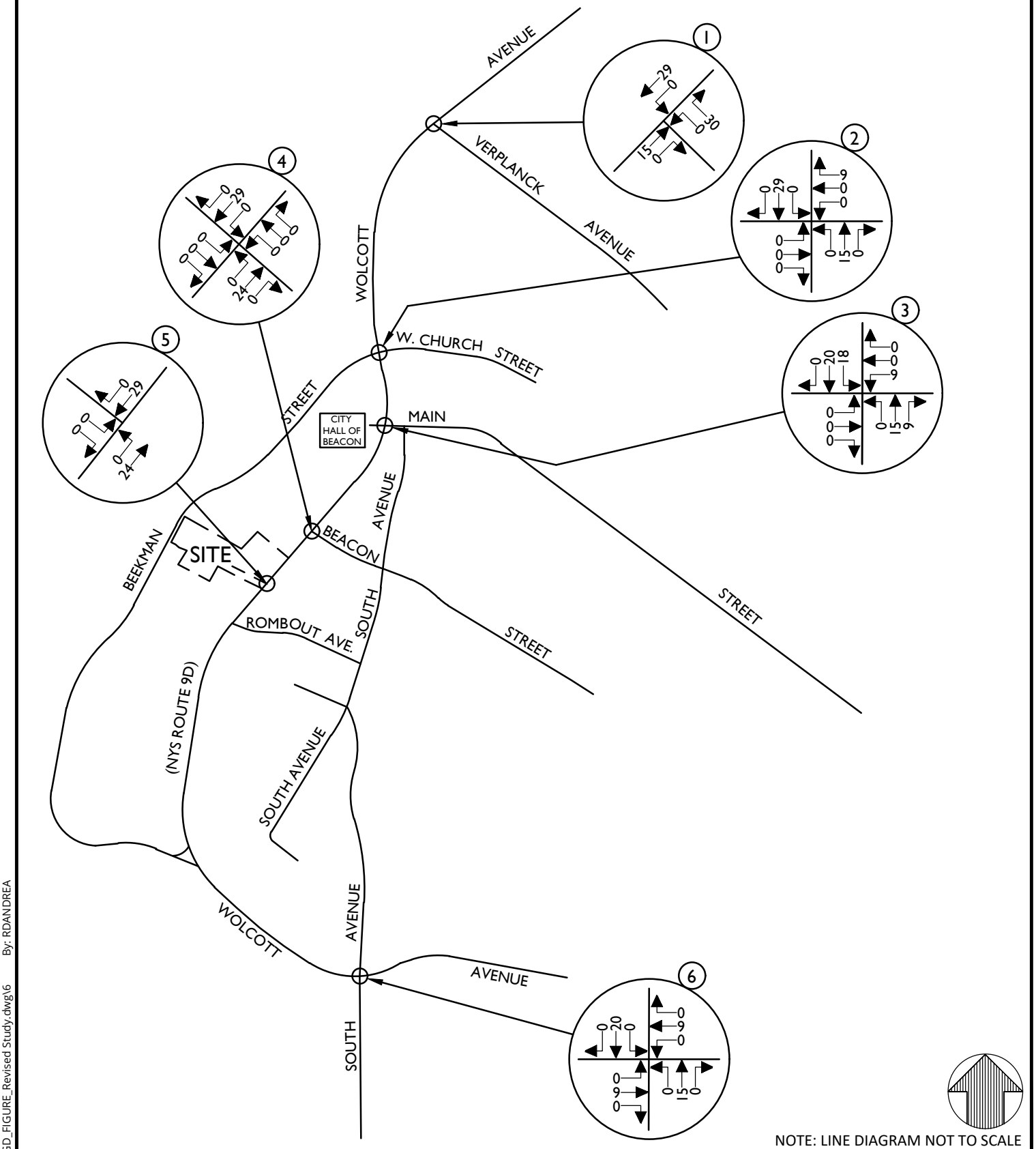
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
2024 PROJECTED TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER: 5

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\5 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

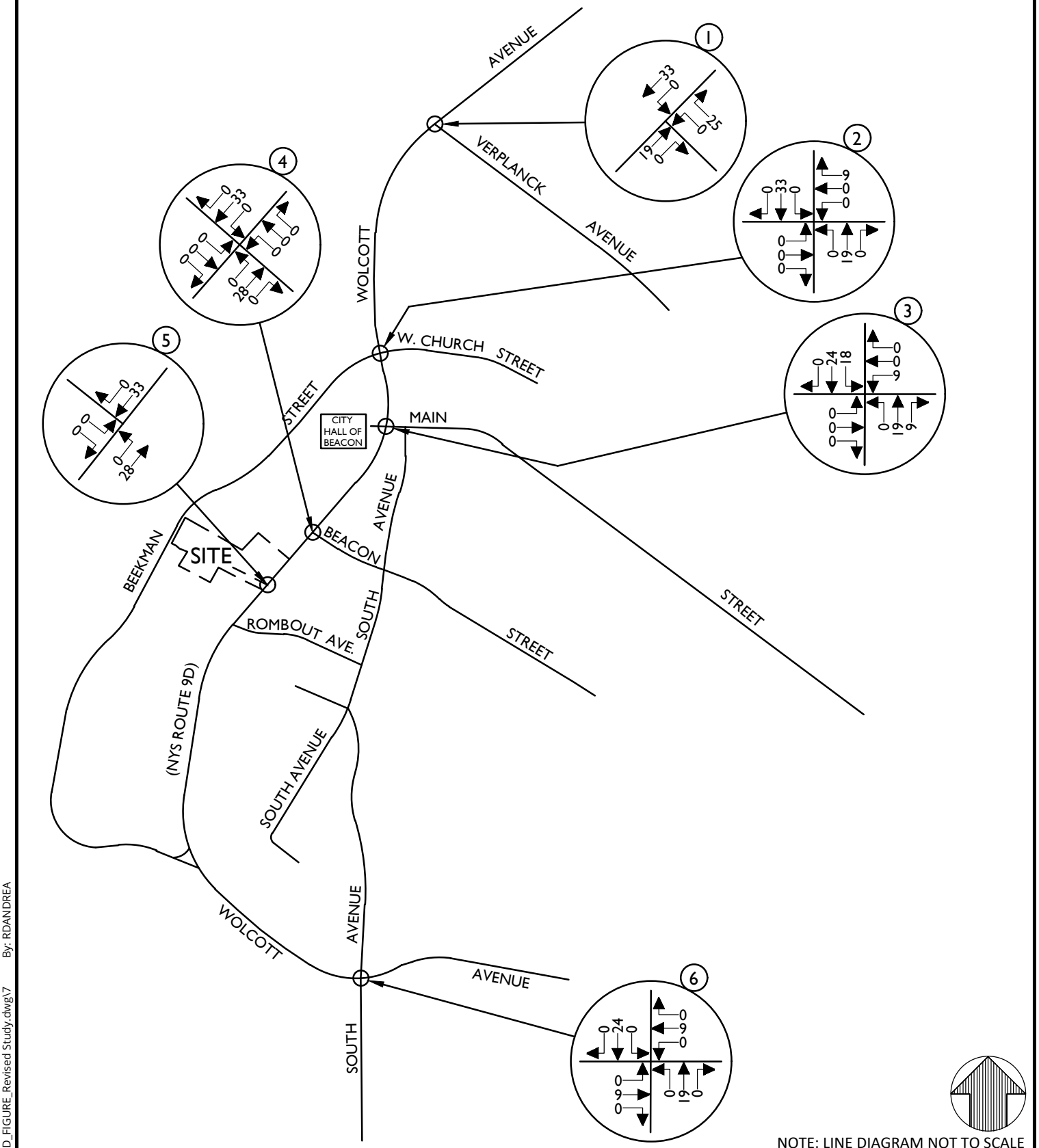
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
OTHER DEVELOPMENT
TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER: 6

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\6 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

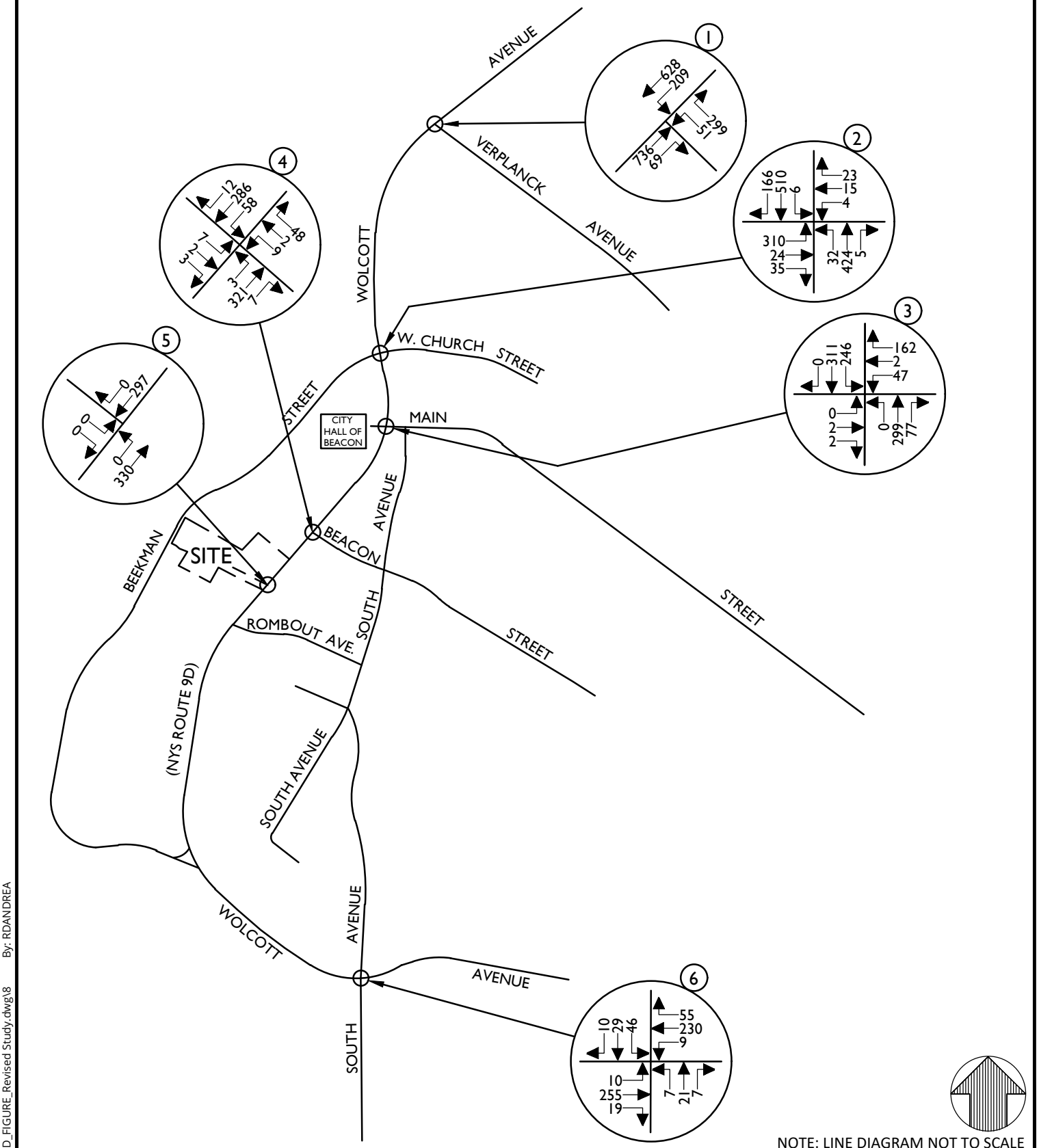
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
OTHER DEVELOPMENT
TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER: 7

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\7 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

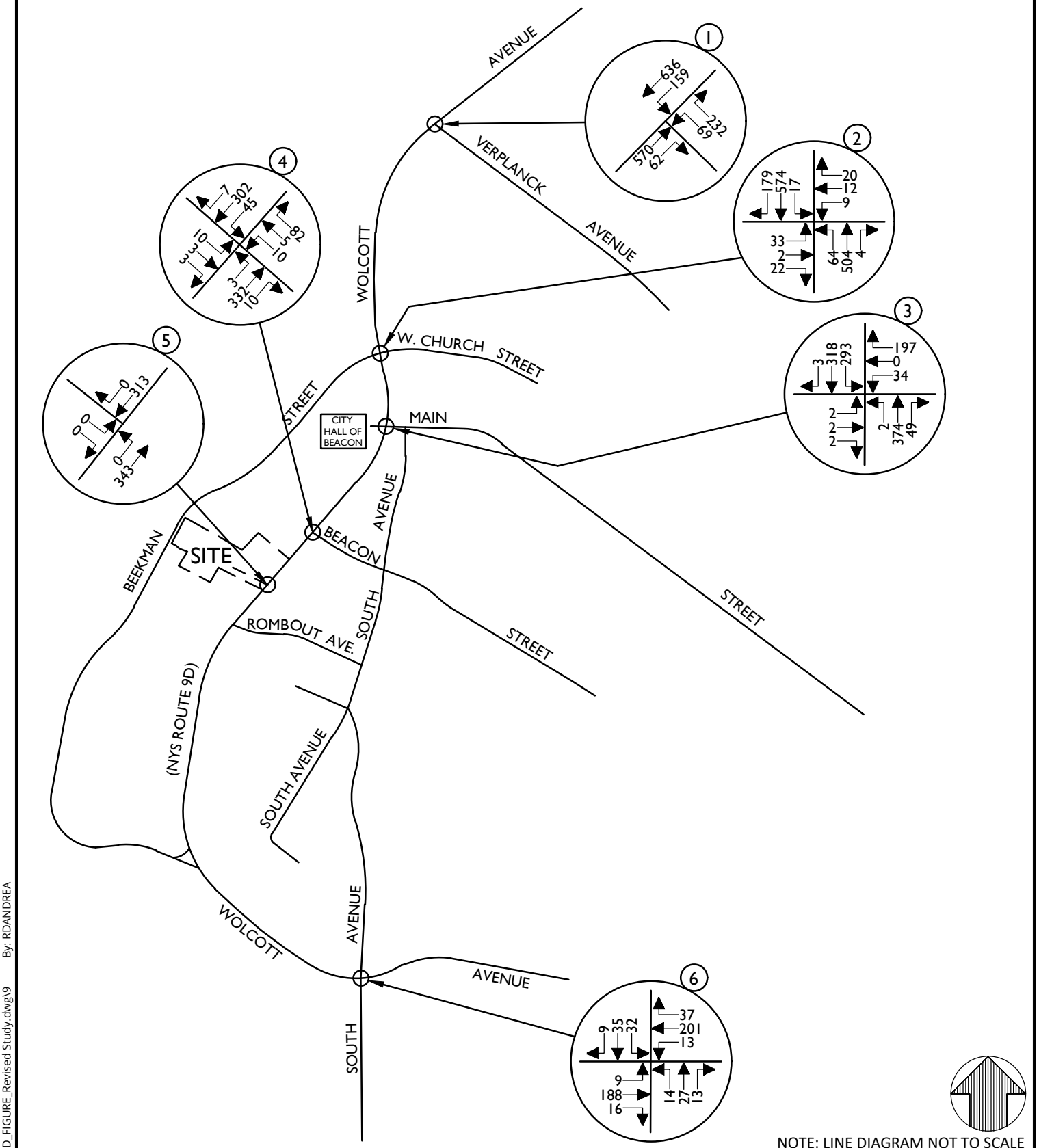
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
2024 NO-BUILD TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER: 8

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\8 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

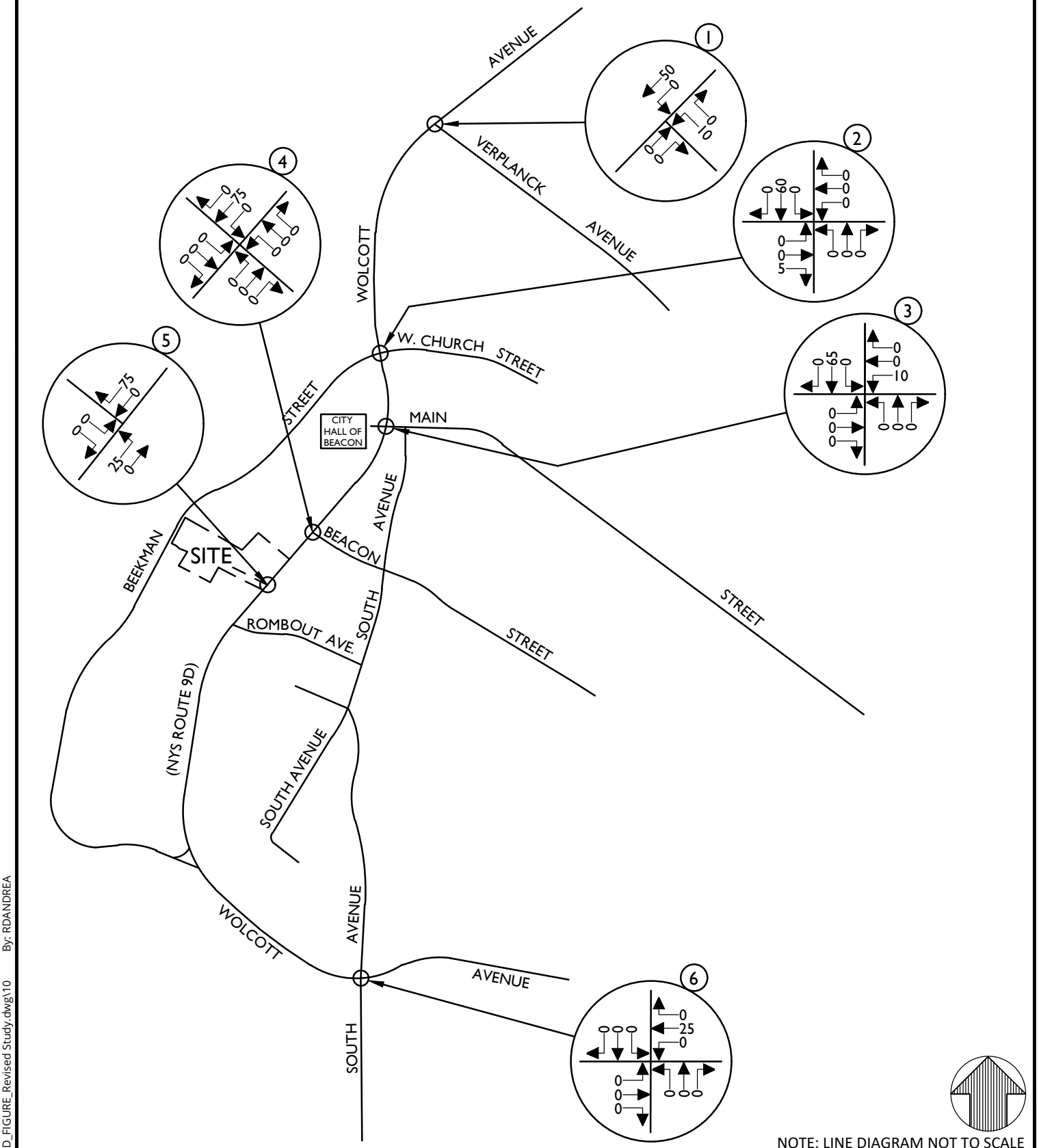
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
2024 NO-BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER: 9

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\9 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

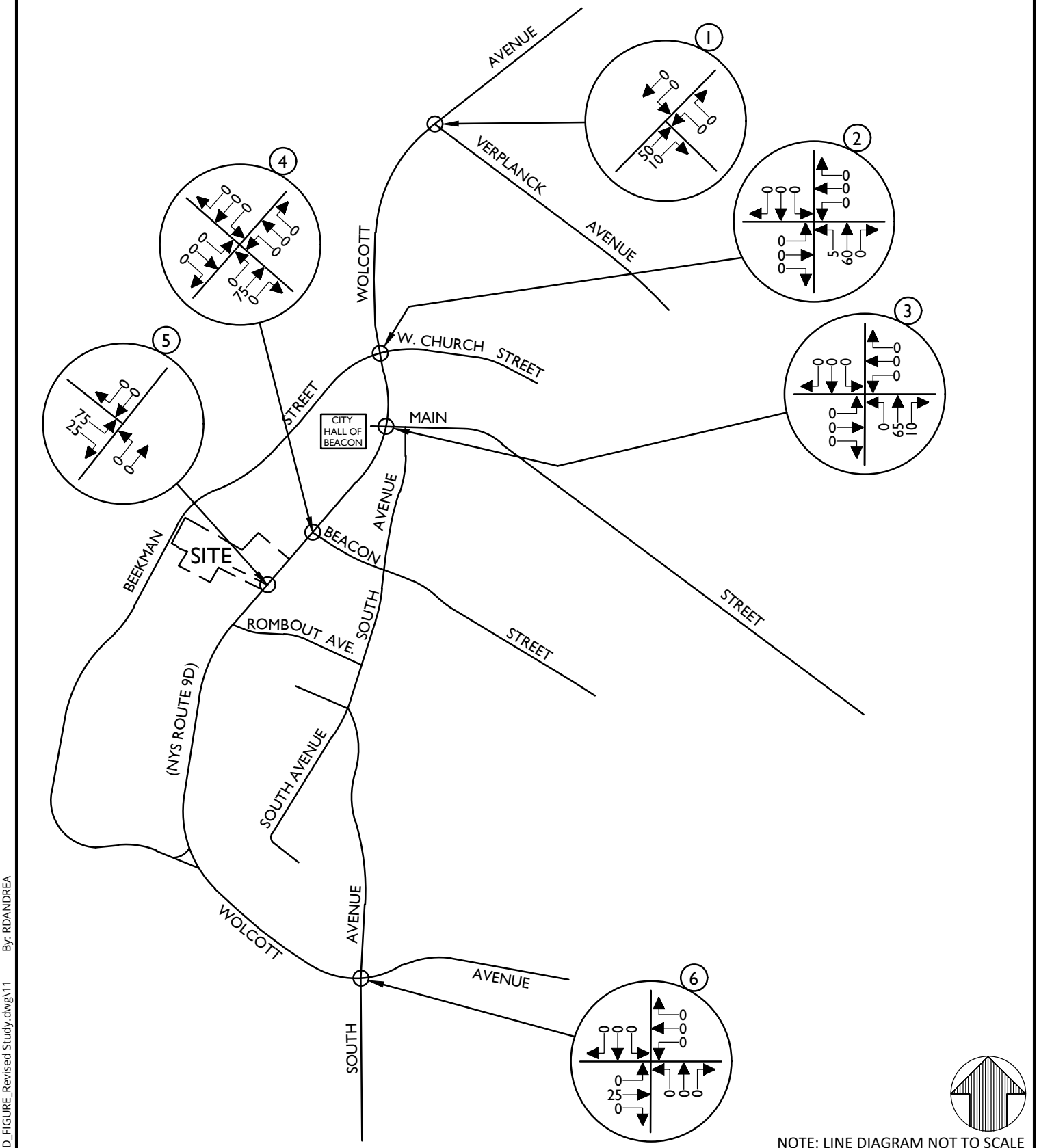
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE: HOTEL ARRIVAL DISTRIBUTION (EXPRESSED AS A %)

SHEET NUMBER: 10

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\10 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

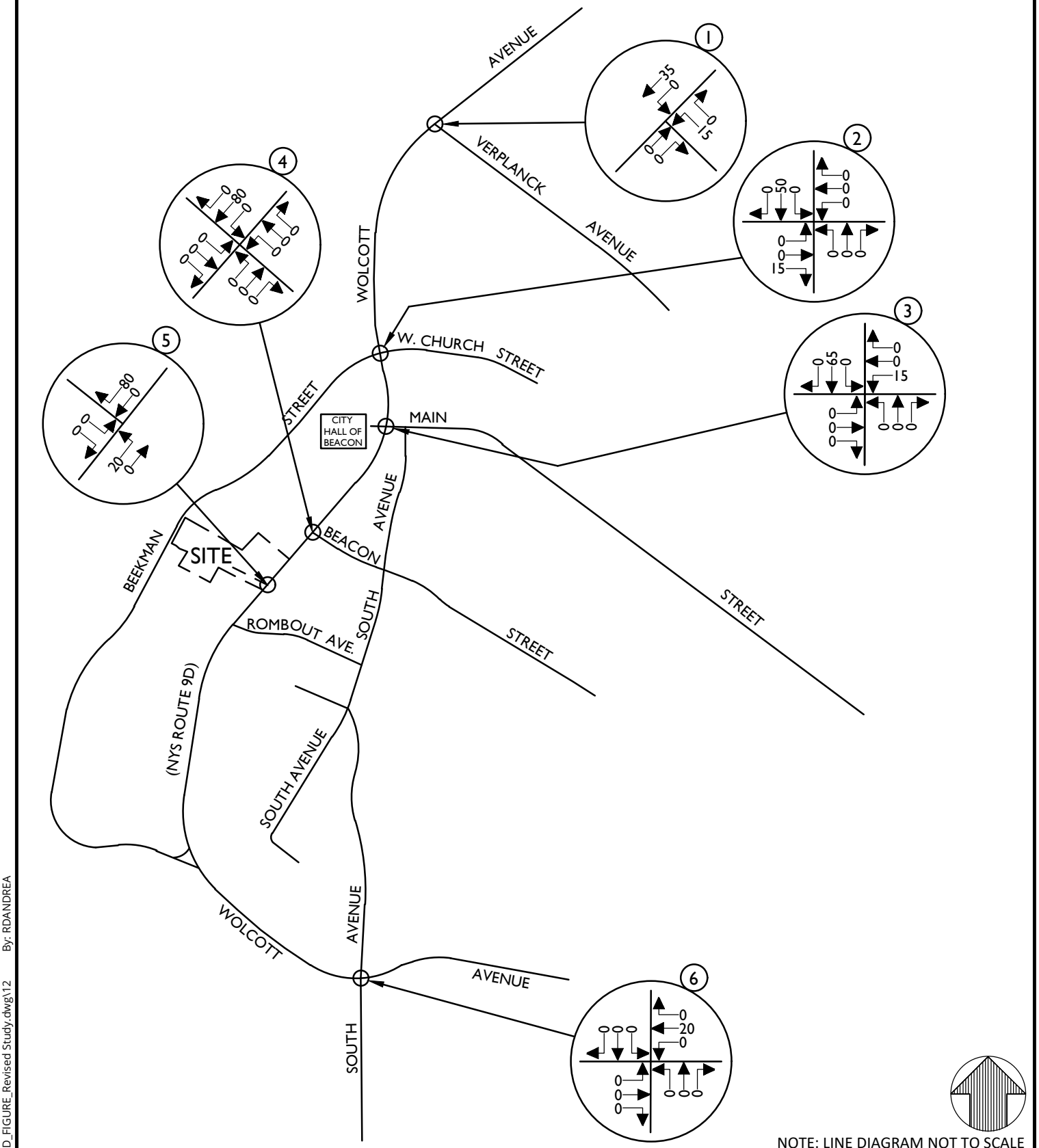
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
HOTEL DEPARTURE DISTRIBUTION
(EXPRESSED AS A %)

SHEET NUMBER:
11

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\11 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

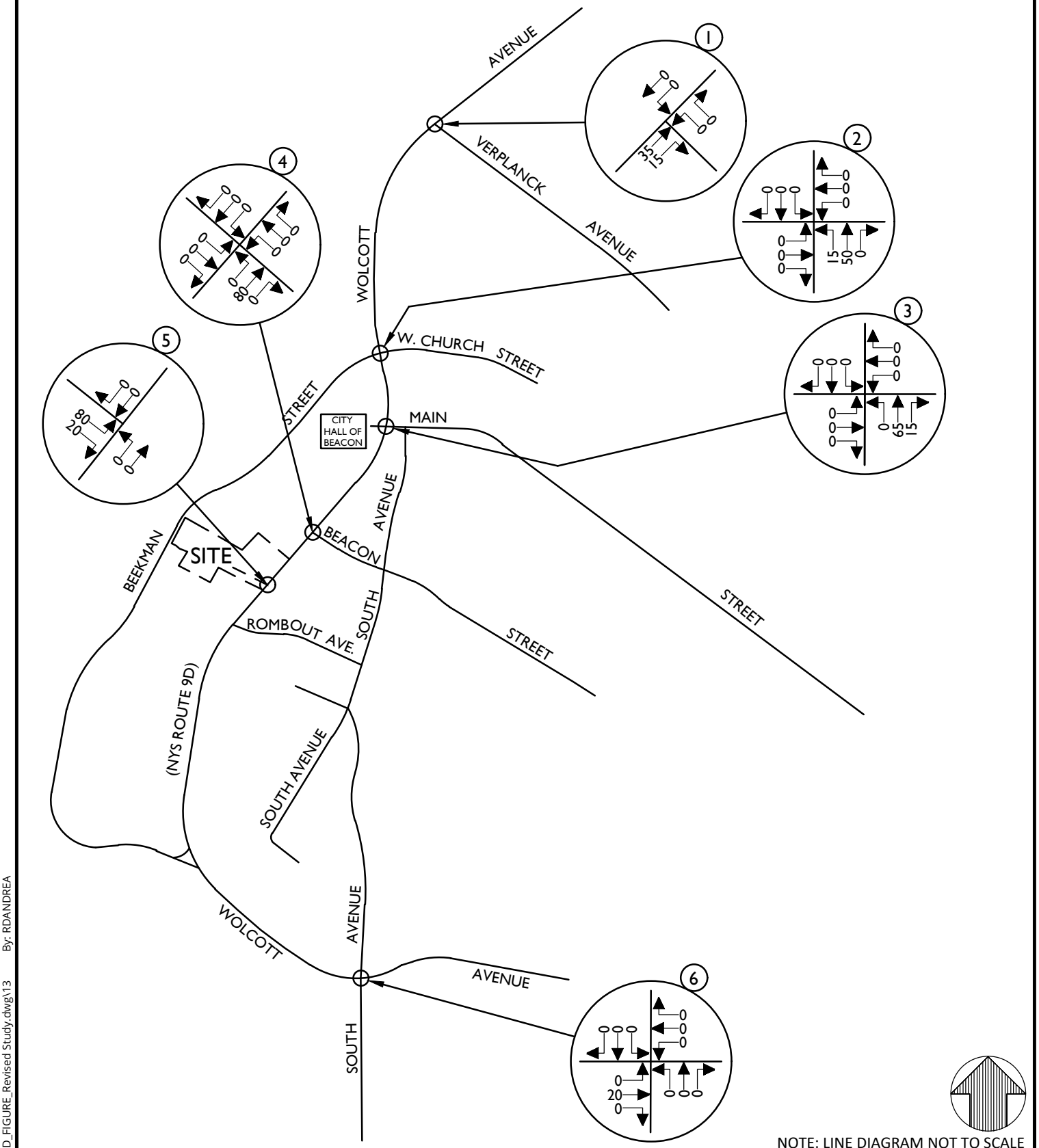
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
CAFE/EVENT
ARRIVAL DISTRIBUTION
(EXPRESSED AS A %)

SHEET NUMBER:
12

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\12 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

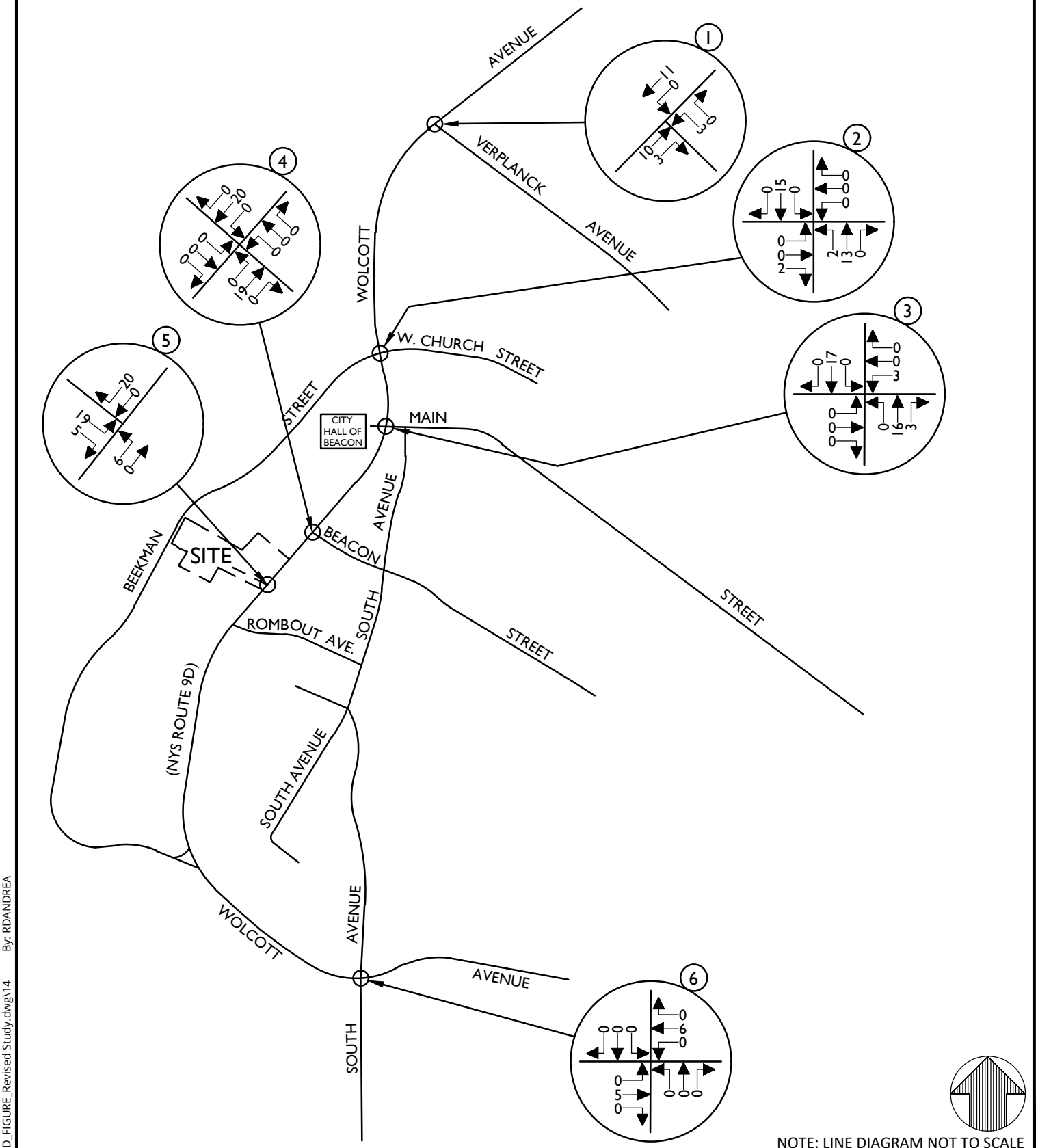
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
CAFE/EVENT
DEPARTURE DISTRIBUTION
(EXPRESSED AS A %)

SHEET NUMBER:
13

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\13 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

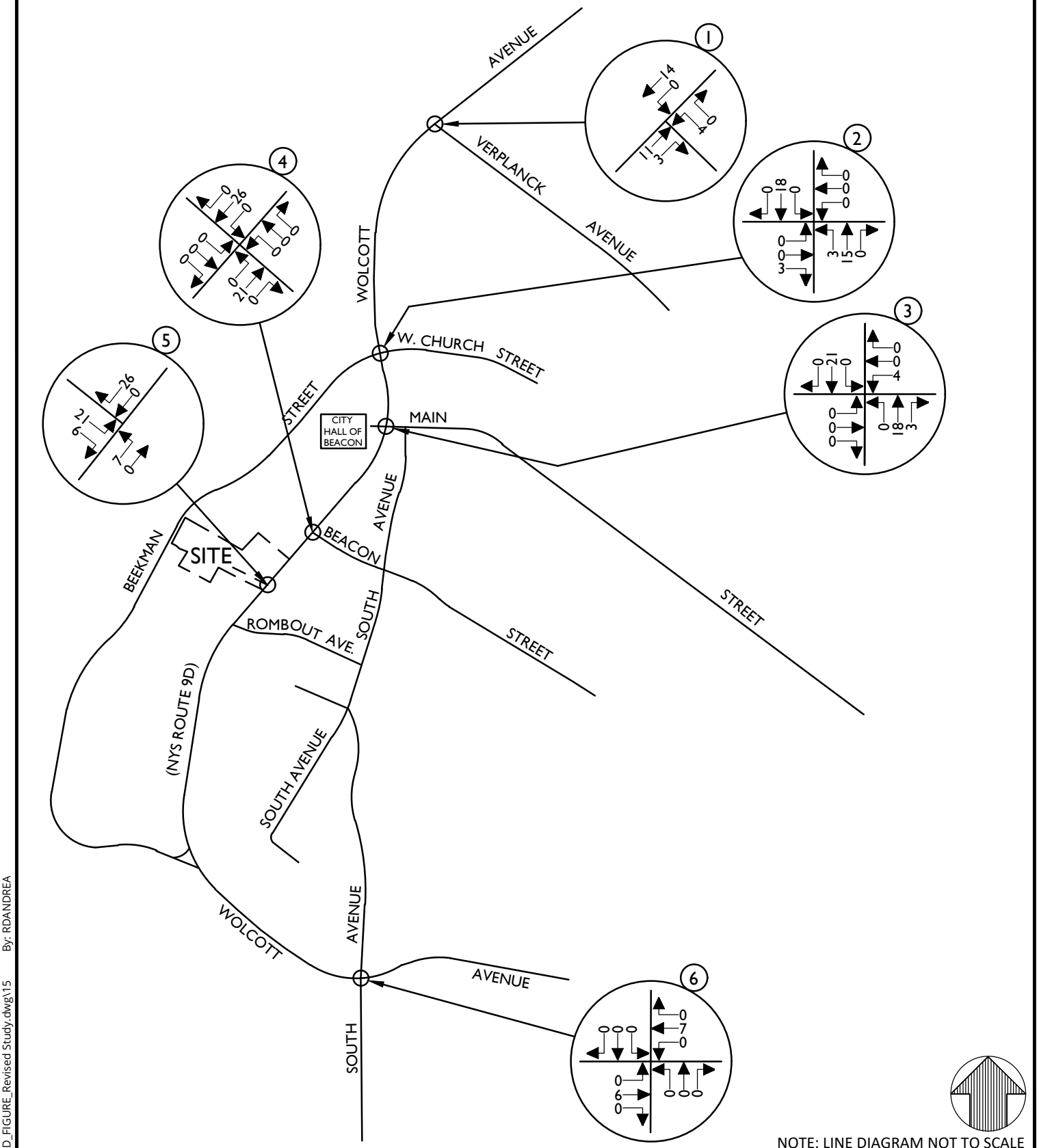
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
TYPICAL CONDITIONS
SITE GENERATED TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER: 14

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\14 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

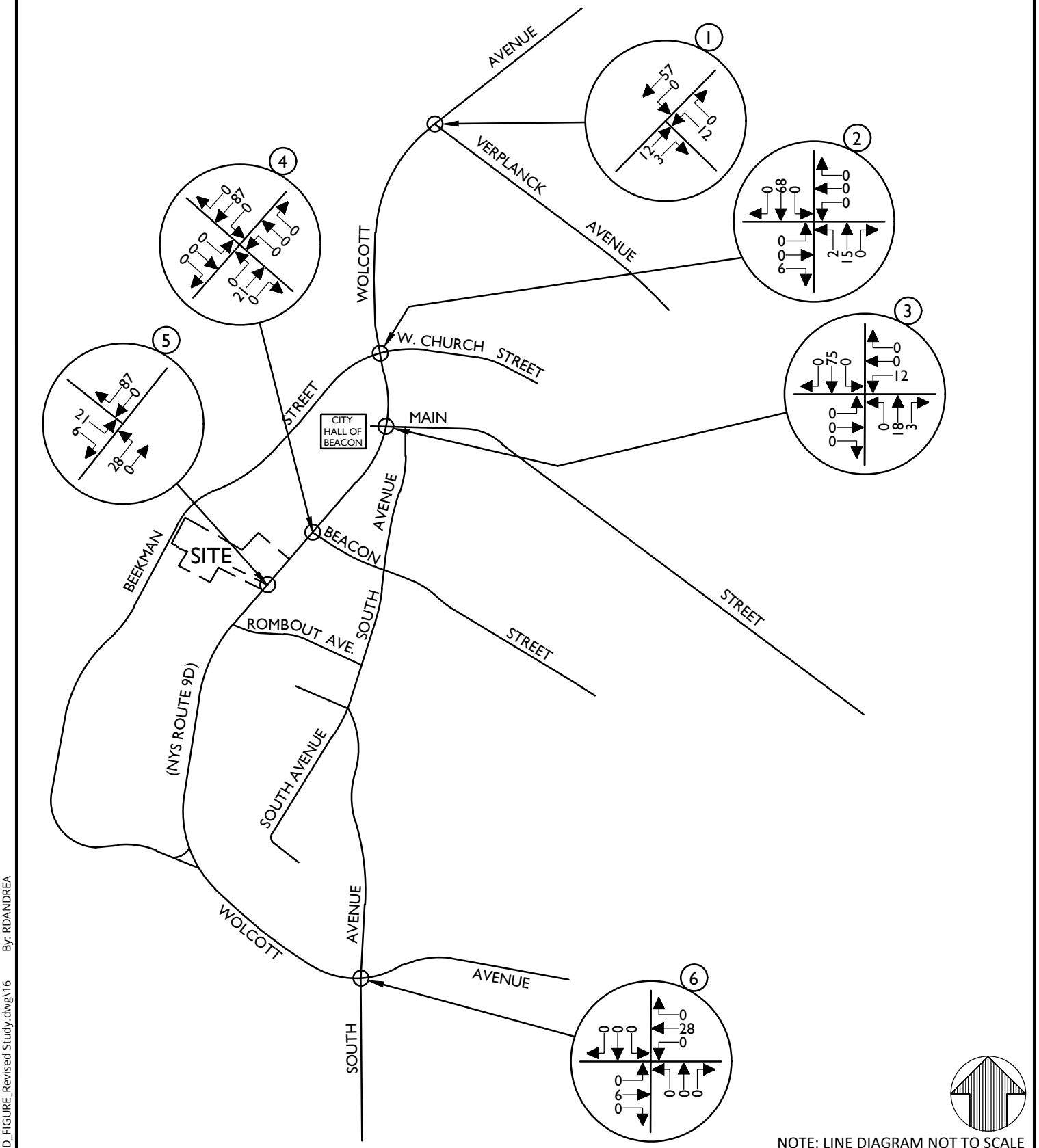
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
TYPICAL CONDITIONS
SITE GENERATED TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER:
15

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\15 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

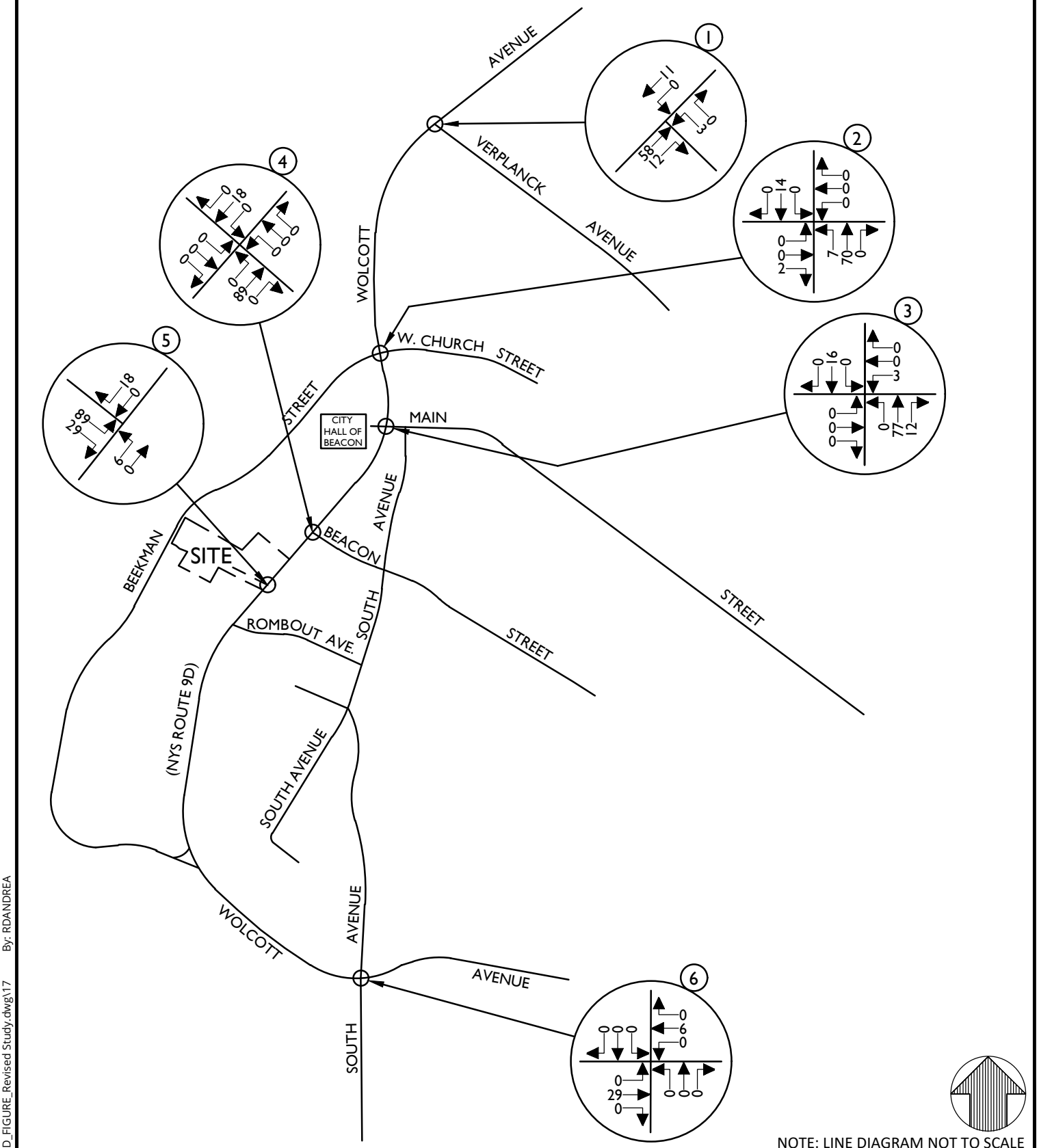
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
EVENT ENTRY
SITE GENERATED TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER: 16

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\16 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

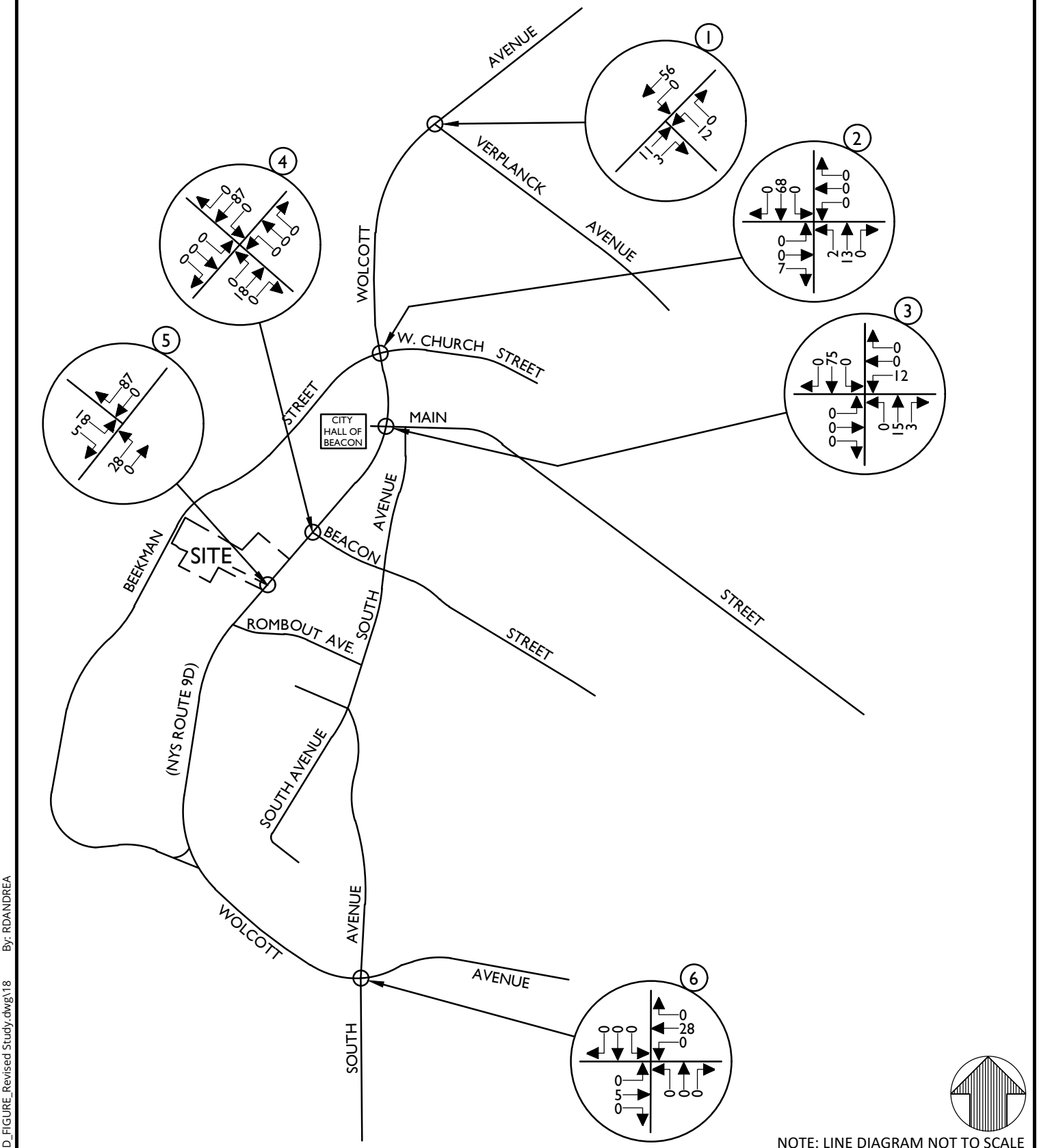
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
EVENT EXIT
SITE GENERATED TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER: 17

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\17 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

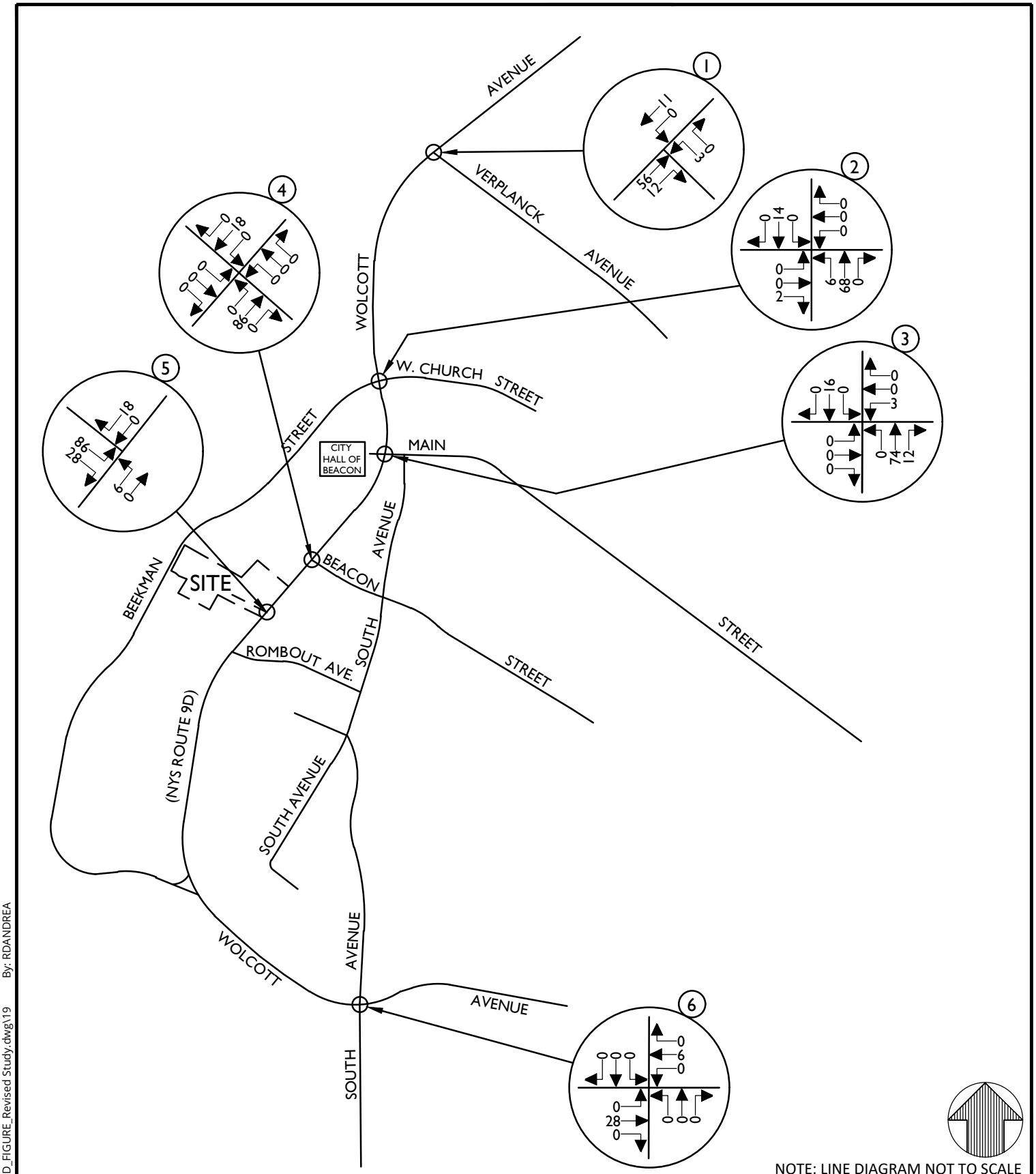
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
EVENT ENTRY
SITE GENERATED TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER: 18

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\18 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

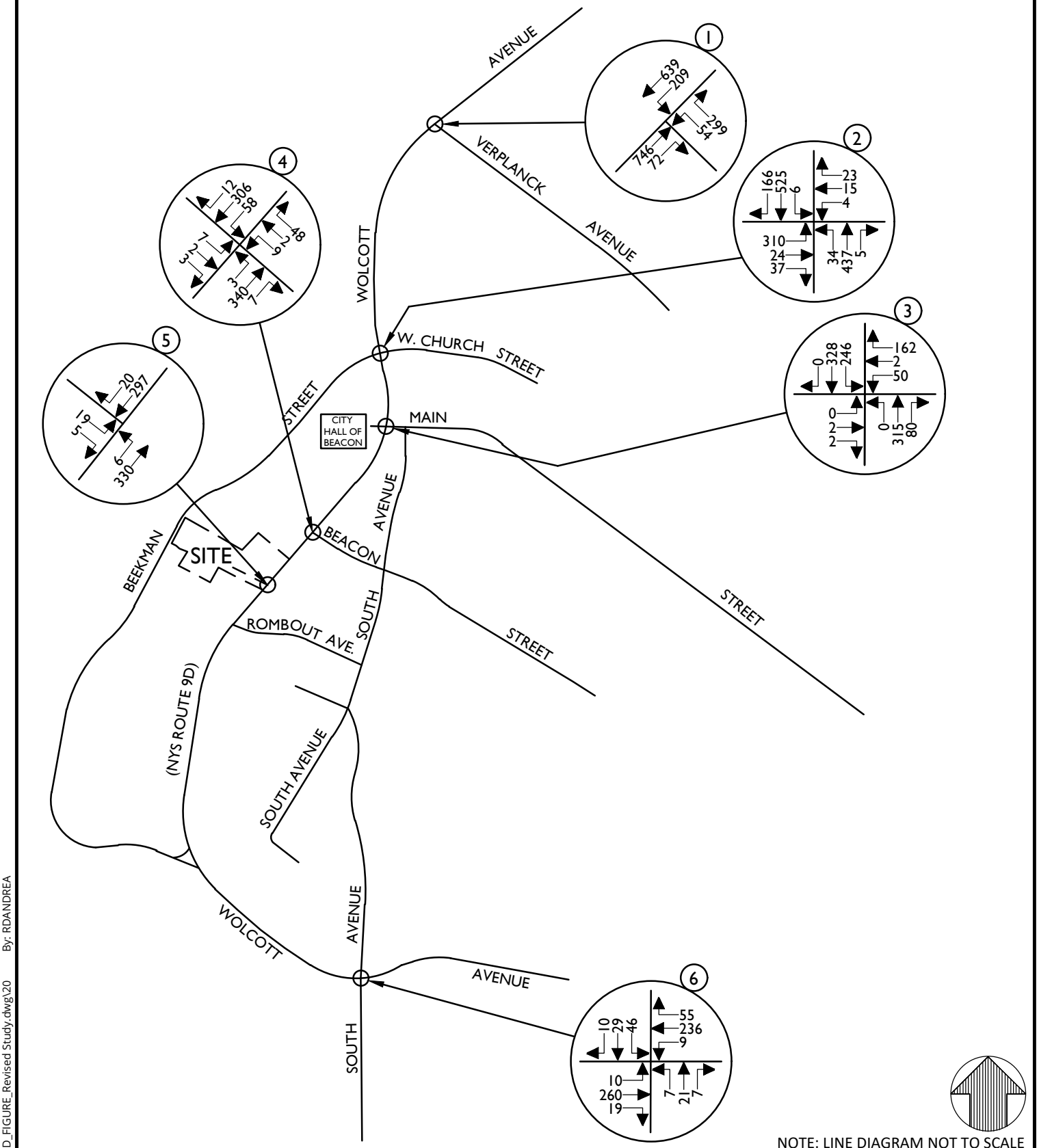
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
EVENT EXIT
SITE GENERATED TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER: 19

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\19 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

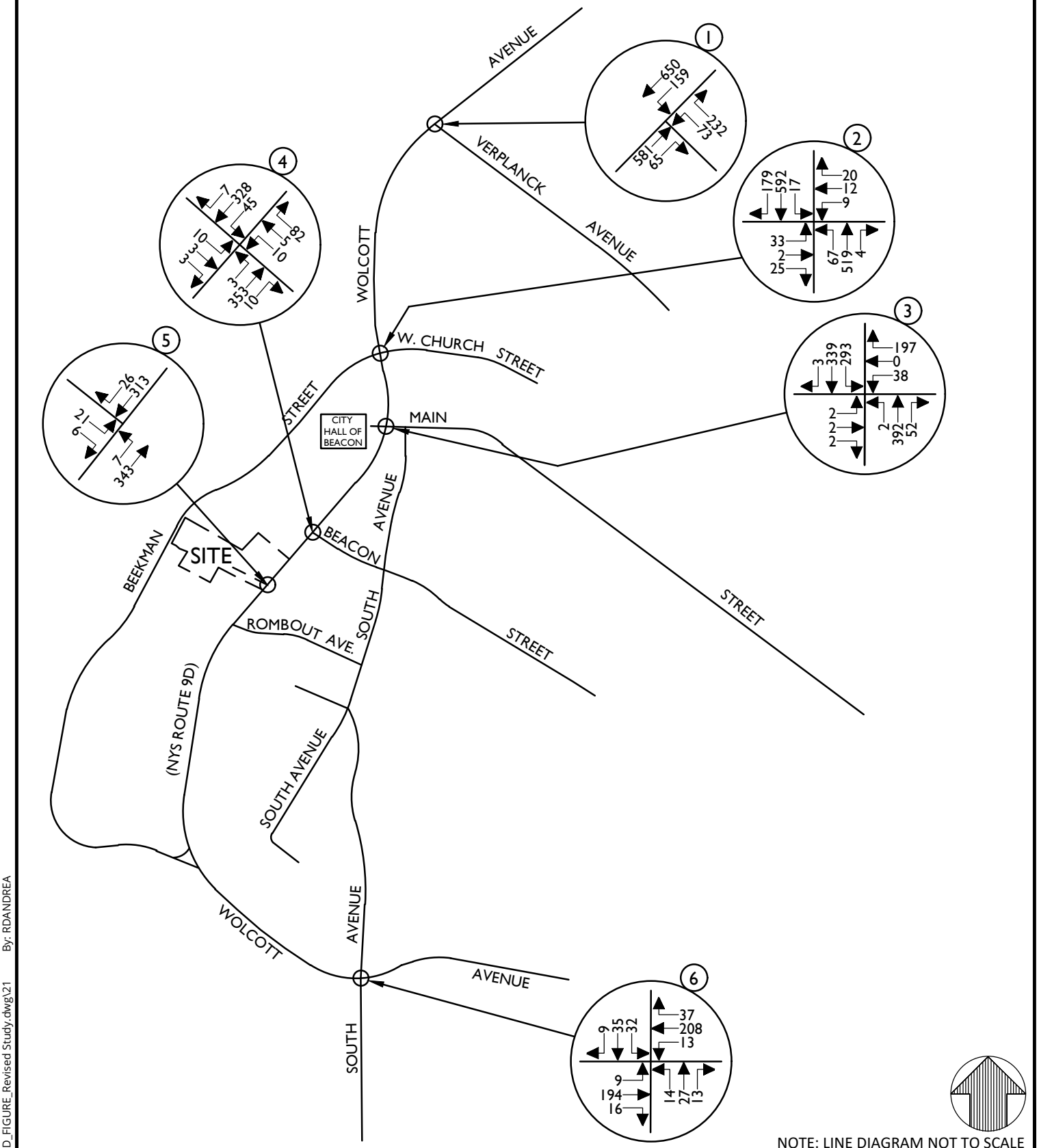
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
TYPICAL CONDITIONS
2024 BUILD TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER: 20

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\20 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

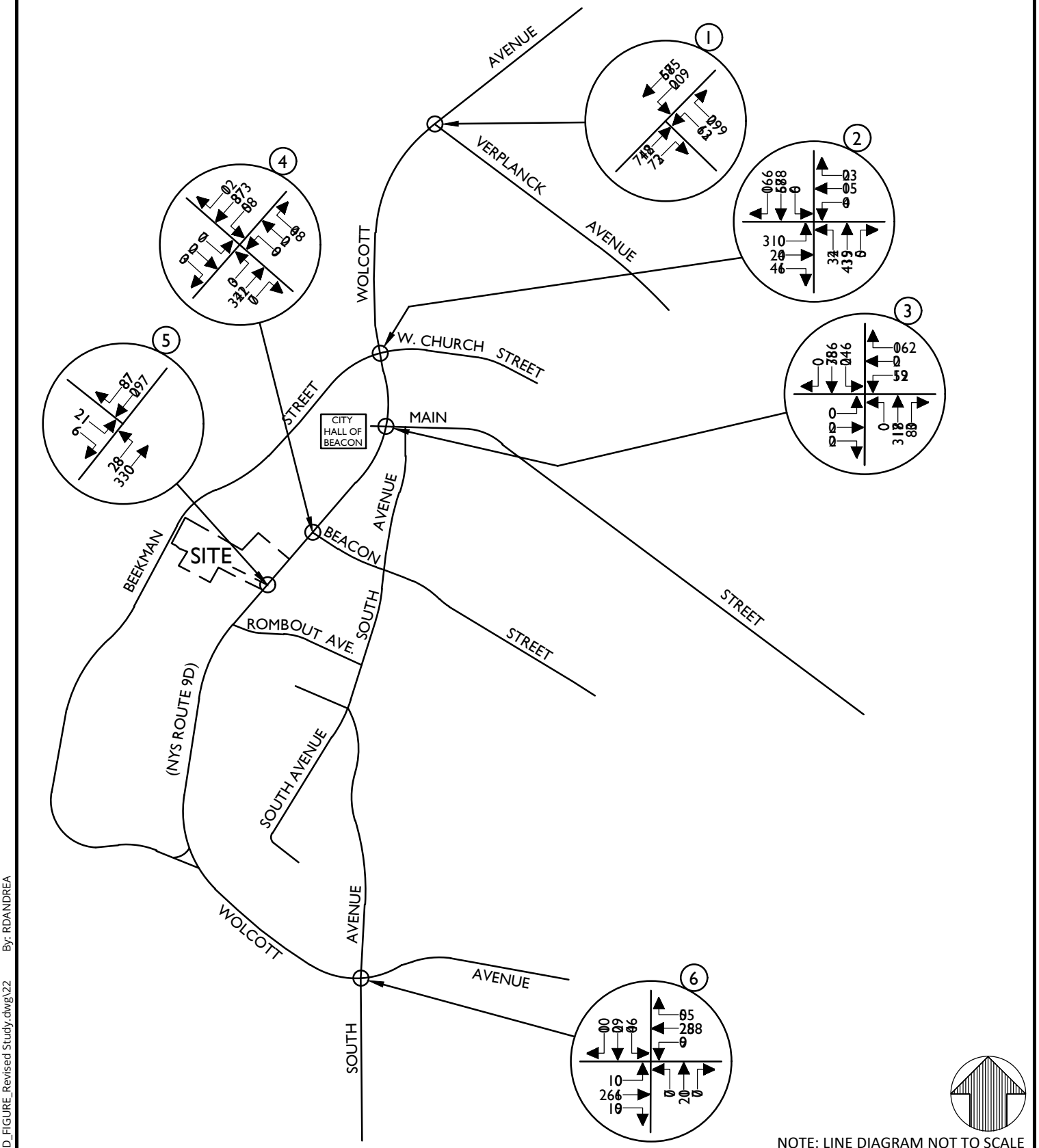
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
TYPICAL CONDITIONS
2024 BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER: 21

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\21 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

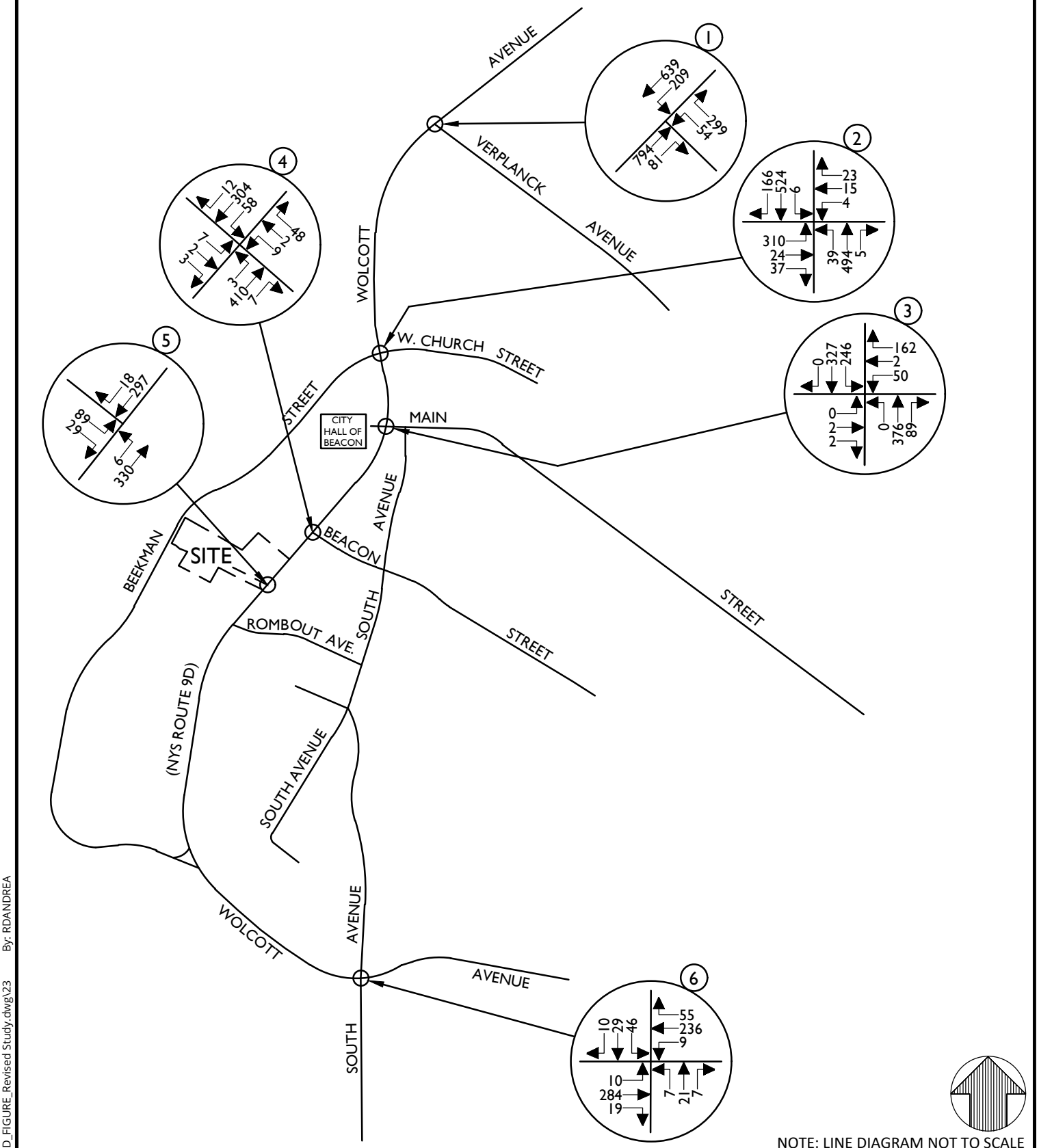
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
EVENT ENTRY
2024 BUILD TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER: 22

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\22 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

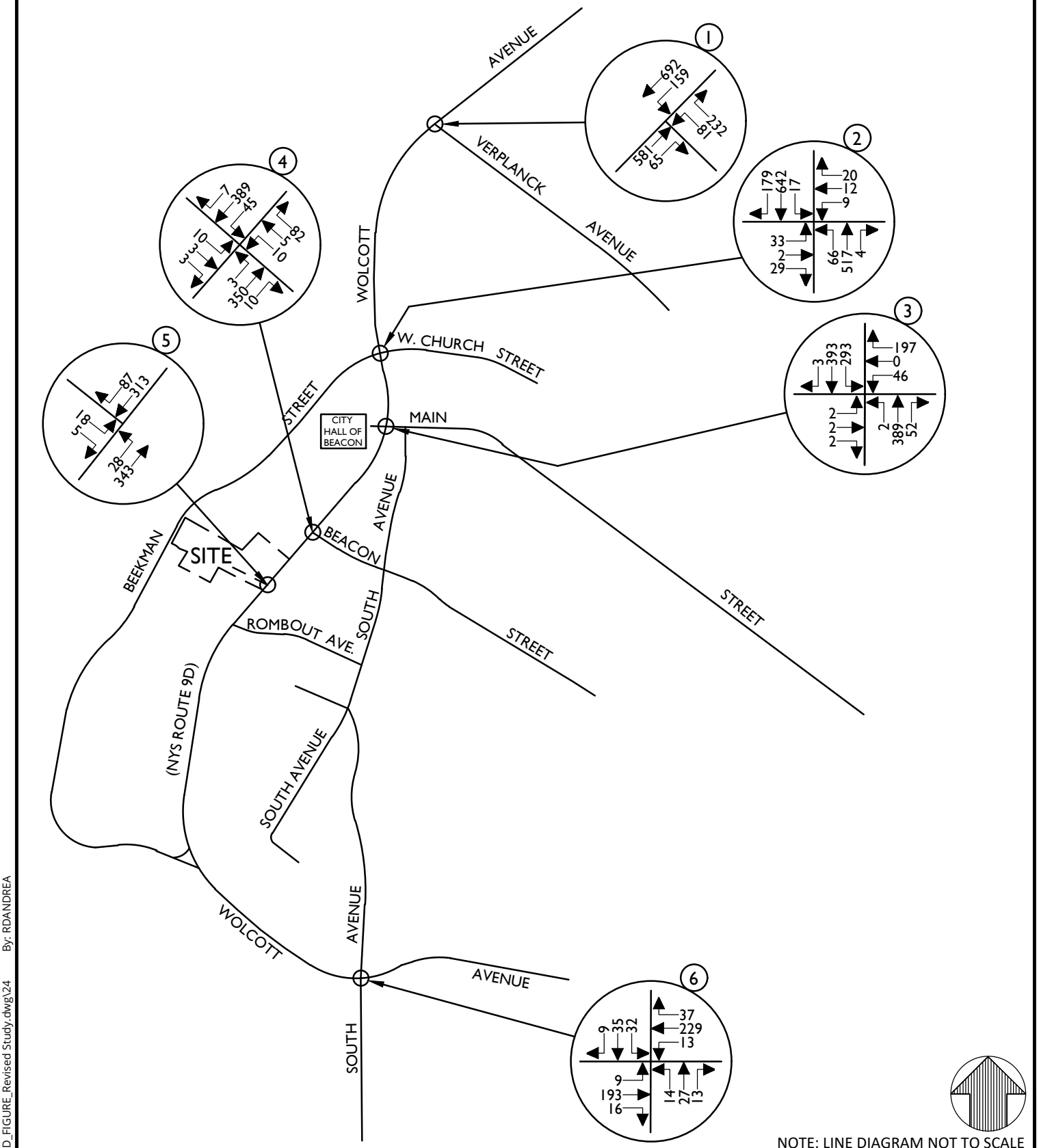
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
EVENT EXIT
2024 BUILD TRAFFIC VOLUMES
FRIDAY PM PEAK HOUR

SHEET NUMBER: 23

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\23 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
Know what's below. Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

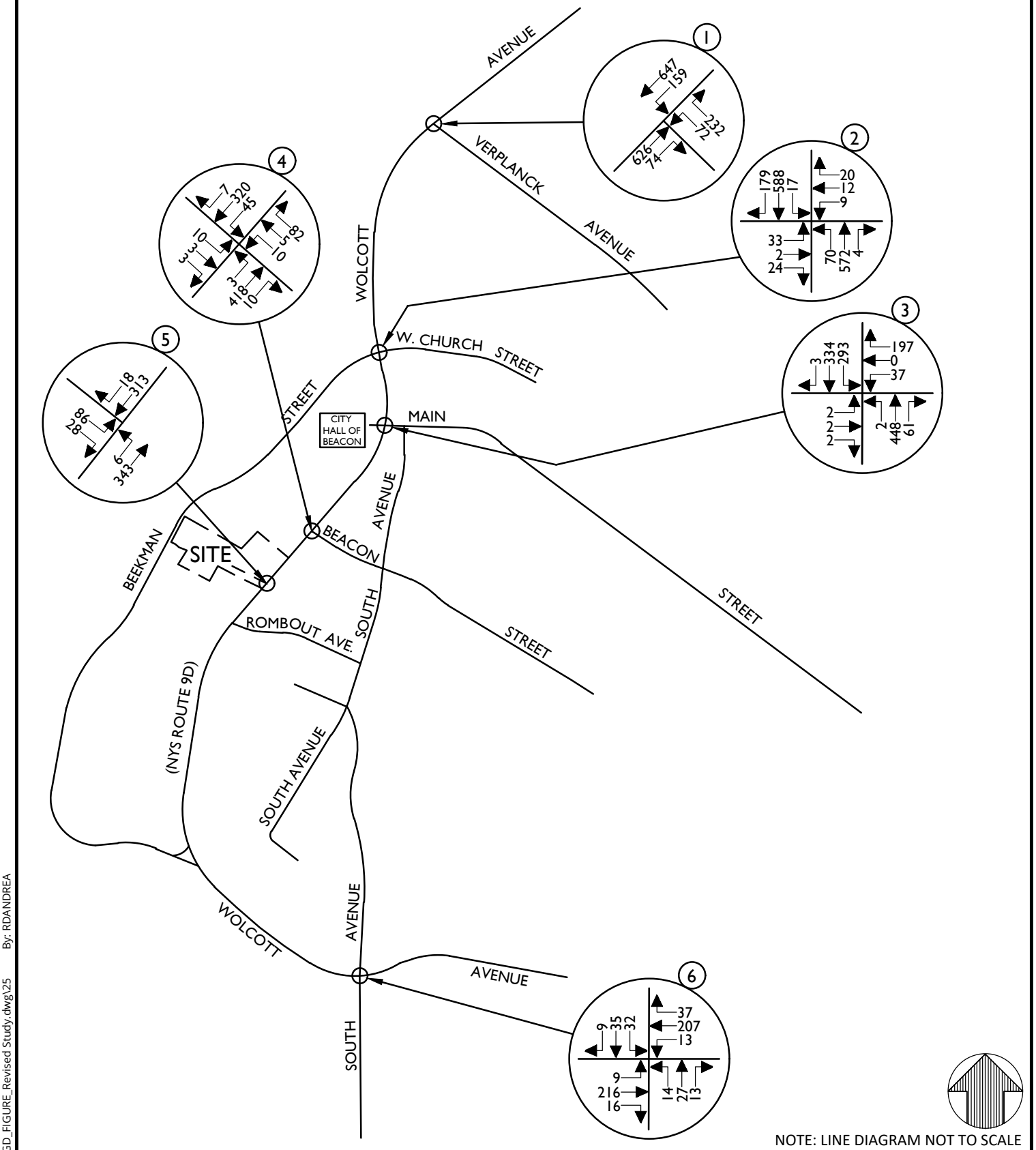
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER:	DRAWING NAME:
21004333A	220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
EVENT ENTRY
2024 BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER: 24

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\24 By: RDANDREA



NOTE: LINE DIAGRAM NOT TO SCALE

Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

PROPHECY THEATER

1113 WOLCOTT AVENUE
(NYS ROUTE 9D)
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING
ENGINEERING & LAND SURVEYING

TRAFFIC IMPACT STUDY

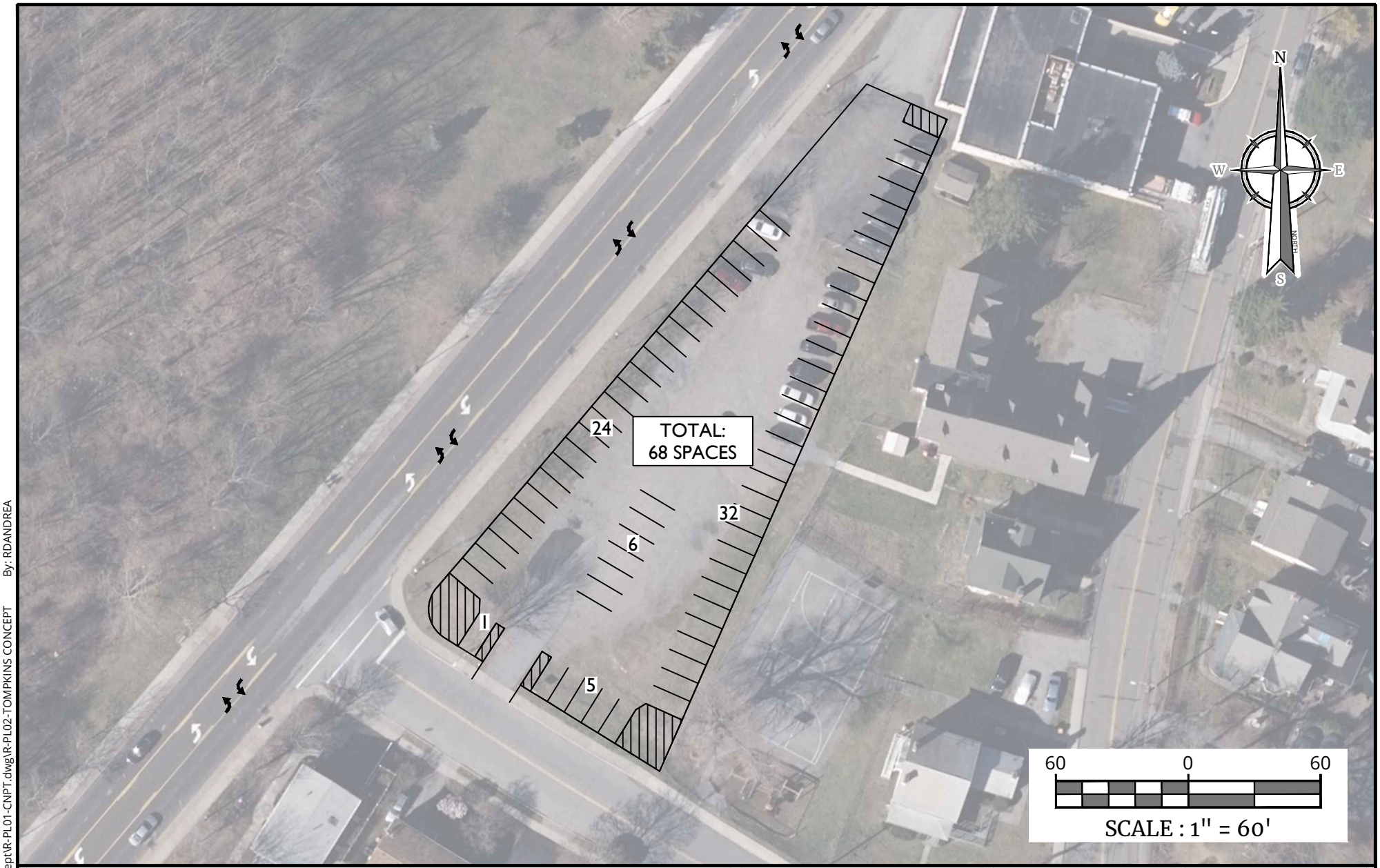
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	10/5/21	R.H.	P.J.G.

PROJECT NUMBER: 21004333A
DRAWING NAME: 220221RGD_FIGURE_REVISED STUDY

SHEET TITLE:
EVENT EXIT
2024 BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER: 25

4333A\Reports\TrafficFigures\220221RGD_FIGURE_Revised Study.dwg\25 By: RDANDREA



Colliers Engineering & Design

www.colliersengineering.com

Doing Business as MASER CONSULTING

Copyright © 2022. Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

REV	DATE	DRAWN BY	DESCRIPTION
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

CONCEPTUAL PARKING LAYOUT
FOR
TOMPKINS FIRE PARKING LOT

NYS ROUTE 9D (WOLCOTT AVENUE)
AT BEACON STREET
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

811 Know what's below. Call before you dig.

PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design

WESTCHESTER
400 Columbus Avenue,
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500

COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

TRAFFIC & PARKING STUDY

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	02/21/22	RGD	---

PROJECT NUMBER:	DRAWING NAME:
21004333A	R-PL01-CNPT

SHEET TITLE:
CONCEPTUAL PARKING PLAN

SHEET NUMBER:
DRAWING CP-1

2021\21004333A\Transportation\Concept\R-PL01-CNPT.dwg\R-PL02-TOMPKINS CONCEPT By: RDANDREA

Appendix

Appendix B | Tables

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

1113 Wolcott Avenue City of Beacon, New York	Entry			Exit			Total Trips
	HTGR[1]	Volume	New Trips[2]	HTGR1	HTGR[1]	New Trips[2]	
Typical Conditions							
Weekday Peak PM Hour							
Hotel (30 Rooms)	0.37	11	9	0.40	12	8	17
Café (50 Seats)	0.12	15	12	0.10	12	9	21
Total	-	**26**	**21**	-	**24**	**17**	**38**
Saturday Midday Peak Hour							
Hotel (30 Rooms)	0.60	18	14	0.50	15	12	26
Café (50 Seats)	0.12	15	12	0.10	12	9	21
Total	-	**33**	**26**	-	**27**	**21**	**47**
Event Conditions							
Weekday Peak Event Entry Hour							
Hotel (30 Rooms)	0.37	11	6	0.40	12	8	14
Event (350 Persons)	1.02	127	109	0.20	25	19	128
Total	-	**138**	**115**	-	**37**	**27**	**142**
Weekday Peak Event Exit Hour							
Hotel (30 Rooms)	0.37	11	6	0.40	12	8	14
Event (350 Persons)	0.20	25	18	1.02	127	110	128
Total	-	**36**	**24**	-	**139**	**118**	**142**
Saturday Peak Event Entry Hour							
Hotel (30 Rooms)	0.50	15	8	0.40	12	6	14
Event (350 Persons)	1.02	127	107	0.20	25	17	124
Total	-	**142**	**115**	-	**37**	**23**	**138**
Saturday Peak Event Exit Hour							
Hotel (30 Rooms)	0.50	15	8	0.40	12	6	14
Event (350 Persons)	0.20	25	16	1.02	127	108	124
Total	-	**40**	**24**	-	**139**	**114**	**138**

NOTES:

1) The Hotel and Café 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 - 310 - Hotel and Land Use - 932 - High-Turnover (Sit-Down) Restaurant. The Event traffic generation is based on a 2.75 Persons per Vehicle car occupancy ratio for the maximum of 350 guests. It is assumed that all guests will enter in a one hour period prior to the event and exit in a one hour period following the event.

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

				2021 Existing			2024 No-Build			2024 Build Typical Conditions			2024 Build Event Entry Conditions			2024 Build Event Exit Conditions		
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
1	**NYS Route 9D & Verplanck Avenue**	**Signalized**																
	Verplanck Avenue	WB	L	0.14	D	39.6	0.16	D	40.8	0.16	D	39.9	0.19	D	40.3	0.16	D	39.9
			R	0.53	D	36.4	0.64	D	41.1	0.63	D	39.6	0.63	D	39.6	0.63	D	39.6
		WB Approach			*D*	*36.9*		*D*	*41.0*		*D*	*39.6*		*D*	*39.7*		*D*	*39.6*
	NYS Route 9D	NB	TR	0.83	C	30.8	0.88	D	35.2	0.91	D	38.5	0.91	D	38.8	0.97	D	49.5
		NB Approach			*C*	*30.8*		*D*	*35.2*		*D*	*38.5*		*D*	*38.8*		*D*	*49.5*
	NYS Route 9D	SB	L	0.54	C	25.3	0.63	C	31.9	0.66	C	34.6	0.66	D	35.1	0.75	D	51.0
			T	0.46	A	8.8	0.51	A	9.3	0.52	A	9.6	0.56	B	10.2	0.52	A	9.6
		SB Approach			*B*	*13.0*		*B*	*14.9*		*B*	*15.8*		*B*	*16.0*		*B*	*19.8*
		Overall			**C**	**24.4**		**C**	**27.7**		**C**	**29.1**		**C**	**29.1**		**D**	**35.7**
2	**NYS Route 9D & Beekman Street/W. Church Street**	**Unsignalized**																
	Beekman Street	EB	LT	2.17	F	573.4	2.33	F	647.2	2.33	F	648.2	2.33	F	648.2	2.34	F	651.0
			R	0.08	B	17.1	0.08	B	17.2	0.09	B	17.3	0.10	B	17.4	0.09	B	17.4
		EB Approach			*F*	*520.9*		*F*	*587.9*		*F*	*585.5*		*F*	*579.1*		*F*	*588.0*
	W. Church Street	WB	LTR	0.09	B	18.4	0.12	B	18.5	0.12	B	18.5	0.12	B	18.5	0.12	B	18.6
		WB Approach			*B*	*18.4*		*B*	*18.5*		*B*	*18.5*		*B*	*18.5*		*B*	*18.6*
	NYS Route 9D	NB	L	0.16	B	17.1	0.21	B	19.0	0.23	B	19.6	0.29	C	21.1	0.26	B	19.8
			TR	0.54	B	19	0.60	C	20.2	0.61	C	20.6	0.62	C	20.7	0.69	C	22.7
		NB Approach			*B*	*18.9*		*C*	*20.1*		*C*	*20.5*		*C*	*20.7*		*C*	*22.5*
	NYS Route 9D	SB	L	0.01	B	14.4	0.02	B	14.7	0.02	B	14.8	0.02	B	14.9	0.02	B	15.6
			TR	0.83	C	31.3	0.92	D	40.6	0.94	D	44.0	1.01	F	58.9	0.94	D	44.3
		SB Approach			*C*	*31.2*		*D*	*40.4*		*D*	*43.7*		*E*	*58.5*		*D*	*44.0*
		Overall			**F**	**172.5**		**F**	**191.1**		**F**	**189.6**		**F**	**190.6**		**F**	**184.6**
	<u>With Signal Timing & Phasing Modifications</u>																	
	Beekman Street	EB	LT	-	-	-	-	-	-	1.23	F	152.5	1.29	F	178.2	1.24	F	155
			R	-	-	-	-	-	-	0.15	C	22.1	0.18	C	23.8	0.15	C	22.2
		EB Approach		-	-	-	-	-	-		*F*	*139.8*		*F*	*161.3*		*F*	*141.8*
	W. Church Street	WB	LTR	-	-	-	-	-	-	0.83	E	59.6	0.84	E	61.7	0.83	E	60.0
		WB Approach		-	-	-	-	-	-		*E*	*59.6*		*E*	*61.7*		*E*	*60.0*
	NYS Route 9D	NB	L	-	-	-	-	-	-	0.20	B	16.1	0.22	B	17.0	0.23	B	16.2
			TR	-	-	-	-	-	-	0.61	B	15.1	0.58	B	14.6	0.68	B	16.6
		NB Approach		-	-	-	-	-	-		*B*	*15.2*		*B*	*14.8*		*B*	*16.6*
	NYS Route 9D	SB	L	-	-	-	-	-	-	0.02	B	12.2	0.02	B	11.8	0.02	B	12.8
			TR	-	-	-	-	-	-	0.93	C	33.4	0.95	D	37.8	0.93	C	33.6
		SB Approach		-	-	-	-	-	-		*C*	*33.2*		*D*	*37.6*		*C*	*33.5*
		Overall		**-**	**-**	**-**	**-**	**-**	**-**		**E**	**58.5**		**E**	**65.7**		**E**	**58.0**
3	**NYS Route 9D & Main Street/City Hall**	**Signalized**																
	City Hall	EB	LTR	0.02	C	23.7	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7
		EB Approach			*C*	*23.7*		*C*	*23.7*		*C*	*23.7*		*C*	*23.7*		*C*	*23.7*
	Main Street	WB	LT	0.13	C	24.5	0.18	C	24.8	0.19	C	24.9	0.23	C	25.2	0.19	C	24.9
			R	0.56	C	24.2	0.59	C	24.5	0.59	C	24.5	0.59	C	24.5	0.59	C	24.5
		WB Approach			*C*	*24.2*		*C*	*24.6*		*C*	*24.6*		*C*	*24.7*		*C*	*24.6*
	NYS Route 9D	NB	L	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0
			TR	0.41	A	8.8	0.47	A	9.5	0.49	A	9.8	0.49	A	9.8	0.58	B	11.0
		NB Approach			*A*	*8.8*		*A*	*9.5*		*A*	*9.8*		*A*	*9.8*		*B*	*11.0*
	NYS Route 9D	SB	L	0.38	B	10.8	0.47	B	13.0	0.48	B	13.7	0.49	B	13.8	0.54	B	16.8
			TR	0.30	A	7.7	0.34	A	8.1	0.36	A	8.2	0.42	A	8.9	0.35	A	8.2
		SB Approach			*A*	*9.0*		*B*	*10.2*		*B*	*10.6*		*B*	*10.8*		*B*	*11.9*
		Overall			**B**	**11.6**		**B**	**12.5**		**B**	**12.7**		**B**	**12.8**		**B**	**13.6**

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

				2021 Existing			2024 No-Build			2024 Build Typical Conditions			2024 Build Event Entry Conditions			2024 Build Event Exit Conditions		
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
4	**NYS Route 9D & Beacon Street/West End Lofts**	**Unsignalized**																
	West End Lofts	EB	LTR	0.04	C	17.9	0.06	C	20.4	0.07	C	21.9	0.07	C	24.0	0.08	D	25.0
	Beacon Street	WB	LTR	0.15	B	12.5	0.18	B	13.8	0.19	B	14.3	0.2	B	14.8	0.21	C	15.9
	NYS Route 9D	NB	LTR	0.00	A	7.8	0.00	A	7.9	0.00	A	8.0	0.00	A	8.1	0.00	A	8.0
	NYS Route 9D	SB	LTR	0.52	A	8.3	0.06	A	8.5	0.06	A	8.6	0.06	A	8.6	0.07	A	9.0
5	**NYS Route 9D & Site Access**	**Unsignalized**																
		EB	LR	-	-	-	-	-	-	0.05	B	12.0	0.06	B	12.5	0.24	B	13.7
		NB	LT	-	-	-	-	-	-	0.01	A	8.0	0.03	A	8.2	0.01	A	8.0
6	**NYS Route 9D & South Avenue**	**Signalized**																
	NYS Route 9D	EB	LTR	0.33	C	23.4	0.37	C	24.0	0.37	C	24.1	0.37	C	24.1	0.4	C	24.7
	NYS Route 9D	WB	LTR	0.37	C	24.1	0.41	C	24.8	0.42	C	24.9	0.45	C	25.6	0.42	C	25.0
	South Avenue	NB	LTR	0.03	B	19.1	0.05	B	19.4	0.05	B	19.4	0.05	B	19.4	0.05	B	19.4
	South Avenue	SB	LTR	0.11	C	20.1	0.15	C	20.6	0.15	C	20.6	0.15	C	20.6	0.15	C	20.6
		Overall			**C**	**23.2**		**C**	**23.7**		**C**	**23.8**		**C**	**24.1**		**C**	**24.0**

NOTES:

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

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

				2021 Existing			2024 No-Build			2024 Build Typical Conditions			2024 Build Event Entry Conditions			2024 Build Event Exit Conditions		
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
1	**NYS Route 9D & Verplanck Avenue**	**Signalized**																
	Verplanck Avenue	WB	L	0.20	D	40.4	0.21	D	40.6	0.22	D	40.8	0.24	D	41.2	0.22	D	40.8
			R	0.41	C	33.3	0.49	D	35.2	0.49	D	35.2	0.49	D	35.2	0.49	D	35.2
		WB Approach			*D*	*35.1*		*D*	*36.4*		*D*	*36.5*		*D*	*36.7*		*D*	*36.5*
	NYS Route 9D	NB	TR	0.64	C	22.6	0.70	C	24.6	0.72	C	25.2	0.72	C	25.2	0.78	C	27.9
		NB Approach			*C*	*22.6*		*C*	*24.6*		*C*	*25.2*		*C*	*25.2*		*C*	*27.9*
	NYS Route 9D	SB	L	0.31	B	13.3	0.36	B	15.7	0.37	B	16.4	0.37	B	16.4	0.40	B	19.3
			T	0.47	A	8.8	0.52	A	9.6	0.53	A	9.7	0.57	B	10.3	0.53	A	9.7
		SB Approach			*A*	*9.7*		*B*	*10.8*		*B*	*11.0*		*B*	*11.4*		*B*	*11.6*
		Overall			**B**	**18.7**		**C**	**20.3**		**C**	**20.7**		**C**	**20.7**		**C**	**22.1**
2	**NYS Route 9D & Beekman Street/W. Church Street**	**Unsignalized**																
	Beekman Street	EB	LT	0.17	C	25.0	0.19	C	25.1	0.18	C	25.0	0.19	C	25.1	0.19	C	25.1
			R	0.22	C	25.4	0.24	C	25.5	0.27	C	25.8	0.30	C	26.0	0.26	C	25.7
		EB Approach			*C*	*25.2*		*C*	*25.2*		*C*	*25.3*		*C*	*25.5*		*C*	*25.4*
	W. Church Street	WB	LTR	0.17	C	24.9	0.24	C	25.3	0.24	C	25.3	0.24	C	25.3	0.24	C	25.4
		WB Approach			*C*	*24.9*		*C*	*25.3*		*C*	*25.3*		*C*	*25.3*		*C*	*25.4*
	NYS Route 9D	NB	L	0.14	A	5.9	0.17	A	7.1	0.18	A	7.4	0.20	A	8.4	0.19	A	7.4
			TR	0.40	A	6.0	0.44	A	6.5	0.45	A	6.6	0.45	A	6.6	0.50	A	7.1
		NB Approach			*A*	*6.0*		*A*	*6.5*		*A*	*6.7*		*A*	*6.8*		*A*	*7.1*
	NYS Route 9D	SB	L	0.03	A	4.3	0.03	A	4.5	0.03	A	4.6	0.03	A	4.6	0.03	A	4.8
			TR	0.66	B	10.6	0.74	B	12.6	0.76	B	13.2	0.80	B	15.1	0.75	B	13.2
		SB Approach			*B*	*10.4*		*B*	*12.4*		*B*	*13.1*		*B*	*14.9*		*B*	*13.0*
		Overall			**A**	**9.8**		**B**	**11.2**		**B**	**11.6**		**B**	**12.7**		**B**	**11.6**
3	**NYS Route 9D & Main Street/City Hall**	**Signalized**																
	City Hall	EB	LTR	0.01	C	23.6	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7	0.03	C	23.7
		EB Approach			*C*	*23.6*		*C*	*23.7*		*C*	*23.7*		*C*	*23.7*		*C*	*23.7*
	Main Street	WB	LT	0.09	C	24.1	0.13	C	24.3	0.14	C	24.4	0.17	C	24.6	0.14	C	24.4
			R	0.66	C	25.5	0.70	C	26.2	0.70	C	26.1	0.70	C	26.1	0.70	C	26.1
		WB Approach			*C*	*25.4*		*C*	*25.9*		*C*	*25.9*		*C*	*25.9*		*C*	*25.9*
	NYS Route 9D	NB	L	0.00	A	6.4	0.00	A	6.9	0.00	A	7.1	0.00	A	7.8	0.00	A	7.1
			TR	0.40	A	8.7	0.46	A	9.4	0.49	A	9.7	0.48	A	9.7	0.56	B	10.7
		NB Approach			*A*	*8.7*		*A*	*9.4*		*A*	*9.7*		*A*	*9.7*		*B*	*10.7*
	NYS Route 9D	SB	L	0.44	B	11.4	0.53	B	13.9	0.55	B	14.7	0.54	B	14.6	0.60	B	17.5
			TR	0.29	A	7.7	0.33	A	8.1	0.35	A	8.3	0.41	A	8.8	0.35	A	8.2
		SB Approach			*A*	*9.5*		*B*	*10.9*		*B*	*11.2*		*B*	*11.3*		*B*	*12.5*
		Overall			**B**	**12.2**		**B**	**13.2**		**B**	**13.4**		**B**	**13.4**		**B**	**14.2**
4	**NYS Route 9D & Beacon Street/West End Lofts**	**Unsignalized**																
	West End Lofts	EB	LTR	0.07	C	18.4	0.11	C	21.5	0.12	C	23.3	0.13	D	25.5	0.13	D	25.7
	Beacon Street	WB	LTR	0.17	B	12.1	0.21	B	13.3	0.21	B	13.7	0.22	B	14.0	0.23	B	14.8
	NYS Route 9D	NB	LTR	0.00	A	7.8	0.00	A	7.9	0.00	A	8.0	0.00	A	8.2	0.00	A	8.0
	NYS Route 9D	SB	LTR	0.04	A	8.1	0.04	A	8.3	0.04	A	8.3	0.04	A	8.3	0.05	A	8.6

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

				2021 Existing			2024 No-Build			2024 Build Typical Conditions			2024 Build Event Entry Conditions			2024 Build Event Exit Conditions		
				v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay
5	NYS Route 9D &	Unsignalized																
	Site Access	EB	LR	-	-	-	-	-	-	0.06	B	12.3	0.05	B	12.8	0.23	B	13.8
		NB	LT	-	-	-	-	-	-	0.01	A	8.1	0.03	A	8.3	0.01	A	8.0
6	NYS Route 9D &	Signalized																
	South Avenue																	
	NYS Route 9D	EB	LTR	0.27	C	22.4	0.30	C	22.9	0.31	C	23.1	0.31	C	23.0	0.34	C	23.6
	NYS Route 9D	WB	LTR	0.31	C	23.0	0.34	C	23.5	0.35	C	23.7	0.38	C	24.2	0.35	C	23.7
	South Avenue	NB	LTR	0.08	B	19.7	0.12	C	20.2	0.12	C	20.2	0.12	C	20.2	0.12	C	20.2
	South Avenue	SB	LTR	0.08	B	19.7	0.13	C	20.3	0.13	C	20.3	0.13	C	20.3	0.13	C	20.3
		Overall			**C**	**22.1**		**C**	**22.5**		**C**	**22.6**		**C**	**22.8**		**C**	**22.8**

NOTES:

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

Colliers Engineering & Design

Table No. 3
Sight Distance Summary Table
Wolcott Avenue (NYS Route 9D) at Site Access

Roadway Design Speed 38 MPH		Available Sight Distance (ft.)		AASHTO Sight Distances	
		Existing	Proposed	Stopping Sight Distance (ft.)	Intersection Sight Distance (ft.)
Main Access Driveway					
Left Turn From Minor Road (Site Access)	Looking Left	435	435	278	419
	Looking Right	545	545	278	419
Left Turn From Major Road (Wolcott Avenue)	Left Turn Entry	450	450	278	307
	Rear End	500	500	278	-
North Exit Driveway					
Left Turn From Minor Road (Site Access)	Looking Left	500	500	278	419
	Looking Right	575	575	278	419
Left Turn From Major Road (Wolcott Avenue)	Left Turn Entry	-	-	-	-
	Rear End	-	-	-	-

Notes:

1) AASHTO Sight Distances are based on a 38 MPH operating speed along the roadway in the vicinity of the Site Access location
2) Available Sight Distances shown are for existing conditions and for future conditions after completion any improvements such as Vegetative Pruning/Clearing .

Table No. 4
Area Parking Observations Summary

Time of Day	Observed Available Parking Spaces						
	Tompkins Lot	Municipal Plaza	Beekman St. On-Street	Cross Lot	Cliff Lot	Beacon Center Lot	Beacon Metro North Train Station
Total Spaces	68	76	70±	18	19	92	---
Friday September 24, 2021							
1:00 PM	Not Observed This Day	Not Observed This Day	65	3	1	8	Not Specifically Counted
2:00 PM			65	3	1	7	
3:00 PM			65	3	-	6	
4:00 PM			65	2	2	10	
5:00 PM			66	-	1	12	
6:00 PM			67	1	-	15	
7:00 PM			70	2	-	18	
8:00 PM			70	5	3	22	
Saturday September 25, 2021							
1:00 PM	Not Observed This Day	Not Observed This Day	70	1	3	25	Not Specifically Counted
2:00 PM			70	-	3	20	
3:00 PM			70	1	2	21	
4:00 PM			70	1	1	19	
5:00 PM			70	-	-	16	
6:00 PM			70	-	-	18	
7:00 PM			70	-	-	20	
8:00 PM			70	1	1	19	
Friday November 5, 2021							
1:00 PM	65	Not Specifically Counted	64	2	2	5	Not Specifically Counted
2:00 PM	65		64	2	3	8	
3:00 PM	65		64	1	2	9	
4:00 PM	66		65	-	1	7	
5:00 PM	68	55	65	-	1	10	
6:00 PM	68	73	67	1	1	13	
7:00 PM	66	76	69	-	2	19	
8:00 PM	66	76	70	3	2	21	
Saturday November 6, 2021							
1:00 PM	65	76	70	2	3	22	Not Specifically Counted
2:00 PM	65	76	70	1	1	20	
3:00 PM	65	76	70	1	-	23	
4:00 PM	66	76	70	-	-	25	
5:00 PM	65	76	70	-	-	19	
6:00 PM	66	76	70	-	2	18	
7:00 PM	66	76	70	-	1	17	
8:00 PM	67	76	70	1	1	19	
Friday January 21, 2021							
1:00 PM	-	20	-	-	-	-	Not Specifically Counted
2:00 PM	-	23	-	-	-	-	
3:00 PM	-	21	-	-	-	-	
4:00 PM	-	26	-	-	-	-	
5:00 PM	-	36	-	-	-	-	

Appendix

Appendix C | Level of Service Standards

Level of Service Standards

Level of Service for Signalized Intersections

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Appendix

Appendix D | Capacity Analysis



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	48	253	680	65	197	565
Future Volume (vph)	48	253	680	65	197	565
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.129	
Satd. Flow (perm)	1725	1544	1813	0	241	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	275	739	71	214	614
Shared Lane Traffic (%)						
Lane Group Flow (vph)	52	275	810	0	214	614
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.14	0.47	0.82		0.59	0.46
Control Delay	40.2	31.9	31.6		16.7	9.0

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	40.2	31.9	31.6		16.7	9.0
Queue Length 50th (ft)	33	160	499		49	184
Queue Length 95th (ft)	69	243	694		117	254
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	982		362	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.14	0.47	0.82		0.59	0.46

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 70	
Control Type: Pretimed	

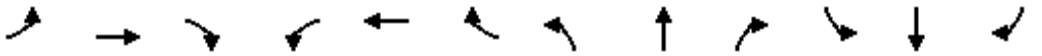
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	48	253	680	65	197	565
Future Volume (veh/h)	48	253	680	65	197	565
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	52	275	739	71	214	614
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	893	86	397	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1648	158	1783	1872
Grp Volume(v), veh/h	52	275	0	810	214	614
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872
Q Serve(g_s), s	2.9	17.3	0.0	44.7	5.2	17.1
Cycle Q Clear(g_c), s	2.9	17.3	0.0	44.7	5.2	17.1
Prop In Lane	1.00	1.00		0.09	1.00	
Lane Grp Cap(c), veh/h	360	515	0	979	397	1326
V/C Ratio(X)	0.14	0.53	0.00	0.83	0.54	0.46
Avail Cap(c_a), veh/h	360	515	0	979	397	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	32.4	0.0	22.8	20.1	7.6
Incr Delay (d2), s/veh	0.8	3.9	0.0	8.0	5.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	8.0	0.0	24.2	4.6	9.1
LnGrp Delay(d),s/veh	39.6	36.4	0.0	30.8	25.3	8.8
LnGrp LOS	D	D		C	C	A
Approach Vol, veh/h	327		810			828
Approach Delay, s/veh	36.9		30.8			13.0
Approach LOS	D		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.4
HCM 2010 LOS	C

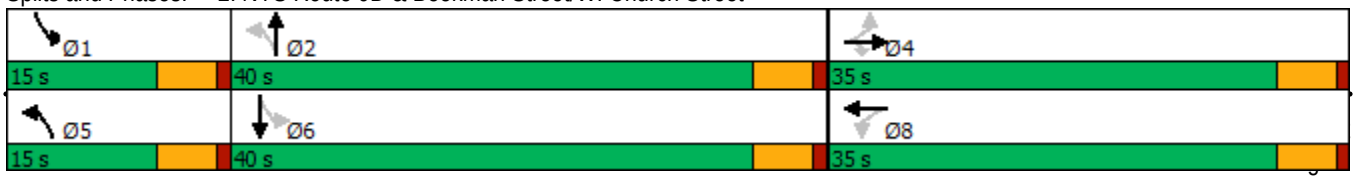


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	292	22	33	3	14	13	30	385	4	5	453	156
Future Volume (vph)	292	22	33	3	14	13	30	385	4	5	453	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.98		0.98			1.00			0.99	
Frt			0.850		0.941			0.998			0.962	
Flt Protected		0.956			0.995		0.950			0.950		
Satd. Flow (prot)	0	1761	1599	0	1764	0	1805	1915	0	1778	1770	0
Flt Permitted		0.718			0.969		0.174			0.388		
Satd. Flow (perm)	0	1322	1562	0	1717	0	331	1915	0	726	1770	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		14			1			23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	411	31	46	3	15	14	36	458	5	5	462	159
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	442	46	0	32	0	36	463	0	5	621	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.91	0.07		0.05		0.13	0.50		0.01	0.81	
Control Delay		52.8	1.6		13.6		10.5	17.2		9.6	31.2	
Queue Delay		0.0	0.0		0.0		0.0	2.5		0.0	0.0	
Total Delay		52.8	1.6		13.6		10.5	19.8		9.6	31.2	
Queue Length 50th (ft)		233	0		6		9	144		1	290	
Queue Length 95th (ft)		#284	0		26		21	260		6	#500	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		484	626		638		348	931		489	770	
Starvation Cap Reductn		0	0		0		0	336		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.91	0.07		0.05		0.10	0.78		0.01	0.81	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 82.3	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	292	22	33	3	14	13	30	385	4	5	453	156
Future Volume (veh/h)	292	22	33	3	14	13	30	385	4	5	453	156
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1932	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	411	31	46	3	15	14	36	458	5	5	462	159
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	196	8	582	48	180	140	228	848	9	349	557	192
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.43	0.43
Sat Flow, veh/h	305	23	1594	0	492	383	1810	1894	21	1782	1308	450
Grp Volume(v), veh/h	442	0	46	32	0	0	36	0	463	5	0	621
Grp Sat Flow(s),veh/h/ln	328	0	1594	875	0	0	1810	0	1915	1782	0	1758
Q Serve(g_s), s	0.0	0.0	1.6	0.0	0.0	0.0	0.9	0.0	14.5	0.1	0.0	25.8
Cycle Q Clear(g_c), s	30.0	0.0	1.6	30.0	0.0	0.0	0.9	0.0	14.5	0.1	0.0	25.8
Prop In Lane	0.93		1.00	0.09		0.44	1.00		0.01	1.00		0.26
Lane Grp Cap(c), veh/h	204	0	582	367	0	0	228	0	857	349	0	748
V/C Ratio(X)	2.17	0.00	0.08	0.09	0.00	0.00	0.16	0.00	0.54	0.01	0.00	0.83
Avail Cap(c_a), veh/h	204	0	582	367	0	0	399	0	857	557	0	748
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.3	0.0	17.1	18.3	0.0	0.0	16.8	0.0	16.6	14.3	0.0	21.0
Incr Delay (d2), s/veh	541.0	0.0	0.1	0.1	0.0	0.0	0.3	0.0	2.4	0.0	0.0	10.3
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	35.2	0.0	0.7	0.5	0.0	0.0	0.5	0.0	8.2	0.1	0.0	14.6
LnGrp Delay(d),s/veh	573.4	0.0	17.1	18.4	0.0	0.0	17.1	0.0	19.0	14.4	0.0	31.3
LnGrp LOS	F		B	B			B		B	B		C
Approach Vol, veh/h		488			32			499			626	
Approach Delay, s/veh		520.9			18.4			18.9			31.2	
Approach LOS		F			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	41.8		35.0	7.2	40.0		35.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.1	16.5		32.0	2.9	27.8		32.0
Green Ext Time (p_c), s	0.0	1.1		0.0	0.0	1.2		0.0

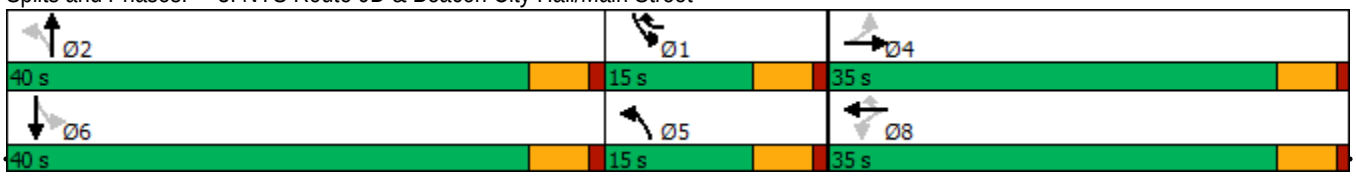
Intersection Summary		
HCM 2010 Ctrl Delay		172.5
HCM 2010 LOS		F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1	1	35	1	152	0	267	64	215	274	0
Future Volume (vph)	0	1	1	35	1	152	0	267	64	215	274	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
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		0.98				0.96		0.98				
Frt		0.932				0.850		0.971				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1798	0	1743	1853	0
Flt Permitted										0.475		
Satd. Flow (perm)	0	1722	0	0	1976	1587	1928	1798	0	872	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		2										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	2	2	38	1	167	0	338	81	244	311	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	0	39	167	0	419	0	244	311	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.02			0.14	0.49		0.39		0.28	0.19	
Control Delay		22.0			26.7	23.7		9.5		3.4	2.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		22.0			26.7	23.7		9.5		3.4	2.1	
Queue Length 50th (ft)		1			11	50		53		0	0	
Queue Length 95th (ft)		6			40	95		145		45	56	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		876			1005	359		1067		887	1651	
Starvation Cap Reductn		0			0	0		0		0	177	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.00			0.04	0.47		0.39		0.28	0.21	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 59.8	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	1	35	1	152	0	267	64	215	274	0
Future Volume (veh/h)	0	1	1	35	1	152	0	267	64	215	274	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.96		0.94	1.00		0.96	1.00		1.00
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
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	2	2	38	1	167	0	338	81	244	311	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	106	106	290	6	301	762	824	198	640	1051	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1389	50	1551	1837	1454	348	1747	1853	0
Grp Volume(v), veh/h	0	0	4	39	0	167	0	0	419	244	311	0
Grp Sat Flow(s),veh/h/ln	0	0	1681	1439	0	1551	1837	0	1802	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.1	1.4	0.0	1.8	0.0	0.0	8.1	0.0	5.4	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	1.5	0.0	1.8	0.0	0.0	8.1	0.0	5.4	0.0
Prop In Lane	0.00		0.50	0.97		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	212	297	0	301	762	0	1022	640	1051	0
V/C Ratio(X)	0.00	0.00	0.02	0.13	0.00	0.56	0.00	0.00	0.41	0.38	0.30	0.00
Avail Cap(c_a), veh/h	0	0	817	818	0	859	943	0	1022	812	1051	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)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.3	0.0	22.6	0.0	0.0	7.5	10.4	7.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	1.6	0.0	0.0	1.2	0.4	0.7	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	0.0	0.0	0.1	0.6	0.0	2.6	0.0	0.0	4.3	2.8	3.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.5	0.0	24.2	0.0	0.0	8.8	10.8	7.7	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		4			206			419			555	
Approach Delay, s/veh		23.7			24.2			8.8			9.0	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	40.0		12.8	8.9	40.0		12.8
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	10.1		2.1	0.0	7.4		3.8
Green Ext Time (p_c), s	0.7	1.1		0.0	0.0	0.7		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	6	1	2	8	1	45	2	280	6	54	242	11
Future Volume (vph)	6	1	2	8	1	45	2	280	6	54	242	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.973			0.888			0.997			0.995	
Flt Protected		0.966			0.993						0.991	
Satd. Flow (prot)	0	1786	0	0	1701	0	0	1843	0	0	1801	0
Flt Permitted		0.966			0.993						0.991	
Satd. Flow (perm)	0	1786	0	0	1701	0	0	1843	0	0	1801	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	7	1	2	12	2	68	3	406	9	59	263	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	10	0	0	82	0	0	418	0	0	334	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

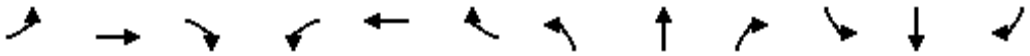
Intersection	
Int Delay, s/veh	2.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	1	2	8	1	45	2	280	6	54	242	11
Future Vol, veh/h	6	1	2	8	1	45	2	280	6	54	242	11
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
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, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	7	1	2	12	2	68	3	406	9	59	263	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	845	813	273	811	815	418	277	0	0	418	0	0
Stage 1	389	389	-	420	420	-	-	-	-	-	-	-
Stage 2	456	424	-	391	395	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	285	315	771	344	360	662	1298	-	-	1141	-	-
Stage 1	639	612	-	660	636	-	-	-	-	-	-	-
Stage 2	588	590	-	680	649	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	241	294	768	324	336	658	1296	-	-	1138	-	-
Mov Cap-2 Maneuver	241	294	-	324	336	-	-	-	-	-	-	-
Stage 1	636	573	-	657	633	-	-	-	-	-	-	-
Stage 2	522	587	-	634	608	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	17.9	12.5	0.1	1.5
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1296	-	-	562	291	1138	-	-
HCM Lane V/C Ratio	0.002	-	-	0.146	0.038	0.052	-	-
HCM Control Delay (s)	7.8	0	-	12.5	17.9	8.3	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.1	0.2	-	-

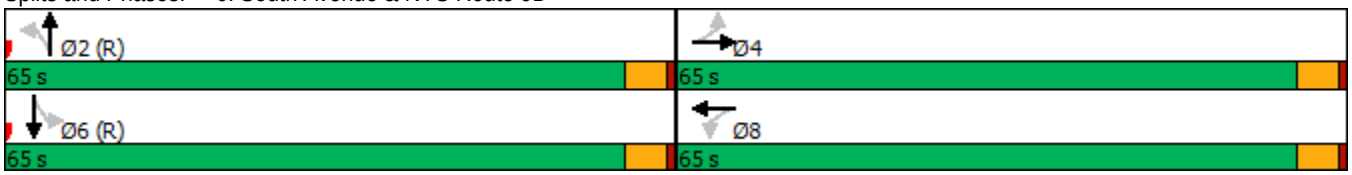


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	232	17	8	208	51	6	5	6	43	8	9
Future Volume (vph)	9	232	17	8	208	51	6	5	6	43	8	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			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
Ped Bike Factor								0.99			0.99	
Frt		0.991			0.974			0.953			0.980	
Flt Protected		0.998			0.998			0.983			0.965	
Satd. Flow (prot)	0	1823	0	0	1838	0	0	1789	0	0	1707	0
Flt Permitted		0.986			0.988			0.943			0.816	
Satd. Flow (perm)	0	1801	0	0	1820	0	0	1703	0	0	1443	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			12			7			9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	10	258	19	10	251	61	7	6	7	54	10	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	287	0	0	322	0	0	20	0	0	75	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	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
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)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.34			0.38			0.03			0.11	
Control Delay		23.5			23.6			14.4			18.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.5			23.6			14.4			18.0	
Queue Length 50th (ft)		149			167			6			31	
Queue Length 95th (ft)		220			218			20			53	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		833			846			789			670	
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		0.34			0.38			0.03			0.11	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	232	17	8	208	51	6	5	6	43	8	9
Future Volume (veh/h)	9	232	17	8	208	51	6	5	6	43	8	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
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
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1816	1872
Adj Flow Rate, veh/h	10	258	19	10	251	61	7	6	7	54	10	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	40	766	55	39	669	159	281	242	262	515	96	97
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	25	1659	119	22	1449	344	528	525	567	1013	207	210
Grp Volume(v), veh/h	287	0	0	322	0	0	20	0	0	75	0	0
Grp Sat Flow(s),veh/h/ln	1803	0	0	1815	0	0	1620	0	0	1430	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	2.9	0.0	0.0
Cycle Q Clear(g_c), s	13.1	0.0	0.0	14.9	0.0	0.0	0.8	0.0	0.0	3.7	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.19	0.35		0.35	0.72		0.15
Lane Grp Cap(c), veh/h	861	0	0	866	0	0	785	0	0	708	0	0
V/C Ratio(X)	0.33	0.00	0.00	0.37	0.00	0.00	0.03	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	861	0	0	866	0	0	785	0	0	708	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	22.4	0.0	0.0	22.9	0.0	0.0	19.1	0.0	0.0	19.8	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.2	0.0	0.0	0.1	0.0	0.0	0.3	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	6.8	0.0	0.0	7.8	0.0	0.0	0.4	0.0	0.0	1.6	0.0	0.0
LnGrp Delay(d),s/veh	23.4	0.0	0.0	24.1	0.0	0.0	19.1	0.0	0.0	20.1	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		287			322			20			75	
Approach Delay, s/veh		23.4			24.1			19.1			20.1	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.2
HCM 2010 LOS	C



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	65	195	519	58	150	568
Future Volume (vph)	65	195	519	58	150	568
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1809	0	1778	1872
Flt Permitted	0.950				0.248	
Satd. Flow (perm)	1725	1544	1809	0	464	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	212	564	63	163	617
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	212	627	0	163	617
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.20	0.37	0.64		0.33	0.47
Control Delay	41.0	29.5	23.1		7.5	9.0

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.0	29.5	23.1		7.5	9.0
Queue Length 50th (ft)	46	118	327		36	186
Queue Length 95th (ft)	88	185	454		59	256
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	979		492	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.20	0.37	0.64		0.33	0.47

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	

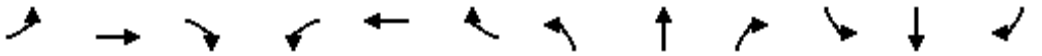
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	65	195	519	58	150	568
Future Volume (veh/h)	65	195	519	58	150	568
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	71	212	564	63	163	617
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	878	98	520	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1622	181	1783	1872
Grp Volume(v), veh/h	71	212	0	627	163	617
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1803	1783	1872
Q Serve(g_s), s	4.1	12.7	0.0	29.3	3.8	17.2
Cycle Q Clear(g_c), s	4.1	12.7	0.0	29.3	3.8	17.2
Prop In Lane	1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	360	515	0	977	520	1326
V/C Ratio(X)	0.20	0.41	0.00	0.64	0.31	0.47
Avail Cap(c_a), veh/h	360	515	0	977	520	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	30.9	0.0	19.3	11.8	7.6
Incr Delay (d2), s/veh	1.2	2.4	0.0	3.2	1.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	5.8	0.0	15.3	2.0	9.2
LnGrp Delay(d),s/veh	40.4	33.3	0.0	22.6	13.3	8.8
LnGrp LOS	D	C		C	B	A
Approach Vol, veh/h	283		627			780
Approach Delay, s/veh	35.1		22.6			9.7
Approach LOS	D		C			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.7
HCM 2010 LOS	B



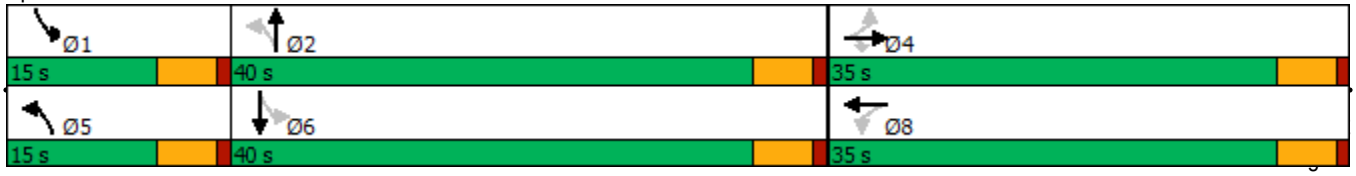
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	1	20	8	11	10	60	457	3	16	510	168
Future Volume (vph)	31	1	20	8	11	10	60	457	3	16	510	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.96		0.99			1.00			0.99	
Frt			0.850		0.955			0.999			0.963	
Flt Protected		0.953			0.986		0.950			0.950		
Satd. Flow (prot)	0	1775	1599	0	1859	0	1771	1936	0	1778	1766	0
Flt Permitted		0.859			0.890		0.277			0.485		
Satd. Flow (perm)	0	1600	1533	0	1678	0	516	1936	0	908	1766	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		13						22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	42	1	27	11	15	13	64	486	3	17	537	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	27	0	39	0	64	489	0	17	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.21	0.10		0.17		0.12	0.32		0.02	0.56	
Control Delay		27.8	0.8		21.6		3.2	5.3		3.2	11.6	
Queue Delay		0.0	0.0		0.0		0.0	0.2		0.0	0.0	
Total Delay		27.8	0.8		21.6		3.2	5.5		3.2	11.6	
Queue Length 50th (ft)		16	0		9		5	52		1	185	
Queue Length 95th (ft)		34	0		27		15	182		6	#351	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		853	857		901		627	1543		852	1278	
Starvation Cap Reductn		0	0		0		0	452		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.05	0.03		0.04		0.10	0.45		0.02	0.56	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 58.4
Natural Cycle: 60
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

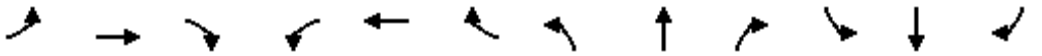
Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1	20	8	11	10	60	457	3	16	510	168
Future Volume (veh/h)	31	1	20	8	11	10	60	457	3	16	510	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1881	1863	1881	1995	1995	1995	1864	1938	1957	1872	1848	1872
Adj Flow Rate, veh/h	42	1	27	11	15	13	64	486	3	17	537	177
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	242	4	121	107	71	49	457	1227	8	622	810	267
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.04	0.64	0.64	0.02	0.61	0.61
Sat Flow, veh/h	1396	52	1436	313	847	580	1775	1924	12	1782	1329	438
Grp Volume(v), veh/h	43	0	27	39	0	0	64	0	489	17	0	714
Grp Sat Flow(s),veh/h/ln	1447	0	1436	1739	0	0	1775	0	1936	1782	0	1767
Q Serve(g_s), s	0.3	0.0	1.0	0.0	0.0	0.0	0.7	0.0	7.0	0.2	0.0	15.2
Cycle Q Clear(g_c), s	1.4	0.0	1.0	1.1	0.0	0.0	0.7	0.0	7.0	0.2	0.0	15.2
Prop In Lane	0.98		1.00	0.28		0.33	1.00		0.01	1.00		0.25
Lane Grp Cap(c), veh/h	246	0	121	227	0	0	457	0	1234	622	0	1077
V/C Ratio(X)	0.17	0.00	0.22	0.17	0.00	0.00	0.14	0.00	0.40	0.03	0.00	0.66
Avail Cap(c_a), veh/h	841	0	750	961	0	0	687	0	1234	903	0	1077
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.5	24.6	0.0	0.0	5.8	0.0	5.0	4.3	0.0	7.3
Incr Delay (d2), s/veh	0.3	0.0	0.9	0.4	0.0	0.0	0.1	0.0	1.0	0.0	0.0	3.2
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	0.7	0.0	0.4	0.6	0.0	0.0	0.4	0.0	4.0	0.1	0.0	8.3
LnGrp Delay(d),s/veh	25.0	0.0	25.4	24.9	0.0	0.0	5.9	0.0	6.0	4.3	0.0	10.6
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		70			39			553			731	
Approach Delay, s/veh		25.2			24.9			6.0			10.4	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	41.6		9.8	7.6	40.0		9.8
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	9.0		3.4	2.7	17.2		3.1
Green Ext Time (p_c), s	0.0	1.3		0.3	0.1	2.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A

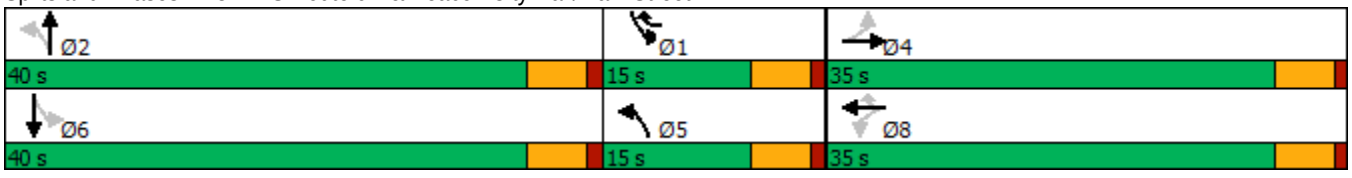


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	1	23	0	185	1	334	37	259	277	2
Future Volume (vph)	1	1	1	23	0	185	1	334	37	259	277	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
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		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.985			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1829	0	1760	1851	0
Flt Permitted		0.920					0.575			0.455		
Satd. Flow (perm)	0	1629	0	0	1976	1619	1109	1829	0	843	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		1										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	1	1	1	26	0	208	1	380	42	282	301	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	0	0	26	208	1	422	0	282	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.02			0.10	0.60	0.00	0.39		0.33	0.19	
Control Delay		24.0			26.5	26.9	3.0	9.4		3.9	4.4	
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		24.0			26.5	26.9	3.0	9.4		3.9	4.4	
Queue Length 50th (ft)		1			8	65	0	53		0	0	
Queue Length 95th (ft)		6			30	115	1	165		50	117	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		825			1000	359	964	1080		854	1572	
Starvation Cap Reductn		0			0	0	0	0		0	79	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.00			0.03	0.58	0.00	0.39		0.33	0.20	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 60	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

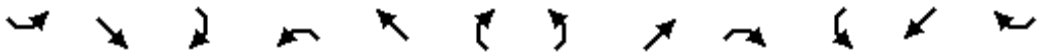
Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	23	0	185	1	334	37	259	277	2
Future Volume (veh/h)	1	1	1	23	0	185	1	334	37	259	277	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.94	0.95		0.98	0.99		0.96	0.99		0.99
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
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1885	1928	1853	1853	1872
Adj Flow Rate, veh/h	1	1	1	26	0	208	1	380	42	282	301	2
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	297	0	313	765	940	104	643	1041	7
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	291	763	527	1418	0	1624	1837	1660	183	1765	1839	12
Grp Volume(v), veh/h	3	0	0	26	0	208	1	0	422	282	0	303
Grp Sat Flow(s),veh/h/ln	1581	0	0	1418	0	1624	1837	0	1843	1765	0	1851
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	3.3	0.0	0.0	8.0	0.0	0.0	5.3
Cycle Q Clear(g_c), s	0.1	0.0	0.0	1.0	0.0	3.3	0.0	0.0	8.0	0.0	0.0	5.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	297	0	313	765	0	1043	643	0	1048
V/C Ratio(X)	0.01	0.00	0.00	0.09	0.00	0.66	0.00	0.00	0.40	0.44	0.00	0.29
Avail Cap(c_a), veh/h	804	0	0	803	0	895	944	0	1043	815	0	1048
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	0.0	24.0	0.0	23.1	6.4	0.0	7.6	11.0	0.0	7.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	2.4	0.0	0.0	1.2	0.5	0.0	0.7
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	0.0	0.0	0.0	0.4	0.0	3.3	0.0	0.0	4.3	3.5	0.0	2.8
LnGrp Delay(d),s/veh	23.6	0.0	0.0	24.1	0.0	25.5	6.4	0.0	8.7	11.4	0.0	7.7
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		3			234			423			585	
Approach Delay, s/veh		23.6			25.4			8.7			9.5	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	10.0		2.1	2.0	7.3		5.3
Green Ext Time (p_c), s	0.9	1.1		0.0	0.0	0.7		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	9	2	2	9	4	77	2	286	9	42	253	6
Future Volume (vph)	9	2	2	9	4	77	2	286	9	42	253	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.981			0.885			0.996			0.997	
Flt Protected		0.966			0.995						0.993	
Satd. Flow (prot)	0	1680	0	0	1647	0	0	1852	0	0	1808	0
Flt Permitted		0.966			0.995						0.993	
Satd. Flow (perm)	0	1680	0	0	1647	0	0	1852	0	0	1808	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	15	3	3	10	5	88	2	336	11	46	275	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	21	0	0	103	0	0	349	0	0	328	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

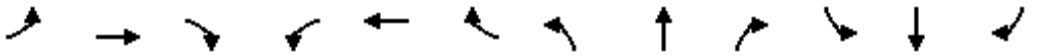
Intersection	
Int Delay, s/veh	2.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	2	2	9	4	77	2	286	9	42	253	6
Future Vol, veh/h	9	2	2	9	4	77	2	286	9	42	253	6
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
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, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	15	3	3	10	5	88	2	336	11	46	275	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	785	727	286	726	725	363	285	0	0	349	0	0
Stage 1	374	374	-	348	348	-	-	-	-	-	-	-
Stage 2	411	353	-	378	377	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	313	298	758	371	367	705	1289	-	-	1210	-	-
Stage 1	651	542	-	689	631	-	-	-	-	-	-	-
Stage 2	622	554	-	666	615	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	256	283	754	351	348	693	1286	-	-	1208	-	-
Mov Cap-2 Maneuver	256	283	-	351	348	-	-	-	-	-	-	-
Stage 1	648	517	-	686	628	-	-	-	-	-	-	-
Stage 2	530	552	-	627	586	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	18.4	12.1	0.1	1.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1286	-	-	607	290	1208	-	-
HCM Lane V/C Ratio	0.002	-	-	0.168	0.073	0.038	-	-
HCM Control Delay (s)	7.8	0	-	12.1	18.4	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.2	0.1	-	-

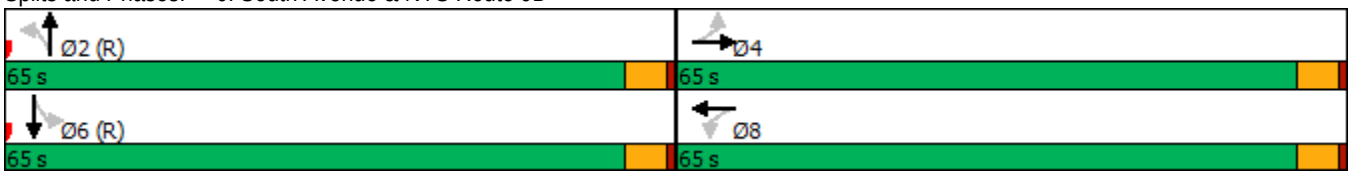


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	168	15	12	181	34	13	7	12	30	10	8
Future Volume (vph)	8	168	15	12	181	34	13	7	12	30	10	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			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
Ped Bike Factor								0.99			0.99	
Frt		0.990			0.980			0.950			0.977	
Flt Protected		0.998			0.997			0.980			0.970	
Satd. Flow (prot)	0	1821	0	0	1842	0	0	1778	0	0	1698	0
Flt Permitted		0.985			0.980			0.900			0.836	
Satd. Flow (perm)	0	1797	0	0	1810	0	0	1618	0	0	1463	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9			22			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	10	205	18	14	213	40	24	13	22	37	12	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	233	0	0	267	0	0	59	0	0	59	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	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
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)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.28			0.32			0.08			0.09	
Control Delay		22.4			22.6			13.5			16.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		22.4			22.6			13.5			16.9	
Queue Length 50th (ft)		117			134			17			23	
Queue Length 95th (ft)		157			185			22			44	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		831			840			758			680	
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			0.32			0.08			0.09	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	168	15	12	181	34	13	7	12	30	10	8
Future Volume (veh/h)	8	168	15	12	181	34	13	7	12	30	10	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
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
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1805	1872
Adj Flow Rate, veh/h	10	205	18	14	213	40	24	13	22	37	12	10
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	45	749	64	51	687	125	320	178	273	452	145	113
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	35	1622	139	48	1488	271	610	385	591	883	315	244
Grp Volume(v), veh/h	233	0	0	267	0	0	59	0	0	59	0	0
Grp Sat Flow(s),veh/h/ln	1796	0	0	1807	0	0	1586	0	0	1442	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	0.1	0.0	0.0
Cycle Q Clear(g_c), s	10.3	0.0	0.0	11.9	0.0	0.0	2.4	0.0	0.0	2.5	0.0	0.0
Prop In Lane	0.04		0.08	0.05		0.15	0.41		0.37	0.63		0.17
Lane Grp Cap(c), veh/h	858	0	0	863	0	0	771	0	0	711	0	0
V/C Ratio(X)	0.27	0.00	0.00	0.31	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	858	0	0	863	0	0	771	0	0	711	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	21.6	0.0	0.0	22.1	0.0	0.0	19.5	0.0	0.0	19.5	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.9	0.0	0.0	0.2	0.0	0.0	0.2	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	5.4	0.0	0.0	6.2	0.0	0.0	1.2	0.0	0.0	1.2	0.0	0.0
LnGrp Delay(d),s/veh	22.4	0.0	0.0	23.0	0.0	0.0	19.7	0.0	0.0	19.7	0.0	0.0
LnGrp LOS	C			C			B			B		
Approach Vol, veh/h		233			267			59			59	
Approach Delay, s/veh		22.4			23.0			19.7			19.7	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	51	299	736	69	209	628
Future Volume (vph)	51	299	736	69	209	628
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.094	
Satd. Flow (perm)	1725	1544	1813	0	176	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	325	800	75	227	683
Shared Lane Traffic (%)						
Lane Group Flow (vph)	55	325	875	0	227	683
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	72.0		20.0	92.0
Total Split (%)	24.6%	16.4%	59.0%		16.4%	75.4%
Maximum Green (s)	25.0	15.0	67.0		15.0	87.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.16	0.57	0.88		0.70	0.51
Control Delay	41.3	35.6	35.9		31.0	9.5

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.3	35.6	35.9		31.0	9.5
Queue Length 50th (ft)	36	203	576		82	217
Queue Length 95th (ft)	74	301	#864		#176	297
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	353	569	995		322	1334
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.16	0.57	0.88		0.70	0.51

Intersection Summary	
Area Type:	Other
Cycle Length: 122	
Actuated Cycle Length: 122	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

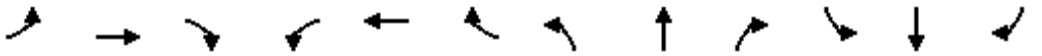
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



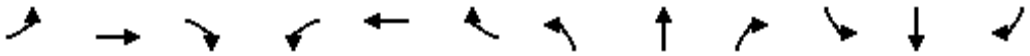
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	51	299	736	69	209	628
Future Volume (veh/h)	51	299	736	69	209	628
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	55	325	800	75	227	683
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	354	506	908	85	358	1335
Arrive On Green	0.20	0.20	0.55	0.55	0.12	0.71
Sat Flow, veh/h	1730	1544	1653	155	1783	1872
Grp Volume(v), veh/h	55	325	0	875	227	683
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872
Q Serve(g_s), s	3.2	21.9	0.0	51.6	5.5	20.1
Cycle Q Clear(g_c), s	3.2	21.9	0.0	51.6	5.5	20.1
Prop In Lane	1.00	1.00		0.09	1.00	
Lane Grp Cap(c), veh/h	354	506	0	993	358	1335
V/C Ratio(X)	0.16	0.64	0.00	0.88	0.63	0.51
Avail Cap(c_a), veh/h	354	506	0	993	358	1335
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	34.9	0.0	24.0	23.6	7.9
Incr Delay (d2), s/veh	0.9	6.1	0.0	11.2	8.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	10.2	0.0	28.6	5.2	10.8
LnGrp Delay(d),s/veh	40.8	41.1	0.0	35.2	31.9	9.3
LnGrp LOS	D	D		D	C	A
Approach Vol, veh/h	380		875			910
Approach Delay, s/veh	41.0		35.2			14.9
Approach LOS	D		D			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	72.0				92.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	67.0				87.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.7
HCM 2010 LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	35	4	15	23	32	424	5	6	510	166
Future Volume (vph)	310	24	35	4	15	23	32	424	5	6	510	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.963	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1772	0
Flt Permitted		0.709			0.966		0.115			0.342		
Satd. Flow (perm)	0	1306	1562	0	1684	0	219	1915	0	640	1772	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	49	4	16	25	38	505	6	6	520	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	49	0	45	0	38	511	0	6	689	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		



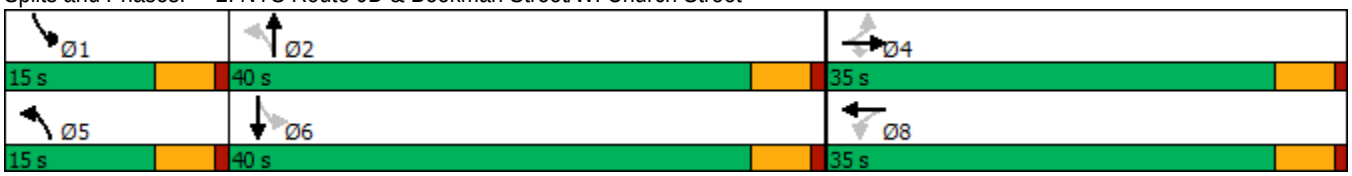
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.08		0.07		0.16	0.55		0.02	0.90	
Control Delay		67.7	1.9		11.7		11.1	18.2		9.5	39.5	
Queue Delay		0.0	0.0		0.0		0.0	3.8		0.0	0.0	
Total Delay		67.7	1.9		11.7		11.1	22.0		9.5	39.5	
Queue Length 50th (ft)		~282	0		7		9	164		1	346	
Queue Length 95th (ft)		#318	1		30		22	293		7	#589	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		478	626		632		305	931		456	769	
Starvation Cap Reductn		0	0		0		0	325		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.99	0.08		0.07		0.12	0.84		0.01	0.90	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 82.3	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

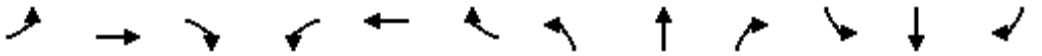
Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	35	4	15	23	32	424	5	6	510	166
Future Volume (veh/h)	310	24	35	4	15	23	32	424	5	6	510	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	49	4	16	25	38	505	6	6	520	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	581	48	144	180	181	846	10	317	565	184
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.43	0.43
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1892	22	1782	1330	432
Grp Volume(v), veh/h	471	0	49	45	0	0	38	0	511	6	0	689
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1762
Q Serve(g_s), s	0.0	0.0	1.7	0.0	0.0	0.0	1.0	0.0	16.6	0.2	0.0	30.4
Cycle Q Clear(g_c), s	30.0	0.0	1.7	30.0	0.0	0.0	1.0	0.0	16.6	0.2	0.0	30.4
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.25
Lane Grp Cap(c), veh/h	202	0	581	372	0	0	181	0	856	317	0	749
V/C Ratio(X)	2.33	0.00	0.08	0.12	0.00	0.00	0.21	0.00	0.60	0.02	0.00	0.92
Avail Cap(c_a), veh/h	202	0	581	372	0	0	350	0	856	523	0	749
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.4	0.0	17.2	18.4	0.0	0.0	18.5	0.0	17.2	14.7	0.0	22.3
Incr Delay (d2), s/veh	614.8	0.0	0.1	0.1	0.0	0.0	0.6	0.0	3.1	0.0	0.0	18.3
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	39.0	0.0	0.7	0.7	0.0	0.0	0.5	0.0	9.4	0.1	0.0	18.5
LnGrp Delay(d),s/veh	647.2	0.0	17.2	18.5	0.0	0.0	19.0	0.0	20.2	14.7	0.0	40.6
LnGrp LOS	F		B	B			B		C	B		D
Approach Vol, veh/h		520			45			549			695	
Approach Delay, s/veh		587.9			18.5			20.1			40.4	
Approach LOS		F			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	41.8		35.0	7.3	40.0		35.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	18.6		32.0	3.0	32.4		32.0
Green Ext Time (p_c), s	0.0	1.2		0.0	0.0	0.7		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		191.1
HCM 2010 LOS		F

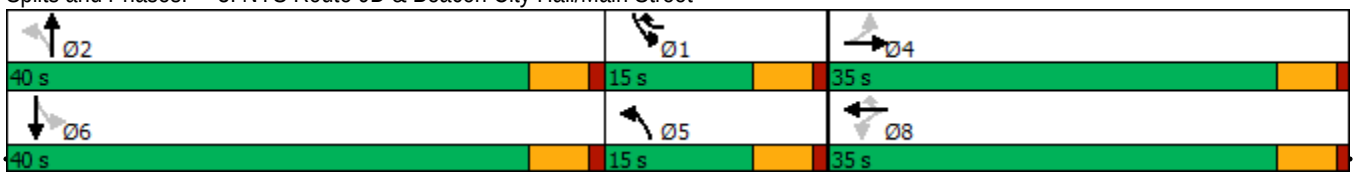


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	47	2	162	0	299	77	246	311	0
Future Volume (vph)	0	2	2	47	2	162	0	299	77	246	311	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
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		0.98				0.96		0.98				
Frt		0.932				0.850		0.969				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1792	0	1743	1853	0
Flt Permitted					0.785					0.423		
Satd. Flow (perm)	0	1722	0	0	1551	1587	1928	1792	0	776	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	52	2	178	0	378	97	280	353	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	54	178	0	475	0	280	353	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.03			0.25	0.47		0.47		0.37	0.23	
Control Delay		21.5			29.8	22.1		11.9		5.5	3.0	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.2	
Total Delay		21.5			29.8	22.1		11.9		5.5	3.2	
Queue Length 50th (ft)		1			21	54		122		28	36	
Queue Length 95th (ft)		7			52	100		175		56	70	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		834			750	391		1011		781	1545	
Starvation Cap Reductn		0			0	0		0		0	560	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.01			0.07	0.46		0.47		0.36	0.36	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 63	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	47	2	162	0	299	77	246	311	0
Future Volume (veh/h)	0	2	2	47	2	162	0	299	77	246	311	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
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
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1879	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	52	2	178	0	378	97	280	353	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	288	9	303	726	810	208	597	1049	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1364	72	1551	1837	1430	367	1747	1853	0
Grp Volume(v), veh/h	0	0	6	54	0	178	0	0	475	280	353	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1436	0	1551	1837	0	1797	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.0	0.0	2.2	0.0	0.0	9.6	0.0	6.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.2	0.0	2.2	0.0	0.0	9.6	0.0	6.3	0.0
Prop In Lane	0.00		0.50	0.96		1.00	1.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	214	297	0	303	726	0	1017	597	1049	0
V/C Ratio(X)	0.00	0.00	0.03	0.18	0.00	0.59	0.00	0.00	0.47	0.47	0.34	0.00
Avail Cap(c_a), veh/h	0	0	816	817	0	858	905	0	1017	767	1049	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)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.5	0.0	22.7	0.0	0.0	7.9	12.4	7.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	1.8	0.0	0.0	1.5	0.6	0.9	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	0.0	0.0	0.1	0.9	0.0	2.8	0.0	0.0	5.2	3.7	3.4	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.8	0.0	24.5	0.0	0.0	9.5	13.0	8.1	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		6			232			475			633	
Approach Delay, s/veh		23.7			24.6			9.5			10.2	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	11.6		2.2	0.0	8.3		4.2
Green Ext Time (p_c), s	0.9	1.3		0.0	0.0	0.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	2	3	9	2	48	3	321	7	58	286	12
Future Volume (vph)	7	2	3	9	2	48	3	321	7	58	286	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.890			0.997			0.995	
Flt Protected		0.971			0.992						0.992	
Satd. Flow (prot)	0	1778	0	0	1703	0	0	1843	0	0	1803	0
Flt Permitted		0.971			0.992						0.992	
Satd. Flow (perm)	0	1778	0	0	1703	0	0	1843	0	0	1803	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	9	2	4	14	3	73	4	465	10	63	311	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	90	0	0	479	0	0	387	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

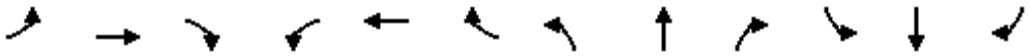
Intersection	
Int Delay, s/veh	2.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	321	7	58	286	12
Future Vol, veh/h	7	2	3	9	2	48	3	321	7	58	286	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
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, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	465	10	63	311	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	966	932	322	930	933	477	326	0	0	478	0	0
Stage 1	446	446	-	481	481	-	-	-	-	-	-	-
Stage 2	520	486	-	449	452	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	236	269	724	291	313	616	1245	-	-	1084	-	-
Stage 1	595	577	-	618	604	-	-	-	-	-	-	-
Stage 2	543	554	-	639	619	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	194	248	722	270	289	612	1243	-	-	1081	-	-
Mov Cap-2 Maneuver	194	248	-	270	289	-	-	-	-	-	-	-
Stage 1	591	535	-	614	600	-	-	-	-	-	-	-
Stage 2	473	551	-	587	574	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	20.4	13.8	0.1	1.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1243	-	-	497	248	1081	-	-
HCM Lane V/C Ratio	0.003	-	-	0.18	0.06	0.058	-	-
HCM Control Delay (s)	7.9	0	-	13.8	20.4	8.5	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0.2	-	-

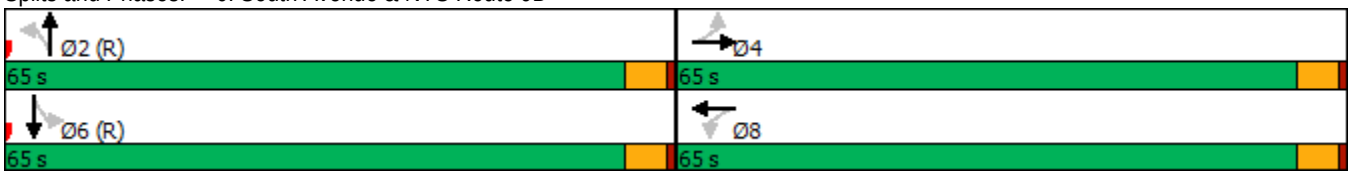


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	255	19	9	230	55	7	21	7	46	29	10
Future Volume (vph)	10	255	19	9	230	55	7	21	7	46	29	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			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
Ped Bike Factor								1.00			0.99	
Frt		0.991			0.975			0.974			0.984	
Flt Protected		0.998			0.998			0.990			0.974	
Satd. Flow (prot)	0	1823	0	0	1840	0	0	1841	0	0	1696	0
Flt Permitted		0.984			0.987			0.961			0.842	
Satd. Flow (perm)	0	1797	0	0	1820	0	0	1781	0	0	1466	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			12			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	283	21	11	277	66	8	25	8	58	37	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	315	0	0	354	0	0	41	0	0	108	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	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
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)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.38			0.42			0.05			0.16	
Control Delay		24.2			24.4			16.5			19.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.2			24.4			16.5			19.8	
Queue Length 50th (ft)		167			188			15			48	
Queue Length 95th (ft)		243			242			34			74	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		831			846			826			680	
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		0.38			0.42			0.05			0.16	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	255	19	9	230	55	7	21	7	46	29	10
Future Volume (veh/h)	10	255	19	9	230	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
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
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	283	21	11	277	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	41	764	55	39	670	156	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	26	1655	120	23	1453	338	289	1108	339	761	530	177
Grp Volume(v), veh/h	315	0	0	354	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1801	0	0	1814	0	0	1736	0	0	1467	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	3.5	0.0	0.0
Cycle Q Clear(g_c), s	14.6	0.0	0.0	16.8	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.19	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	860	0	0	866	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.37	0.00	0.00	0.41	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	866	0	0	834	0	0	720	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	22.8	0.0	0.0	23.4	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.4	0.0	0.0	0.1	0.0	0.0	0.4	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	7.6	0.0	0.0	8.8	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.0	0.0	0.0	24.8	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		315			354			41			108	
Approach Delay, s/veh		24.0			24.8			19.4			20.6	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.7
HCM 2010 LOS	C



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	69	232	570	62	159	636
Future Volume (vph)	69	232	570	62	159	636
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.987			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1811	0	1778	1872
Flt Permitted	0.950				0.208	
Satd. Flow (perm)	1725	1544	1811	0	389	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	252	620	67	173	691
Shared Lane Traffic (%)						
Lane Group Flow (vph)	75	252	687	0	173	691
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.21	0.44	0.70		0.39	0.52
Control Delay	41.2	31.0	25.2		8.2	9.8

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.2	31.0	25.2		8.2	9.8
Queue Length 50th (ft)	49	144	377		39	221
Queue Length 95th (ft)	93	222	523		62	304
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	980		449	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.21	0.44	0.70		0.39	0.52

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	

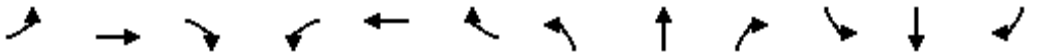
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	69	232	570	62	159	636
Future Volume (veh/h)	69	232	570	62	159	636
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	75	252	620	67	173	691
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	882	95	479	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1628	176	1783	1872
Grp Volume(v), veh/h	75	252	0	687	173	691
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1804	1783	1872
Q Serve(g_s), s	4.3	15.6	0.0	33.8	4.1	20.5
Cycle Q Clear(g_c), s	4.3	15.6	0.0	33.8	4.1	20.5
Prop In Lane	1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	360	515	0	977	479	1326
V/C Ratio(X)	0.21	0.49	0.00	0.70	0.36	0.52
Avail Cap(c_a), veh/h	360	515	0	977	479	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	31.9	0.0	20.4	13.6	8.1
Incr Delay (d2), s/veh	1.3	3.3	0.0	4.2	2.1	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	7.1	0.0	17.9	2.5	10.9
LnGrp Delay(d),s/veh	40.6	35.2	0.0	24.6	15.7	9.6
LnGrp LOS	D	D		C	B	A
Approach Vol, veh/h	327		687			864
Approach Delay, s/veh	36.4		24.6			10.8
Approach LOS	D		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.3
HCM 2010 LOS	C



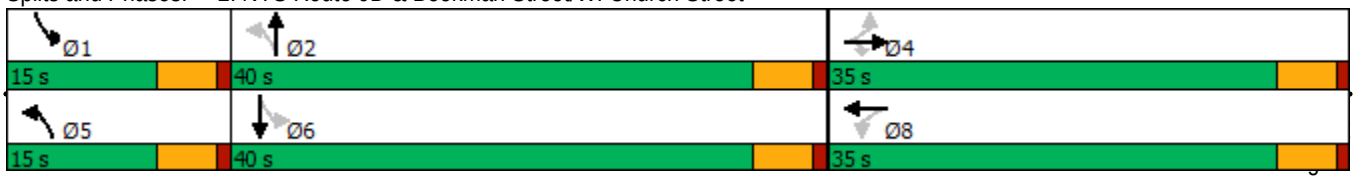
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	2	22	9	12	20	64	504	4	17	574	179
Future Volume (vph)	33	2	22	9	12	20	64	504	4	17	574	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.964	
Flt Protected		0.955			0.989		0.950			0.950		
Satd. Flow (prot)	0	1780	1599	0	1815	0	1771	1936	0	1778	1768	0
Flt Permitted		0.824			0.911		0.232			0.449		
Satd. Flow (perm)	0	1536	1533	0	1672	0	432	1936	0	840	1768	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	3	30	12	16	27	68	536	4	18	604	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	48	30	0	55	0	68	540	0	18	792	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.24	0.11		0.23		0.14	0.35		0.03	0.62	
Control Delay		28.2	0.8		18.9		3.4	5.7		3.3	13.8	
Queue Delay		0.0	0.0		0.0		0.0	0.3		0.0	0.0	
Total Delay		28.2	0.8		18.9		3.4	6.0		3.3	13.8	
Queue Length 50th (ft)		17	0		10		6	61		2	225	
Queue Length 95th (ft)		37	0		30		16	211		6	#491	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		816	854		901		574	1540		809	1275	
Starvation Cap Reductn		0	0		0		0	434		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.06	0.04		0.06		0.12	0.49		0.02	0.62	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 58.6
Natural Cycle: 65
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

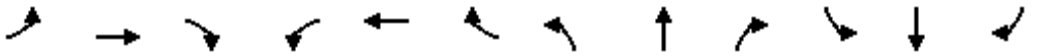
Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	2	22	9	12	20	64	504	4	17	574	179
Future Volume (veh/h)	33	2	22	9	12	20	64	504	4	17	574	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1881	1864	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	3	30	12	16	27	68	536	4	18	604	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	239	12	126	97	56	74	402	1220	9	583	819	255
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.64	0.64	0.02	0.61	0.61
Sat Flow, veh/h	1350	139	1441	240	635	843	1775	1921	14	1782	1350	420
Grp Volume(v), veh/h	48	0	30	55	0	0	68	0	540	18	0	792
Grp Sat Flow(s),veh/h/ln	1489	0	1441	1718	0	0	1775	0	1935	1782	0	1770
Q Serve(g_s), s	0.0	0.0	1.1	0.0	0.0	0.0	0.8	0.0	8.2	0.2	0.0	18.4
Cycle Q Clear(g_c), s	1.5	0.0	1.1	1.6	0.0	0.0	0.8	0.0	8.2	0.2	0.0	18.4
Prop In Lane	0.94		1.00	0.22		0.49	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	251	0	126	226	0	0	402	0	1229	583	0	1074
V/C Ratio(X)	0.19	0.00	0.24	0.24	0.00	0.00	0.17	0.00	0.44	0.03	0.00	0.74
Avail Cap(c_a), veh/h	838	0	749	947	0	0	628	0	1229	861	0	1074
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.5	24.8	0.0	0.0	6.9	0.0	5.3	4.5	0.0	8.1
Incr Delay (d2), s/veh	0.4	0.0	1.0	0.6	0.0	0.0	0.2	0.0	1.1	0.0	0.0	4.5
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	0.7	0.0	0.5	0.9	0.0	0.0	0.4	0.0	4.6	0.1	0.0	10.2
LnGrp Delay(d),s/veh	25.1	0.0	25.5	25.3	0.0	0.0	7.1	0.0	6.5	4.5	0.0	12.6
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		78			55			608			810	
Approach Delay, s/veh		25.2			25.3			6.5			12.4	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	41.7		10.1	7.7	40.0		10.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	10.2		3.5	2.8	20.4		3.6
Green Ext Time (p_c), s	0.0	1.4		0.3	0.1	2.3		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

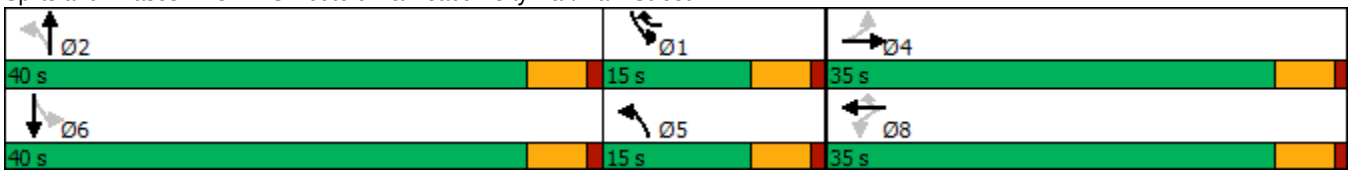


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	34	0	197	2	374	49	293	318	3
Future Volume (vph)	2	2	2	34	0	197	2	374	49	293	318	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
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		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.983			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1819	0	1760	1851	0
Flt Permitted		0.874					0.552			0.408		
Satd. Flow (perm)	0	1547	0	0	1976	1619	1065	1819	0	756	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3									1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	38	0	221	2	425	56	318	346	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	38	221	2	481	0	318	349	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.05			0.14	0.63	0.00	0.45		0.41	0.22	
Control Delay		23.0			26.6	27.8	3.0	10.3		5.3	4.7	
Queue Delay		0.0			0.0	0.0	0.0	0.0		3.6	0.0	
Total Delay		23.0			26.6	27.8	3.0	10.3		8.9	4.7	
Queue Length 50th (ft)		2			11	69	0	64		0	0	
Queue Length 95th (ft)		11			39	122	2	201		61	140	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		782			996	362	934	1070		793	1569	
Starvation Cap Reductn		0			0	0	0	0		376	74	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.01			0.04	0.61	0.00	0.45		0.76	0.23	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 60.2	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	34	0	197	2	374	49	293	318	3
Future Volume (veh/h)	2	2	2	34	0	197	2	374	49	293	318	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	0.99		0.96	0.99		0.99
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
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	38	0	221	2	425	56	318	346	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	298	0	315	726	917	121	599	1037	9
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	290	761	526	1423	0	1624	1837	1622	214	1765	1834	16
Grp Volume(v), veh/h	9	0	0	38	0	221	2	0	481	318	0	349
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1835	1765	0	1850
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	3.8	0.0	0.0	9.6	0.0	0.0	6.3
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.4	0.0	3.8	0.0	0.0	9.6	0.0	0.0	6.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	298	0	315	726	0	1038	599	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.13	0.00	0.70	0.00	0.00	0.46	0.53	0.00	0.33
Avail Cap(c_a), veh/h	800	0	0	801	0	894	904	0	1038	770	0	1046
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.1	0.0	23.3	6.9	0.0	7.9	13.2	0.0	7.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	2.8	0.0	0.0	1.5	0.7	0.0	0.9
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	0.1	0.0	0.0	0.6	0.0	3.5	0.0	0.0	5.2	4.5	0.0	3.4
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.3	0.0	26.2	6.9	0.0	9.4	13.9	0.0	8.1
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		9			259			483			667	
Approach Delay, s/veh		23.7			25.9			9.4			10.9	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	11.6		2.3	2.0	8.3		5.8
Green Ext Time (p_c), s	1.0	1.3		0.0	0.0	0.8		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	3	3	10	5	82	3	332	10	45	302	7
Future Volume (vph)	10	3	3	10	5	82	3	332	10	45	302	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974			0.886			0.996			0.997	
Flt Protected		0.970			0.995						0.994	
Satd. Flow (prot)	0	1638	0	0	1646	0	0	1853	0	0	1810	0
Flt Permitted		0.970			0.995						0.994	
Satd. Flow (perm)	0	1638	0	0	1646	0	0	1853	0	0	1810	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	16	5	5	11	6	93	4	391	12	49	328	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	110	0	0	407	0	0	385	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

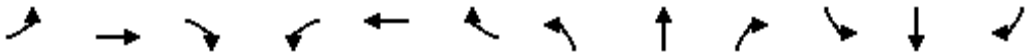
Intersection	
Int Delay, s/veh	2.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	3	3	10	5	82	3	332	10	45	302	7
Future Vol, veh/h	10	3	3	10	5	82	3	332	10	45	302	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
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, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	391	12	49	328	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	907	846	339	846	844	418	339	0	0	405	0	0
Stage 1	433	433	-	407	407	-	-	-	-	-	-	-
Stage 2	474	413	-	439	437	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	259	252	708	314	318	660	1231	-	-	1154	-	-
Stage 1	605	508	-	646	599	-	-	-	-	-	-	-
Stage 2	575	519	-	624	583	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	205	237	704	292	299	648	1228	-	-	1152	-	-
Mov Cap-2 Maneuver	205	237	-	292	299	-	-	-	-	-	-	-
Stage 1	601	481	-	642	595	-	-	-	-	-	-	-
Stage 2	478	516	-	579	552	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	21.5	13.3	0.1	1.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1228	-	-	546	244	1152	-	-
HCM Lane V/C Ratio	0.003	-	-	0.202	0.107	0.042	-	-
HCM Control Delay (s)	7.9	0	-	13.3	21.5	8.3	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.4	0.1	-	-

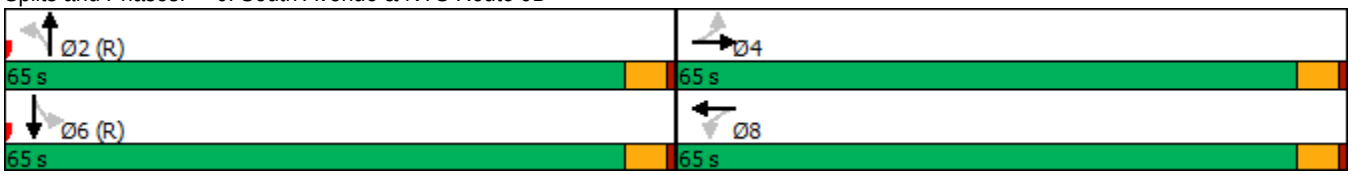


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	188	16	13	201	37	14	27	13	32	35	9
Future Volume (vph)	9	188	16	13	201	37	14	27	13	32	35	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			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
Ped Bike Factor								0.99			0.99	
Frt		0.990			0.980			0.967			0.984	
Flt Protected		0.998			0.997			0.987			0.979	
Satd. Flow (prot)	0	1821	0	0	1842	0	0	1822	0	0	1686	0
Flt Permitted		0.983			0.979			0.926			0.866	
Satd. Flow (perm)	0	1794	0	0	1809	0	0	1701	0	0	1491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9			17			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	229	20	15	236	44	25	49	24	39	43	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	260	0	0	295	0	0	98	0	0	93	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	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
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)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.31			0.35			0.12			0.13	
Control Delay		23.0			23.2			16.9			19.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.0			23.2			16.9			19.2	
Queue Length 50th (ft)		133			151			38			41	
Queue Length 95th (ft)		176			206			39			67	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		830			839			794			691	
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			0.12			0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	188	16	13	201	37	14	27	13	32	35	9
Future Volume (veh/h)	9	188	16	13	201	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	229	20	15	236	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	44	749	64	50	689	124	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	34	1623	138	46	1492	270	384	887	412	590	721	176
Grp Volume(v), veh/h	260	0	0	295	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1795	0	0	1808	0	0	1683	0	0	1487	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	11.7	0.0	0.0	13.4	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.08	0.05		0.15	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	857	0	0	863	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.30	0.00	0.00	0.34	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	857	0	0	863	0	0	812	0	0	726	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	22.0	0.0	0.0	22.5	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.4	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	6.1	0.0	0.0	7.1	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	22.9	0.0	0.0	23.5	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		260			295			98			93	
Approach Delay, s/veh		22.9			23.5			20.2			20.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.5
HCM 2010 LOS	C



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	54	299	746	72	209	639
Future Volume (vph)	54	299	746	72	209	639
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.078	
Satd. Flow (perm)	1725	1544	1813	0	146	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	59	325	811	78	227	695
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	325	889	0	227	695
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.16	0.56	0.91		0.74	0.52
Control Delay	40.4	34.3	39.1		38.3	9.9

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	40.4	34.3	39.1		38.3	9.9
Queue Length 50th (ft)	38	197	594		97	223
Queue Length 95th (ft)	76	293	#888		#209	307
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	982		307	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.16	0.56	0.91		0.74	0.52

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

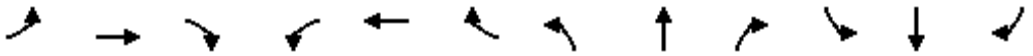
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



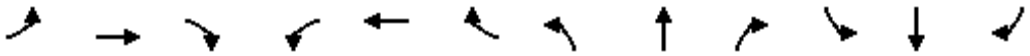
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	54	299	746	72	209	639
Future Volume (veh/h)	54	299	746	72	209	639
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	59	325	811	78	227	695
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	893	86	344	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1648	159	1783	1872
Grp Volume(v), veh/h	59	325	0	889	227	695
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872
Q Serve(g_s), s	3.4	21.3	0.0	53.3	6.0	20.7
Cycle Q Clear(g_c), s	3.4	21.3	0.0	53.3	6.0	20.7
Prop In Lane	1.00	1.00		0.09	1.00	
Lane Grp Cap(c), veh/h	360	515	0	979	344	1326
V/C Ratio(X)	0.16	0.63	0.00	0.91	0.66	0.52
Avail Cap(c_a), veh/h	360	515	0	979	344	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	33.8	0.0	24.8	25.1	8.1
Incr Delay (d2), s/veh	1.0	5.8	0.0	13.7	9.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	9.9	0.0	30.1	7.8	11.2
LnGrp Delay(d),s/veh	39.9	39.6	0.0	38.5	34.6	9.6
LnGrp LOS	D	D		D	C	A
Approach Vol, veh/h	384		889			922
Approach Delay, s/veh	39.6		38.5			15.8
Approach LOS	D		D			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	37	4	15	23	34	437	5	6	525	166
Future Volume (vph)	310	24	37	4	15	23	34	437	5	6	525	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.964	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1774	0
Flt Permitted		0.709			0.966		0.103			0.328		
Satd. Flow (perm)	0	1306	1562	0	1684	0	196	1915	0	614	1774	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	52	4	16	25	40	520	6	6	536	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	52	0	45	0	40	526	0	6	705	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

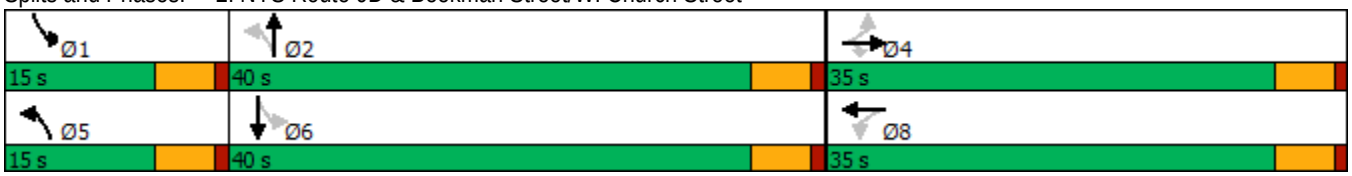


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.08		0.07		0.17	0.56		0.02	0.92	
Control Delay		67.8	2.2		11.8		11.3	18.5		9.5	42.1	
Queue Delay		0.0	0.0		0.0		0.0	4.3		0.0	0.0	
Total Delay		67.8	2.2		11.8		11.3	22.8		9.5	42.1	
Queue Length 50th (ft)		~282	0		7		10	171		1	359	
Queue Length 95th (ft)		#319	2		30		22	304		7	#611	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		478	625		632		296	932		446	770	
Starvation Cap Reductn		0	0		0		0	321		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.99	0.08		0.07		0.14	0.86		0.01	0.92	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 82.4
Natural Cycle: 90
Control Type: Semi Act-Uncoord
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

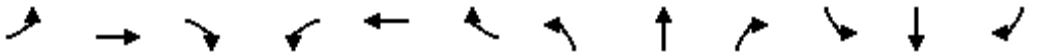
Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	37	4	15	23	34	437	5	6	525	166
Future Volume (veh/h)	310	24	37	4	15	23	34	437	5	6	525	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	52	4	16	25	40	520	6	6	536	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	581	48	144	180	172	847	10	308	570	180
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.42	0.42
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1893	22	1782	1341	423
Grp Volume(v), veh/h	471	0	52	45	0	0	40	0	526	6	0	705
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1764
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	0.0	1.0	0.0	17.2	0.2	0.0	31.6
Cycle Q Clear(g_c), s	30.0	0.0	1.8	30.0	0.0	0.0	1.0	0.0	17.2	0.2	0.0	31.6
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	202	0	581	372	0	0	172	0	857	308	0	749
V/C Ratio(X)	2.33	0.00	0.09	0.12	0.00	0.00	0.23	0.00	0.61	0.02	0.00	0.94
Avail Cap(c_a), veh/h	202	0	581	372	0	0	339	0	857	513	0	749
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	17.2	18.4	0.0	0.0	18.9	0.0	17.3	14.8	0.0	22.7
Incr Delay (d2), s/veh	615.8	0.0	0.1	0.1	0.0	0.0	0.7	0.0	3.3	0.0	0.0	21.2
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	39.0	0.0	0.8	0.7	0.0	0.0	0.5	0.0	9.8	0.1	0.0	19.7
LnGrp Delay(d),s/veh	648.2	0.0	17.3	18.5	0.0	0.0	19.6	0.0	20.6	14.8	0.0	44.0
LnGrp LOS	F		B	B			B		C	B		D
Approach Vol, veh/h		523			45			566			711	
Approach Delay, s/veh		585.5			18.5			20.5			43.7	
Approach LOS		F			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	41.9		35.0	7.4	40.0		35.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	19.2		32.0	3.0	33.6		32.0
Green Ext Time (p_c), s	0.0	1.3		0.0	0.0	0.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		189.6
HCM 2010 LOS		F

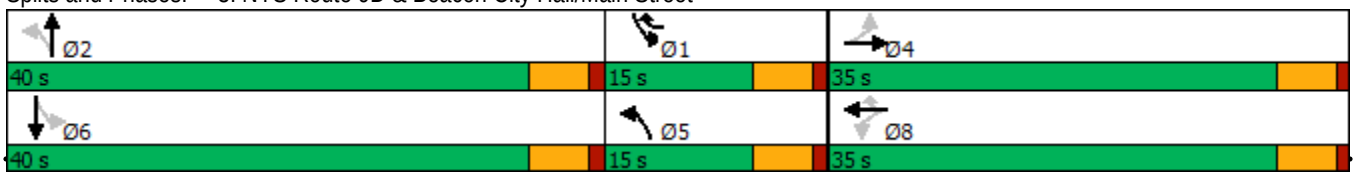


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	50	2	162	0	315	80	246	328	0
Future Volume (vph)	0	2	2	50	2	162	0	315	80	246	328	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
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		0.98				0.96		0.98				
Frt		0.932				0.850		0.970				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1794	0	1743	1853	0
Flt Permitted					0.771					0.404		
Satd. Flow (perm)	0	1722	0	0	1523	1587	1928	1794	0	741	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	55	2	178	0	399	101	280	373	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	57	178	0	500	0	280	373	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.03			0.27	0.47		0.49		0.38	0.24	
Control Delay		21.5			30.1	22.0		12.3		5.9	3.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.2	
Total Delay		21.5			30.1	22.0		12.3		5.9	3.3	
Queue Length 50th (ft)		1			22	54		130		28	39	
Queue Length 95th (ft)		7			54	100		187		56	75	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		833			735	392		1011		758	1544	
Starvation Cap Reductn		0			0	0		0		0	551	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.01			0.08	0.45		0.49		0.37	0.38	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 63.1	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	50	2	162	0	315	80	246	328	0
Future Volume (veh/h)	0	2	2	50	2	162	0	315	80	246	328	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
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
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	55	2	178	0	399	101	280	373	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	288	9	303	709	812	206	579	1049	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1366	68	1551	1837	1435	363	1747	1853	0
Grp Volume(v), veh/h	0	0	6	57	0	178	0	0	500	280	373	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1434	0	1551	1837	0	1798	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.1	0.0	2.2	0.0	0.0	10.3	0.0	6.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.3	0.0	2.2	0.0	0.0	10.3	0.0	6.8	0.0
Prop In Lane	0.00		0.50	0.96		1.00	1.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	214	297	0	303	709	0	1018	579	1049	0
V/C Ratio(X)	0.00	0.00	0.03	0.19	0.00	0.59	0.00	0.00	0.49	0.48	0.36	0.00
Avail Cap(c_a), veh/h	0	0	816	816	0	858	889	0	1018	749	1049	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)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.6	0.0	22.7	0.0	0.0	8.1	13.1	7.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	1.8	0.0	0.0	1.7	0.6	0.9	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	0.0	0.0	0.1	0.9	0.0	2.8	0.0	0.0	5.5	3.8	3.7	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.9	0.0	24.5	0.0	0.0	9.8	13.7	8.2	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		6			235			500			653	
Approach Delay, s/veh		23.7			24.6			9.8			10.6	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	12.3		2.2	0.0	8.8		4.3
Green Ext Time (p_c), s	0.9	1.4		0.0	0.0	0.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	2	3	9	2	48	3	340	7	58	306	12
Future Volume (vph)	7	2	3	9	2	48	3	340	7	58	306	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.890			0.997			0.996	
Flt Protected		0.971			0.992						0.992	
Satd. Flow (prot)	0	1778	0	0	1703	0	0	1843	0	0	1805	0
Flt Permitted		0.971			0.992						0.992	
Satd. Flow (perm)	0	1778	0	0	1703	0	0	1843	0	0	1805	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	9	2	4	14	3	73	4	493	10	63	333	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	90	0	0	507	0	0	409	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	340	7	58	306	12
Future Vol, veh/h	7	2	3	9	2	48	3	340	7	58	306	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
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, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	493	10	63	333	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1016	982	344	980	983	505	348	0	0	506	0	0
Stage 1	468	468	-	509	509	-	-	-	-	-	-	-
Stage 2	548	514	-	471	474	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	218	251	703	272	295	596	1222	-	-	1059	-	-
Stage 1	579	565	-	599	589	-	-	-	-	-	-	-
Stage 2	524	539	-	624	607	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	177	230	701	251	271	593	1220	-	-	1056	-	-
Mov Cap-2 Maneuver	177	230	-	251	271	-	-	-	-	-	-	-
Stage 1	575	522	-	595	585	-	-	-	-	-	-	-
Stage 2	454	535	-	571	561	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	21.9	14.3	0.1	1.3
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1220	-	-	475	228	1056	-	-
HCM Lane V/C Ratio	0.004	-	-	0.188	0.065	0.06	-	-
HCM Control Delay (s)	8	0	-	14.3	21.9	8.6	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0.2	-	-



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	19	5	6	330	297	20
Future Volume (vph)	19	5	6	330	297	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.974				0.991	
Flt Protected	0.961			0.999		
Satd. Flow (prot)	1744	0	0	1861	1846	0
Flt Permitted	0.961			0.999		
Satd. Flow (perm)	1744	0	0	1861	1846	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	5	7	359	323	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	0	0	366	345	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.5

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	19	5	6	330	297	20
Future Vol, veh/h	19	5	6	330	297	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	5	7	359	323	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	707	334	345	0	-	0
Stage 1	334	-	-	-	-	-
Stage 2	373	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	402	708	1214	-	-	-
Stage 1	725	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	399	708	1214	-	-	-
Mov Cap-2 Maneuver	505	-	-	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	696	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	12	0.1	0
HCM LOS	B		

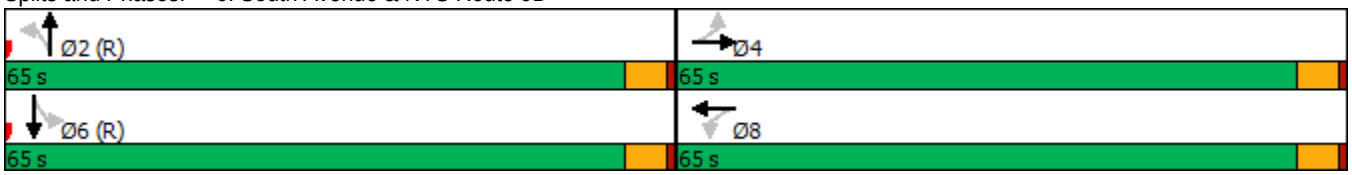
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1214	-	537	-	-
HCM Lane V/C Ratio	0.005	-	0.049	-	-
HCM Control Delay (s)	8	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	260	19	9	236	55	7	21	7	46	29	10
Future Volume (vph)	10	260	19	9	236	55	7	21	7	46	29	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			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
Ped Bike Factor								1.00			0.99	
Frt		0.991			0.975			0.974			0.984	
Flt Protected		0.998			0.998			0.990			0.974	
Satd. Flow (prot)	0	1823	0	0	1840	0	0	1841	0	0	1696	0
Flt Permitted		0.985			0.987			0.961			0.842	
Satd. Flow (perm)	0	1799	0	0	1819	0	0	1781	0	0	1466	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			12			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	289	21	11	284	66	8	25	8	58	37	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	321	0	0	361	0	0	41	0	0	108	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	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
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)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.39			0.43			0.05			0.16	
Control Delay		24.3			24.6			16.5			19.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.3			24.6			16.5			19.8	
Queue Length 50th (ft)		171			193			15			48	
Queue Length 95th (ft)		247			247			34			74	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		832			846			826			680	
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		0.39			0.43			0.05			0.16	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	260	19	9	236	55	7	21	7	46	29	10
Future Volume (veh/h)	10	260	19	9	236	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
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
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	289	21	11	284	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	40	765	54	39	674	153	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	25	1659	118	23	1461	332	289	1108	339	761	530	177
Grp Volume(v), veh/h	321	0	0	361	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1802	0	0	1815	0	0	1736	0	0	1467	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	3.5	0.0	0.0
Cycle Q Clear(g_c), s	15.0	0.0	0.0	17.2	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.18	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	860	0	0	866	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.37	0.00	0.00	0.42	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	866	0	0	834	0	0	720	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	22.9	0.0	0.0	23.5	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.5	0.0	0.0	0.1	0.0	0.0	0.4	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	7.8	0.0	0.0	9.0	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.1	0.0	0.0	24.9	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		321			361			41			108	
Approach Delay, s/veh		24.1			24.9			19.4			20.6	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

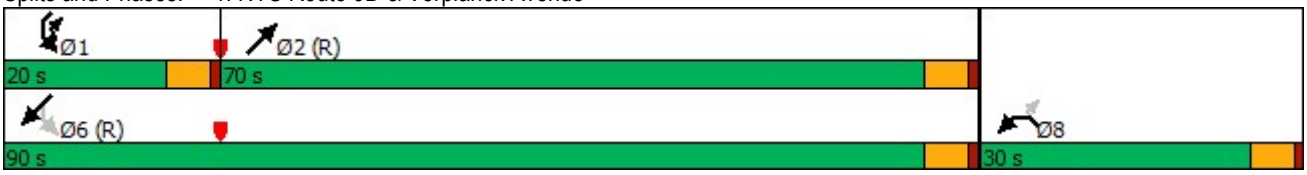
Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	63	299	748	72	209	685
Future Volume (vph)	63	299	748	72	209	685
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.077	
Satd. Flow (perm)	1725	1544	1813	0	144	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	68	325	813	78	227	745
Shared Lane Traffic (%)						
Lane Group Flow (vph)	68	325	891	0	227	745
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.19	0.56	0.91		0.74	0.56
Control Delay	40.9	34.3	39.3		38.9	10.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	40.9	34.3	39.3		38.9	10.5
Queue Length 50th (ft)	44	197	597		99	250
Queue Length 95th (ft)	86	293	#891		#211	344

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	982		306	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.19	0.56	0.91		0.74	0.56

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	63	299	748	72	209	685
Future Volume (veh/h)	63	299	748	72	209	685
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	68	325	813	78	227	745
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	893	86	343	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1649	158	1783	1872
Grp Volume(v), veh/h	68	325	0	891	227	745
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1807	1783	1872
Q Serve(g_s), s	3.9	21.3	0.0	53.5	6.1	23.1
Cycle Q Clear(g_c), s	3.9	21.3	0.0	53.5	6.1	23.1
Prop In Lane	1.00	1.00		0.09	1.00	
Lane Grp Cap(c), veh/h	360	515	0	979	343	1326
V/C Ratio(X)	0.19	0.63	0.00	0.91	0.66	0.56
Avail Cap(c_a), veh/h	360	515	0	979	343	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	33.8	0.0	24.9	25.4	8.5
Incr Delay (d2), s/veh	1.2	5.8	0.0	13.9	9.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	9.9	0.0	30.3	7.9	12.4
LnGrp Delay(d),s/veh	40.3	39.6	0.0	38.8	35.1	10.2
LnGrp LOS	D	D		D	D	B
Approach Vol, veh/h	393		891			972
Approach Delay, s/veh	39.7		38.8			16.0
Approach LOS	D		D			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

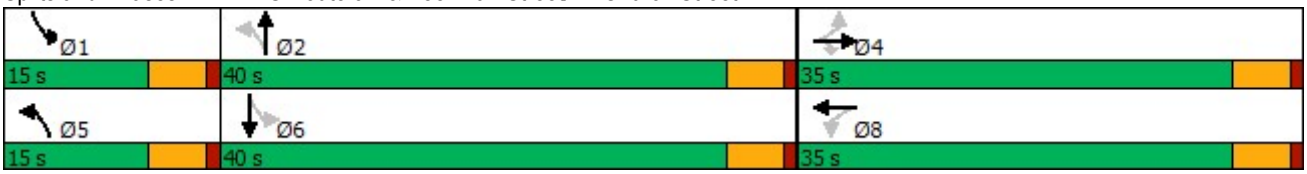
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	41	4	15	23	34	439	5	6	578	166
Future Volume (vph)	310	24	41	4	15	23	34	439	5	6	578	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.967	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1780	0
Flt Permitted		0.709			0.966		0.100			0.325		
Satd. Flow (perm)	0	1306	1562	0	1684	0	190	1915	0	608	1780	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	58	4	16	25	40	523	6	6	590	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	58	0	45	0	40	529	0	6	759	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.09		0.07		0.18	0.57		0.02	0.98	
Control Delay		67.8	2.7		11.8		11.4	18.6		9.5	55.2	
Queue Delay		0.0	0.0		0.0		0.0	4.5		0.0	0.0	
Total Delay		67.8	2.7		11.8		11.4	23.1		9.5	55.2	
Queue Length 50th (ft)		~282	0		7		10	172		1	~447	
Queue Length 95th (ft)		#319	5		30		22	306		7	#679	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		478	625		632		294	932		444	771	
Starvation Cap Reductn		0	0		0		0	321		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.99	0.09		0.07		0.14	0.87		0.01	0.98	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 82.4
Natural Cycle: 90
Control Type: Semi Act-Uncoord
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	41	4	15	23	34	439	5	6	578	166
Future Volume (veh/h)	310	24	41	4	15	23	34	439	5	6	578	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	58	4	16	25	40	523	6	6	590	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	581	48	144	180	140	847	10	306	584	167
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.42	0.42
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1893	22	1782	1376	394
Grp Volume(v), veh/h	471	0	58	45	0	0	40	0	529	6	0	759
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1770
Q Serve(g_s), s	0.0	0.0	2.0	0.0	0.0	0.0	1.0	0.0	17.4	0.2	0.0	35.0
Cycle Q Clear(g_c), s	30.0	0.0	2.0	30.0	0.0	0.0	1.0	0.0	17.4	0.2	0.0	35.0
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.22
Lane Grp Cap(c), veh/h	202	0	581	372	0	0	140	0	857	306	0	752
V/C Ratio(X)	2.33	0.00	0.10	0.12	0.00	0.00	0.29	0.00	0.62	0.02	0.00	1.01
Avail Cap(c_a), veh/h	202	0	581	372	0	0	307	0	857	511	0	752
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	17.3	18.4	0.0	0.0	20.0	0.0	17.4	14.9	0.0	23.7
Incr Delay (d2), s/veh	615.8	0.0	0.1	0.1	0.0	0.0	1.1	0.0	3.3	0.0	0.0	35.2
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	39.0	0.0	0.9	0.7	0.0	0.0	0.5	0.0	9.9	0.1	0.0	24.3
LnGrp Delay(d),s/veh	648.2	0.0	17.4	18.5	0.0	0.0	21.1	0.0	20.7	14.9	0.0	58.9
LnGrp LOS	F		B	B			C		C	B		F
Approach Vol, veh/h		529			45			569			765	
Approach Delay, s/veh		579.1			18.5			20.7			58.5	
Approach LOS		F			B			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	41.9		35.0	7.4	40.0		35.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	19.4		32.0	3.0	37.0		32.0
Green Ext Time (p_c), s	0.0	1.3		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		190.6
HCM 2010 LOS		F

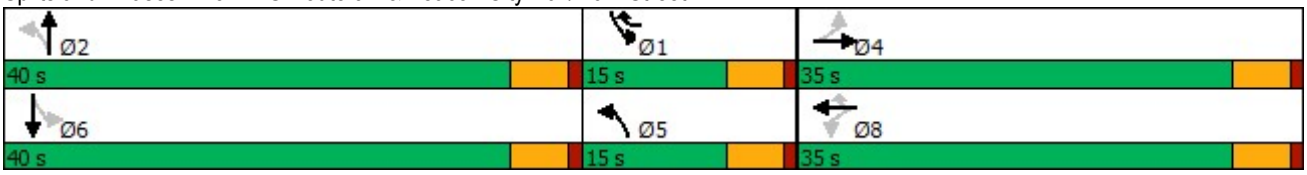
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	59	2	162	0	317	80	246	386	0
Future Volume (vph)	0	2	2	59	2	162	0	317	80	246	386	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
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		0.98				0.96		0.98				
Frt		0.932				0.850		0.970				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1794	0	1743	1853	0
Flt Permitted					0.730					0.401		
Satd. Flow (perm)	0	1722	0	0	1442	1587	1928	1794	0	736	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	65	2	178	0	401	101	280	439	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	67	178	0	502	0	280	439	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.03			0.32	0.46		0.50		0.38	0.29	
Control Delay		21.2			31.1	21.7		12.7		6.2	3.5	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.3	
Total Delay		21.2			31.1	21.7		12.7		6.2	3.8	
Queue Length 50th (ft)		1			26	54		133		29	50	
Queue Length 95th (ft)		7			61	100		193		60	97	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		829			693	398		1006		751	1536	
Starvation Cap Reductn		0			0	0		0		0	520	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.01			0.10	0.45		0.50		0.37	0.43	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 63.4
Natural Cycle: 70
Control Type: Semi Act-Uncoord

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	59	2	162	0	317	80	246	386	0
Future Volume (veh/h)	0	2	2	59	2	162	0	317	80	246	386	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
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
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	65	2	178	0	401	101	280	439	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	290	7	304	656	813	205	577	1048	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1372	58	1551	1837	1437	362	1747	1853	0
Grp Volume(v), veh/h	0	0	6	67	0	178	0	0	502	280	439	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1430	0	1551	1837	0	1799	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.5	0.0	2.2	0.0	0.0	10.4	0.0	8.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.7	0.0	2.2	0.0	0.0	10.4	0.0	8.3	0.0
Prop In Lane	0.00		0.50	0.97		1.00	1.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	215	297	0	304	656	0	1018	577	1048	0
V/C Ratio(X)	0.00	0.00	0.03	0.23	0.00	0.59	0.00	0.00	0.49	0.49	0.42	0.00
Avail Cap(c_a), veh/h	0	0	816	815	0	858	835	0	1018	747	1048	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)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.8	0.0	22.7	0.0	0.0	8.1	13.2	7.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.4	0.0	1.8	0.0	0.0	1.7	0.6	1.2	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	0.0	0.0	0.1	1.1	0.0	2.8	0.0	0.0	5.5	3.8	4.5	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	25.2	0.0	24.5	0.0	0.0	9.8	13.8	8.9	0.0
LnGrp LOS			C	C		C			A	B	A	
Approach Vol, veh/h		6			245			502			719	
Approach Delay, s/veh		23.7			24.7			9.8			10.8	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	12.4		2.2	0.0	10.3		4.7
Green Ext Time (p_c), s	0.9	1.4		0.0	0.0	1.1		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	2	3	9	2	48	3	342	7	58	373	12
Future Volume (vph)	7	2	3	9	2	48	3	342	7	58	373	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.890			0.997			0.996	
Flt Protected		0.971			0.992						0.993	
Satd. Flow (prot)	0	1778	0	0	1703	0	0	1843	0	0	1806	0
Flt Permitted		0.971			0.992						0.993	
Satd. Flow (perm)	0	1778	0	0	1703	0	0	1843	0	0	1806	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	9	2	4	14	3	73	4	496	10	63	405	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	90	0	0	510	0	0	481	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	342	7	58	373	12
Future Vol, veh/h	7	2	3	9	2	48	3	342	7	58	373	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
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, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	496	10	63	405	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1091	1057	416	1055	1058	508	420	0	0	509	0	0
Stage 1	540	540	-	512	512	-	-	-	-	-	-	-
Stage 2	551	517	-	543	546	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	194	227	641	245	270	593	1150	-	-	1056	-	-
Stage 1	530	524	-	597	588	-	-	-	-	-	-	-
Stage 2	522	537	-	578	571	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	157	207	639	225	247	590	1148	-	-	1053	-	-
Mov Cap-2 Maneuver	157	207	-	225	247	-	-	-	-	-	-	-
Stage 1	526	482	-	593	584	-	-	-	-	-	-	-
Stage 2	451	533	-	526	525	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	24	14.8	0.1	1.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1148	-	-	456	204	1053	-	-
HCM Lane V/C Ratio	0.004	-	-	0.196	0.073	0.06	-	-
HCM Control Delay (s)	8.1	0	-	14.8	24	8.6	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0.2	-	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	21	6	28	330	297	87
Future Volume (vph)	21	6	28	330	297	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.968				0.969	
Flt Protected	0.963			0.996		
Satd. Flow (prot)	1736	0	0	1855	1805	0
Flt Permitted	0.963			0.996		
Satd. Flow (perm)	1736	0	0	1855	1805	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	7	30	359	323	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	0	0	389	418	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	21	6	28	330	297	87
Future Vol, veh/h	21	6	28	330	297	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	7	30	359	323	95

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	790	371	418	0	-	0
Stage 1	371	-	-	-	-	-
Stage 2	419	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	359	675	1141	-	-	-
Stage 1	698	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	347	675	1141	-	-	-
Mov Cap-2 Maneuver	464	-	-	-	-	-
Stage 1	675	-	-	-	-	-
Stage 2	664	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	12.7	0.6	0
HCM LOS	B		

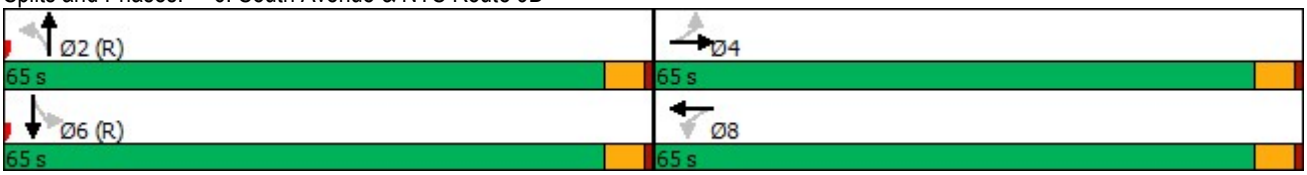
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1141	-	499	-	-
HCM Lane V/C Ratio	0.027	-	0.059	-	-
HCM Control Delay (s)	8.2	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	261	19	9	258	55	7	21	7	46	29	10
Future Volume (vph)	10	261	19	9	258	55	7	21	7	46	29	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			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
Ped Bike Factor								1.00			0.99	
Frt		0.991			0.977			0.974			0.984	
Flt Protected		0.998			0.999			0.990			0.974	
Satd. Flow (prot)	0	1823	0	0	1845	0	0	1841	0	0	1696	0
Flt Permitted		0.984			0.988			0.961			0.842	
Satd. Flow (perm)	0	1797	0	0	1824	0	0	1781	0	0	1466	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			11			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	290	21	11	311	66	8	25	8	58	37	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	322	0	0	388	0	0	41	0	0	108	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	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
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)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.39			0.46			0.05			0.16	
Control Delay		24.4			25.3			16.5			19.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		24.4			25.3			16.5			19.8	
Queue Length 50th (ft)		172			212			15			48	
Queue Length 95th (ft)		248			270			34			74	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		831			847			826			680	
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		0.39			0.46			0.05			0.16	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	261	19	9	258	55	7	21	7	46	29	10
Future Volume (veh/h)	10	261	19	9	258	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
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
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1890	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	290	21	11	311	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	40	765	54	38	687	143	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	25	1658	117	21	1489	309	289	1108	339	761	530	177
Grp Volume(v), veh/h	322	0	0	388	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1801	0	0	1819	0	0	1736	0	0	1467	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	3.5	0.0	0.0
Cycle Q Clear(g_c), s	15.0	0.0	0.0	18.8	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.07	0.03		0.17	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	860	0	0	868	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.37	0.00	0.00	0.45	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	868	0	0	834	0	0	720	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	22.9	0.0	0.0	23.9	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.7	0.0	0.0	0.1	0.0	0.0	0.4	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	7.8	0.0	0.0	9.9	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.1	0.0	0.0	25.6	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		322			388			41			108	
Approach Delay, s/veh		24.1			25.6			19.4			20.6	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	41	4	15	23	34	439	5	6	578	166
Future Volume (vph)	310	24	41	4	15	23	34	439	5	6	578	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.97		0.96			1.00			0.99	
Frt			0.850		0.925			0.998			0.967	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1713	0	1805	1915	0	1778	1780	0
Flt Permitted		0.956			0.996		0.104			0.355		
Satd. Flow (perm)	0	1760	1557	0	1713	0	198	1915	0	664	1780	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145		25			1			19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	58	4	16	25	40	523	6	6	590	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	58	0	45	0	40	529	0	6	759	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		8	8		5	2		1	6	

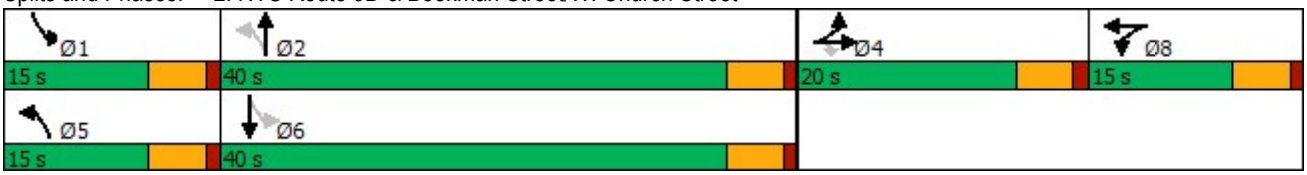
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4				2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	9.0	9.0		9.0	21.0		9.0	21.0	
Total Split (s)	20.0	20.0	20.0	15.0	15.0		15.0	40.0		15.0	40.0	
Total Split (%)	22.2%	22.2%	22.2%	16.7%	16.7%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	15.0	15.0	15.0	10.0	10.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min		None	Min	
v/c Ratio		1.30	0.13		0.25		0.16	0.51		0.01	0.88	
Control Delay		185.0	0.6		25.0		9.9	15.2		9.0	35.1	
Queue Delay		0.0	0.0		0.0		0.0	1.7		0.0	0.0	
Total Delay		185.0	0.6		25.0		9.9	16.9		9.0	35.1	
Queue Length 50th (ft)		~346	0		10		9	155		1	~382	
Queue Length 95th (ft)		#399	0		41		22	301		7	#670	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		362	435		256		332	1038		518	864	
Starvation Cap Reductn		0	0		0		0	334		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		1.30	0.13		0.18		0.12	0.75		0.01	0.88	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 75.1	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	41	4	15	23	34	439	5	6	578	166
Future Volume (veh/h)	310	24	41	4	15	23	34	439	5	6	578	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.86	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	58	4	16	25	40	523	6	6	590	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	339	26	330	5	19	30	184	901	10	352	622	178
Arrive On Green	0.21	0.21	0.21	0.03	0.03	0.03	0.03	0.48	0.48	0.01	0.45	0.45
Sat Flow, veh/h	1633	127	1591	143	572	894	1810	1893	22	1782	1376	394
Grp Volume(v), veh/h	471	0	58	45	0	0	40	0	529	6	0	759
Grp Sat Flow(s),veh/h/ln	1760	0	1591	1609	0	0	1810	0	1915	1782	0	1770
Q Serve(g_s), s	15.0	0.0	2.2	2.0	0.0	0.0	0.8	0.0	14.5	0.1	0.0	29.7
Cycle Q Clear(g_c), s	15.0	0.0	2.2	2.0	0.0	0.0	0.8	0.0	14.5	0.1	0.0	29.7
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.22
Lane Grp Cap(c), veh/h	365	0	330	54	0	0	184	0	912	352	0	800
V/C Ratio(X)	1.29	0.00	0.18	0.84	0.00	0.00	0.22	0.00	0.58	0.02	0.00	0.95
Avail Cap(c_a), veh/h	365	0	330	223	0	0	379	0	927	588	0	857
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	23.6	34.7	0.0	0.0	16.4	0.0	13.7	11.8	0.0	19.0
Incr Delay (d2), s/veh	149.5	0.0	0.3	27.0	0.0	0.0	0.6	0.0	0.9	0.0	0.0	18.8
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	22.4	0.0	1.0	1.3	0.0	0.0	0.4	0.0	7.7	0.1	0.0	18.5
LnGrp Delay(d),s/veh	178.2	0.0	23.8	61.7	0.0	0.0	17.0	0.0	14.6	11.8	0.0	37.8
LnGrp LOS	F		C	E			B		B	B		D
Approach Vol, veh/h		529			45			569			765	
Approach Delay, s/veh		161.3			61.7			14.8			37.6	
Approach LOS		F			E			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	39.4		20.0	7.2	37.7		7.4
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		15.0	10.0	35.0		10.0
Max Q Clear Time (g_c+I1), s	2.1	16.5		17.0	2.8	31.7		4.0
Green Ext Time (p_c), s	0.0	1.3		0.0	0.0	0.9		0.1

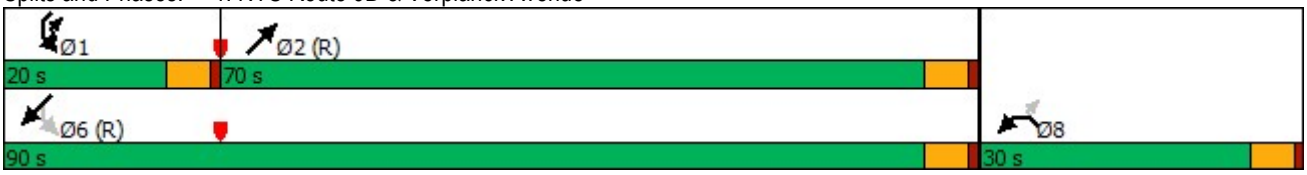
Intersection Summary		
HCM 2010 Ctrl Delay		65.7
HCM 2010 LOS		E

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	54	299	794	81	209	639
Future Volume (vph)	54	299	794	81	209	639
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1813	0	1778	1872
Flt Permitted	0.950				0.057	
Satd. Flow (perm)	1725	1544	1813	0	107	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	59	325	863	88	227	695
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	325	951	0	227	695
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.16	0.56	0.97		0.80	0.52
Control Delay	40.4	34.3	49.4		51.1	9.9
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	40.4	34.3	49.4		51.1	9.9
Queue Length 50th (ft)	38	197	681		119	223
Queue Length 95th (ft)	76	293	#991		#247	307

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	982		284	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.16	0.56	0.97		0.80	0.52

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	54	299	794	81	209	639
Future Volume (veh/h)	54	299	794	81	209	639
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	59	325	863	88	227	695
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	887	90	301	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1638	167	1783	1872
Grp Volume(v), veh/h	59	325	0	951	227	695
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1805	1783	1872
Q Serve(g_s), s	3.4	21.3	0.0	61.2	9.3	20.7
Cycle Q Clear(g_c), s	3.4	21.3	0.0	61.2	9.3	20.7
Prop In Lane	1.00	1.00		0.09	1.00	
Lane Grp Cap(c), veh/h	360	515	0	978	301	1326
V/C Ratio(X)	0.16	0.63	0.00	0.97	0.75	0.52
Avail Cap(c_a), veh/h	360	515	0	978	301	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	33.8	0.0	26.6	35.1	8.1
Incr Delay (d2), s/veh	1.0	5.8	0.0	22.9	15.9	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	9.9	0.0	36.6	8.5	11.2
LnGrp Delay(d),s/veh	39.9	39.6	0.0	49.5	51.0	9.6
LnGrp LOS	D	D		D	D	A
Approach Vol, veh/h	384		951			922
Approach Delay, s/veh	39.6		49.5			19.8
Approach LOS	D		D			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.7
HCM 2010 LOS	D

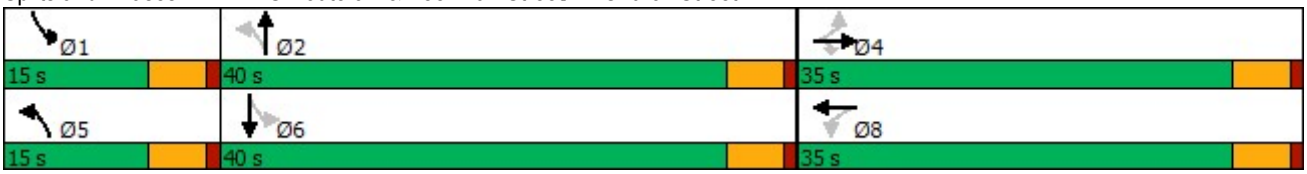
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	37	4	15	23	39	494	5	6	524	166
Future Volume (vph)	310	24	37	4	15	23	39	494	5	6	524	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.98		0.97			1.00			0.99	
Frt			0.850		0.925			0.998			0.964	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1737	0	1805	1915	0	1778	1774	0
Flt Permitted		0.709			0.966		0.103			0.266		
Satd. Flow (perm)	0	1306	1562	0	1684	0	196	1915	0	498	1774	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	52	4	16	25	46	588	6	6	535	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	52	0	45	0	46	594	0	6	704	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.99	0.08		0.07		0.20	0.64		0.02	0.92	
Control Delay		68.2	2.2		11.8		11.6	20.2		9.7	42.2	
Queue Delay		0.0	0.0		0.0		0.0	9.7		0.0	0.0	
Total Delay		68.2	2.2		11.8		11.6	29.9		9.7	42.2	
Queue Length 50th (ft)		~283	0		7		11	203		1	360	
Queue Length 95th (ft)		#319	2		30		24	356		7	#611	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		477	624		631		296	933		402	769	
Starvation Cap Reductn		0	0		0		0	306		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.99	0.08		0.07		0.16	0.95		0.01	0.92	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 82.5
Natural Cycle: 90
Control Type: Semi Act-Uncoord
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	37	4	15	23	39	494	5	6	524	166
Future Volume (veh/h)	310	24	37	4	15	23	39	494	5	6	524	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	52	4	16	25	46	588	6	6	535	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	193	8	579	47	144	180	175	851	9	264	568	179
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.03	0.45	0.45	0.01	0.42	0.42
Sat Flow, veh/h	299	23	1594	0	396	495	1810	1896	19	1782	1341	423
Grp Volume(v), veh/h	471	0	52	45	0	0	46	0	594	6	0	704
Grp Sat Flow(s),veh/h/ln	323	0	1594	890	0	0	1810	0	1915	1782	0	1764
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	0.0	1.2	0.0	20.5	0.2	0.0	31.6
Cycle Q Clear(g_c), s	30.0	0.0	1.8	30.0	0.0	0.0	1.2	0.0	20.5	0.2	0.0	31.6
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	201	0	579	371	0	0	175	0	860	264	0	747
V/C Ratio(X)	2.34	0.00	0.09	0.12	0.00	0.00	0.26	0.00	0.69	0.02	0.00	0.94
Avail Cap(c_a), veh/h	201	0	579	371	0	0	337	0	860	469	0	747
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.6	0.0	17.3	18.5	0.0	0.0	19.0	0.0	18.2	15.5	0.0	22.8
Incr Delay (d2), s/veh	618.5	0.0	0.1	0.1	0.0	0.0	0.8	0.0	4.5	0.0	0.0	21.5
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	39.1	0.0	0.8	0.7	0.0	0.0	0.6	0.0	11.8	0.1	0.0	19.7
LnGrp Delay(d),s/veh	651.0	0.0	17.4	18.6	0.0	0.0	19.8	0.0	22.7	15.6	0.0	44.3
LnGrp LOS	F		B	B			B		C	B		D
Approach Vol, veh/h		523			45			640			710	
Approach Delay, s/veh		588.0			18.6			22.5			44.0	
Approach LOS		F			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	42.1		35.0	7.6	40.0		35.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	22.5		32.0	3.2	33.6		32.0
Green Ext Time (p_c), s	0.0	1.4		0.0	0.1	0.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	184.6	
HCM 2010 LOS	F	

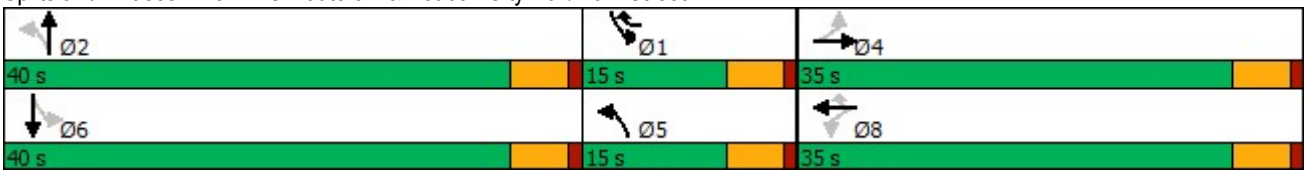
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	50	2	162	0	376	89	246	327	0
Future Volume (vph)	0	2	2	50	2	162	0	376	89	246	327	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
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		0.98				0.96		0.98				
Frt		0.932				0.850		0.971				
Flt Protected					0.954					0.950		
Satd. Flow (prot)	0	1722	0	0	1885	1647	1928	1798	0	1743	1853	0
Flt Permitted					0.771					0.338		
Satd. Flow (perm)	0	1722	0	0	1523	1587	1928	1798	0	620	1853	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			9			15			21			12
Confl. Bikes (#/hr)			1						1			
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	2%	5%	2%	1%	0%
Adj. Flow (vph)	0	3	3	55	2	178	0	476	113	280	372	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	57	178	0	589	0	280	372	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type		NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.03			0.27	0.47		0.58		0.42	0.24	
Control Delay		21.5			30.1	21.9		13.9		7.5	3.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.2	
Total Delay		21.5			30.1	21.9		13.9		7.5	3.3	
Queue Length 50th (ft)		1			22	54		164		28	39	
Queue Length 95th (ft)		7			54	100		231		56	75	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70				120		
Base Capacity (vph)		831			734	391		1011		678	1544	
Starvation Cap Reductn		0			0	0		0		0	551	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.01			0.08	0.46		0.58		0.41	0.37	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 63.2
Natural Cycle: 70
Control Type: Semi Act-Uncoord

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	2	50	2	162	0	376	89	246	327	0
Future Volume (veh/h)	0	2	2	50	2	162	0	376	89	246	327	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.97		0.94	1.00		0.96	1.00		1.00
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
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1937	1928	1880	1928	1835	1853	1872
Adj Flow Rate, veh/h	0	3	3	55	2	178	0	476	113	280	372	0
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.91	0.91	0.91	0.79	0.79	0.79	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	2	0	2	5	2	1	0
Cap, veh/h	0	107	107	288	9	303	710	825	196	516	1049	0
Arrive On Green	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.57	0.57	0.06	0.57	0.00
Sat Flow, veh/h	0	841	841	1366	68	1551	1837	1457	346	1747	1853	0
Grp Volume(v), veh/h	0	0	6	57	0	178	0	0	589	280	372	0
Grp Sat Flow(s),veh/h/ln	0	0	1682	1434	0	1551	1837	0	1803	1747	1853	0
Q Serve(g_s), s	0.0	0.0	0.2	2.1	0.0	2.2	0.0	0.0	13.0	0.0	6.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	2.3	0.0	2.2	0.0	0.0	13.0	0.0	6.7	0.0
Prop In Lane	0.00		0.50	0.96		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	214	297	0	303	710	0	1020	516	1049	0
V/C Ratio(X)	0.00	0.00	0.03	0.19	0.00	0.59	0.00	0.00	0.58	0.54	0.35	0.00
Avail Cap(c_a), veh/h	0	0	816	816	0	858	889	0	1020	687	1049	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)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.6	24.6	0.0	22.7	0.0	0.0	8.7	15.9	7.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	1.8	0.0	0.0	2.4	0.9	0.9	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	0.0	0.0	0.1	0.9	0.0	2.8	0.0	0.0	7.1	4.3	3.7	0.0
LnGrp Delay(d),s/veh	0.0	0.0	23.7	24.9	0.0	24.5	0.0	0.0	11.0	16.8	8.2	0.0
LnGrp LOS			C	C		C			B	B	A	
Approach Vol, veh/h		6			235			589			652	
Approach Delay, s/veh		23.7			24.6			11.0			11.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	15.0		2.2	0.0	8.7		4.3
Green Ext Time (p_c), s	0.9	1.6		0.0	0.0	0.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	13.6
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	7	2	3	9	2	48	3	410	7	58	304	12
Future Volume (vph)	7	2	3	9	2	48	3	410	7	58	304	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.890			0.998			0.996	
Flt Protected		0.971			0.992						0.992	
Satd. Flow (prot)	0	1778	0	0	1703	0	0	1844	0	0	1805	0
Flt Permitted		0.971			0.992						0.992	
Satd. Flow (perm)	0	1778	0	0	1703	0	0	1844	0	0	1805	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			2			4			3			2
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.81	0.81	0.81	0.66	0.66	0.66	0.69	0.69	0.69	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	2%	2%	0%
Adj. Flow (vph)	9	2	4	14	3	73	4	594	10	63	330	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	90	0	0	608	0	0	406	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	2	3	9	2	48	3	410	7	58	304	12
Future Vol, veh/h	7	2	3	9	2	48	3	410	7	58	304	12
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	3	0	0	2
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, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	81	81	81	66	66	66	69	69	69	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	2	2	0
Mvmt Flow	9	2	4	14	3	73	4	594	10	63	330	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1114	1080	341	1078	1081	606	345	0	0	607	0	0
Stage 1	465	465	-	610	610	-	-	-	-	-	-	-
Stage 2	649	615	-	468	471	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	6.5	5.9	5.9	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	5.5	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	187	220	706	237	263	527	1225	-	-	971	-	-
Stage 1	581	566	-	537	540	-	-	-	-	-	-	-
Stage 2	462	485	-	626	609	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	148	201	704	218	240	524	1223	-	-	969	-	-
Mov Cap-2 Maneuver	148	201	-	218	240	-	-	-	-	-	-	-
Stage 1	577	520	-	533	536	-	-	-	-	-	-	-
Stage 2	392	482	-	569	559	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	25	15.9	0.1	1.4
HCM LOS	D	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1223	-	-	418	195	969	-	-
HCM Lane V/C Ratio	0.004	-	-	0.214	0.076	0.065	-	-
HCM Control Delay (s)	8	0	-	15.9	25	9	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.2	0.2	-	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	89	29	6	330	297	18
Future Volume (vph)	89	29	6	330	297	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.967				0.992	
Flt Protected	0.964			0.999		
Satd. Flow (prot)	1736	0	0	1861	1848	0
Flt Permitted	0.964			0.999		
Satd. Flow (perm)	1736	0	0	1861	1848	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	97	32	7	359	323	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	129	0	0	366	343	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.1

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	89	29	6	330	297	18
Future Vol, veh/h	89	29	6	330	297	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	97	32	7	359	323	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	706	333	343	0	-	0
Stage 1	333	-	-	-	-	-
Stage 2	373	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	402	709	1216	-	-	-
Stage 1	726	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	399	709	1216	-	-	-
Mov Cap-2 Maneuver	505	-	-	-	-	-
Stage 1	721	-	-	-	-	-
Stage 2	696	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	13.7	0.1	0
HCM LOS	B		

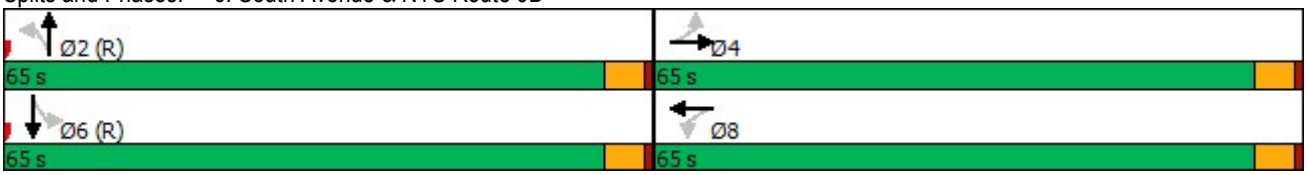
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1216	-	543	-	-
HCM Lane V/C Ratio	0.005	-	0.236	-	-
HCM Control Delay (s)	8	0	13.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.9	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	284	19	9	236	55	7	21	7	46	29	10
Future Volume (vph)	10	284	19	9	236	55	7	21	7	46	29	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			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
Ped Bike Factor								1.00			0.99	
Frt		0.992			0.975			0.974			0.984	
Flt Protected		0.998			0.998			0.990			0.974	
Satd. Flow (prot)	0	1825	0	0	1840	0	0	1841	0	0	1696	0
Flt Permitted		0.986			0.987			0.961			0.842	
Satd. Flow (perm)	0	1803	0	0	1819	0	0	1781	0	0	1466	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			12			8			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	316	21	11	284	66	8	25	8	58	37	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	348	0	0	361	0	0	41	0	0	108	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	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
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)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.42			0.43			0.05			0.16	
Control Delay		25.1			24.6			16.5			19.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		25.1			24.6			16.5			19.8	
Queue Length 50th (ft)		190			193			15			48	
Queue Length 95th (ft)		271			247			34			74	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		833			846			826			680	
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		0.42			0.43			0.05			0.16	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

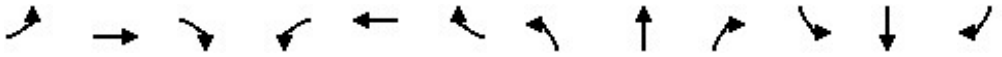
Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	284	19	9	236	55	7	21	7	46	29	10
Future Volume (veh/h)	10	284	19	9	236	55	7	21	7	46	29	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
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
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1891	1957	1910	1910	1910	1872	1779	1872
Adj Flow Rate, veh/h	11	316	21	11	284	66	8	25	8	58	37	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.85	0.85	0.85	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	39	772	50	39	674	153	167	511	156	394	244	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	23	1673	109	23	1460	332	289	1108	339	761	530	177
Grp Volume(v), veh/h	348	0	0	361	0	0	41	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1805	0	0	1814	0	0	1736	0	0	1467	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	3.5	0.0	0.0
Cycle Q Clear(g_c), s	16.5	0.0	0.0	17.2	0.0	0.0	1.6	0.0	0.0	5.2	0.0	0.0
Prop In Lane	0.03		0.06	0.03		0.18	0.20		0.20	0.54		0.12
Lane Grp Cap(c), veh/h	862	0	0	866	0	0	834	0	0	720	0	0
V/C Ratio(X)	0.40	0.00	0.00	0.42	0.00	0.00	0.05	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	862	0	0	866	0	0	834	0	0	720	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	23.3	0.0	0.0	23.5	0.0	0.0	19.3	0.0	0.0	20.2	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	1.5	0.0	0.0	0.1	0.0	0.0	0.4	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	8.7	0.0	0.0	9.0	0.0	0.0	0.8	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	24.7	0.0	0.0	25.0	0.0	0.0	19.4	0.0	0.0	20.6	0.0	0.0
LnGrp LOS	C			C			B			C		
Approach Vol, veh/h		348			361			41			108	
Approach Delay, s/veh		24.7			25.0			19.4			20.6	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

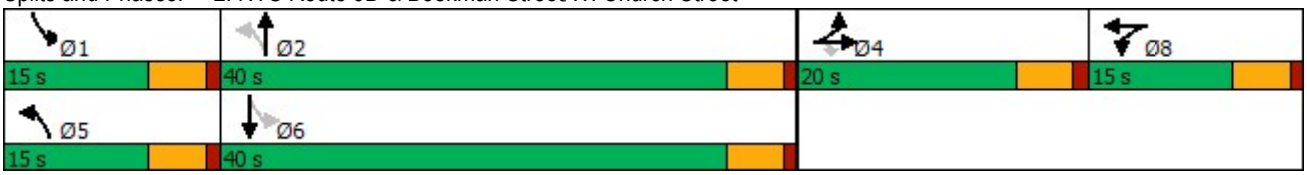


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	24	37	4	15	23	39	494	5	6	524	166
Future Volume (vph)	310	24	37	4	15	23	39	494	5	6	524	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.97		0.96			1.00			0.99	
Frt			0.850		0.925			0.998			0.964	
Flt Protected		0.956			0.996		0.950			0.950		
Satd. Flow (prot)	0	1760	1599	0	1713	0	1805	1915	0	1778	1774	0
Flt Permitted		0.956			0.996		0.134			0.294		
Satd. Flow (perm)	0	1760	1557	0	1713	0	255	1915	0	550	1774	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145		25			1			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			2			13			1			6
Confl. Bikes (#/hr)						1			1			1
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Heavy Vehicles (%)	2%	4%	0%	0%	7%	0%	3%	2%	0%	0%	1%	1%
Adj. Flow (vph)	437	34	52	4	16	25	46	588	6	6	535	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	471	52	0	45	0	46	594	0	6	704	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		8	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4				2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	9.0	9.0		9.0	21.0		9.0	21.0	
Total Split (s)	20.0	20.0	20.0	15.0	15.0		15.0	40.0		15.0	40.0	
Total Split (%)	22.2%	22.2%	22.2%	16.7%	16.7%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	15.0	15.0	15.0	10.0	10.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min		None	Min	
v/c Ratio		1.27	0.12		0.24		0.16	0.58		0.02	0.84	
Control Delay		169.5	0.5		25.0		9.8	16.6		9.0	31.5	
Queue Delay		0.0	0.0		0.0		0.0	2.1		0.0	0.0	
Total Delay		169.5	0.5		25.0		9.8	18.7		9.0	31.5	
Queue Length 50th (ft)		~346	0		10		10	182		1	334	
Queue Length 95th (ft)		#400	0		42		24	351		7	#602	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		372	444		263		360	1068		469	887	
Starvation Cap Reductn		0	0		0		0	319		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		1.27	0.12		0.17		0.13	0.79		0.01	0.79	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 73.8	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	24	37	4	15	23	39	494	5	6	524	166
Future Volume (veh/h)	310	24	37	4	15	23	39	494	5	6	524	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.86	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1881	1842	1881	1995	1947	1995	1900	1919	1957	1872	1853	1872
Adj Flow Rate, veh/h	437	34	52	4	16	25	46	588	6	6	535	169
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.92	0.92	0.92	0.84	0.84	0.84	0.98	0.98	0.98
Percent Heavy Veh, %	2	4	0	0	7	0	3	2	0	0	1	1
Cap, veh/h	353	27	344	5	19	30	202	864	9	289	574	181
Arrive On Green	0.22	0.22	0.22	0.03	0.03	0.03	0.03	0.46	0.46	0.01	0.43	0.43
Sat Flow, veh/h	1633	127	1591	144	574	897	1810	1896	19	1782	1341	423
Grp Volume(v), veh/h	471	0	52	45	0	0	46	0	594	6	0	704
Grp Sat Flow(s),veh/h/ln	1760	0	1591	1615	0	0	1810	0	1915	1782	0	1764
Q Serve(g_s), s	15.0	0.0	1.8	1.9	0.0	0.0	1.0	0.0	17.0	0.1	0.0	26.3
Cycle Q Clear(g_c), s	15.0	0.0	1.8	1.9	0.0	0.0	1.0	0.0	17.0	0.1	0.0	26.3
Prop In Lane	0.93		1.00	0.09		0.56	1.00		0.01	1.00		0.24
Lane Grp Cap(c), veh/h	380	0	344	54	0	0	202	0	873	289	0	756
V/C Ratio(X)	1.24	0.00	0.15	0.83	0.00	0.00	0.23	0.00	0.68	0.02	0.00	0.93
Avail Cap(c_a), veh/h	380	0	344	233	0	0	401	0	966	535	0	890
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	22.0	33.3	0.0	0.0	15.6	0.0	14.9	12.8	0.0	18.9
Incr Delay (d2), s/veh	127.8	0.0	0.2	26.6	0.0	0.0	0.6	0.0	1.7	0.0	0.0	14.8
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	20.7	0.0	0.8	1.2	0.0	0.0	0.5	0.0	9.3	0.1	0.0	15.8
LnGrp Delay(d),s/veh	155.0	0.0	22.2	60.0	0.0	0.0	16.2	0.0	16.6	12.8	0.0	33.6
LnGrp LOS	F		C	E			B		B	B		C
Approach Vol, veh/h		523			45			640			710	
Approach Delay, s/veh		141.8			60.0			16.6			33.5	
Approach LOS		F			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	36.6		20.0	7.4	34.7		7.3
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		15.0	10.0	35.0		10.0
Max Q Clear Time (g_c+I1), s	2.1	19.0		17.0	3.0	28.3		3.9
Green Ext Time (p_c), s	0.0	1.5		0.0	0.1	1.4		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	58.0
HCM 2010 LOS	E



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	73	232	581	65	159	650
Future Volume (vph)	73	232	581	65	159	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1809	0	1778	1872
Flt Permitted	0.950				0.198	
Satd. Flow (perm)	1725	1544	1809	0	371	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	252	632	71	173	707
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	252	703	0	173	707
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.22	0.44	0.72		0.39	0.53
Control Delay	41.4	31.0	25.8		8.4	10.0

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.4	31.0	25.8		8.4	10.0
Queue Length 50th (ft)	51	144	391		39	229
Queue Length 95th (ft)	96	222	544		62	316
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	979		438	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.22	0.44	0.72		0.39	0.53

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	

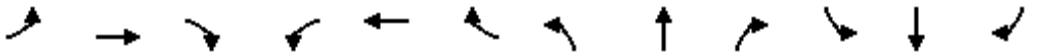
Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	73	232	581	65	159	650
Future Volume (veh/h)	73	232	581	65	159	650
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	79	252	632	71	173	707
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	878	99	468	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1621	182	1783	1872
Grp Volume(v), veh/h	79	252	0	703	173	707
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1803	1783	1872
Q Serve(g_s), s	4.5	15.6	0.0	35.2	4.1	21.2
Cycle Q Clear(g_c), s	4.5	15.6	0.0	35.2	4.1	21.2
Prop In Lane	1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	360	515	0	976	468	1326
V/C Ratio(X)	0.22	0.49	0.00	0.72	0.37	0.53
Avail Cap(c_a), veh/h	360	515	0	976	468	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	31.9	0.0	20.7	14.2	8.2
Incr Delay (d2), s/veh	1.4	3.3	0.0	4.6	2.2	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.1	0.0	18.6	2.6	11.4
LnGrp Delay(d),s/veh	40.8	35.2	0.0	25.2	16.4	9.7
LnGrp LOS	D	D		C	B	A
Approach Vol, veh/h	331		703			880
Approach Delay, s/veh	36.5		25.2			11.0
Approach LOS	D		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

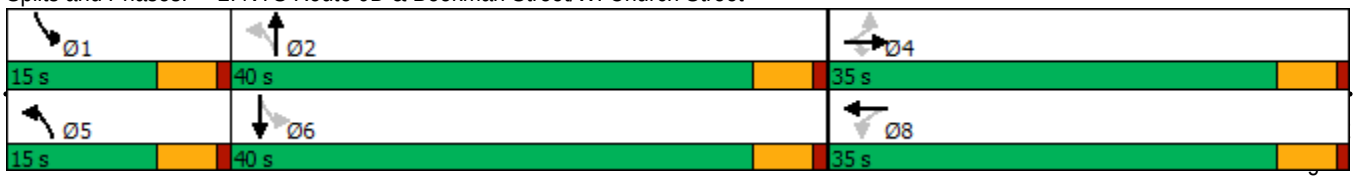


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	1	25	9	12	20	67	519	4	17	592	179
Future Volume (vph)	33	1	25	9	12	20	67	519	4	17	592	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.965	
Flt Protected		0.953			0.989		0.950			0.950		
Satd. Flow (prot)	0	1775	1599	0	1815	0	1771	1936	0	1778	1771	0
Flt Permitted		0.842			0.912		0.220			0.439		
Satd. Flow (perm)	0	1568	1533	0	1673	0	410	1936	0	822	1771	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	1	34	12	16	27	71	552	4	18	623	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	46	34	0	55	0	71	556	0	18	811	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.22	0.12		0.23		0.15	0.36		0.03	0.64	
Control Delay		28.0	1.3		19.0		3.5	5.7		3.2	14.2	
Queue Delay		0.0	0.0		0.0		0.0	0.3		0.0	0.0	
Total Delay		28.0	1.3		19.0		3.5	6.0		3.2	14.2	
Queue Length 50th (ft)		17	0		10		6	63		2	236	
Queue Length 95th (ft)		35	0		30		17	219		6	#509	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		833	854		902		562	1541		798	1277	
Starvation Cap Reductn		0	0		0		0	429		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.06	0.04		0.06		0.13	0.50		0.02	0.64	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 58.6	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

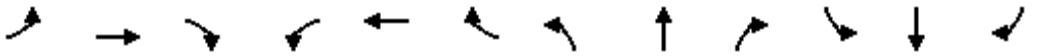
Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1	25	9	12	20	67	519	4	17	592	179
Future Volume (veh/h)	33	1	25	9	12	20	67	519	4	17	592	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1881	1863	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	1	34	12	16	27	71	552	4	18	623	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	248	4	126	97	56	74	391	1221	9	572	824	249
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.64	0.64	0.02	0.61	0.61
Sat Flow, veh/h	1426	48	1441	239	635	843	1775	1921	14	1782	1361	411
Grp Volume(v), veh/h	46	0	34	55	0	0	71	0	556	18	0	811
Grp Sat Flow(s),veh/h/ln	1474	0	1441	1717	0	0	1775	0	1935	1782	0	1772
Q Serve(g_s), s	0.0	0.0	1.3	0.0	0.0	0.0	0.8	0.0	8.5	0.2	0.0	19.2
Cycle Q Clear(g_c), s	1.4	0.0	1.3	1.6	0.0	0.0	0.8	0.0	8.5	0.2	0.0	19.2
Prop In Lane	0.98		1.00	0.22		0.49	1.00		0.01	1.00		0.23
Lane Grp Cap(c), veh/h	253	0	126	227	0	0	391	0	1230	572	0	1073
V/C Ratio(X)	0.18	0.00	0.27	0.24	0.00	0.00	0.18	0.00	0.45	0.03	0.00	0.76
Avail Cap(c_a), veh/h	831	0	748	946	0	0	614	0	1230	850	0	1073
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.6	24.8	0.0	0.0	7.2	0.0	5.4	4.6	0.0	8.3
Incr Delay (d2), s/veh	0.3	0.0	1.1	0.5	0.0	0.0	0.2	0.0	1.2	0.0	0.0	5.0
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	0.7	0.0	0.5	0.9	0.0	0.0	0.4	0.0	4.9	0.1	0.0	10.7
LnGrp Delay(d),s/veh	25.0	0.0	25.8	25.3	0.0	0.0	7.4	0.0	6.6	4.6	0.0	13.2
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		80			55			627			829	
Approach Delay, s/veh		25.3			25.3			6.7			13.1	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	41.7		10.1	7.7	40.0		10.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	10.5		3.4	2.8	21.2		3.6
Green Ext Time (p_c), s	0.0	1.5		0.4	0.1	2.3		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

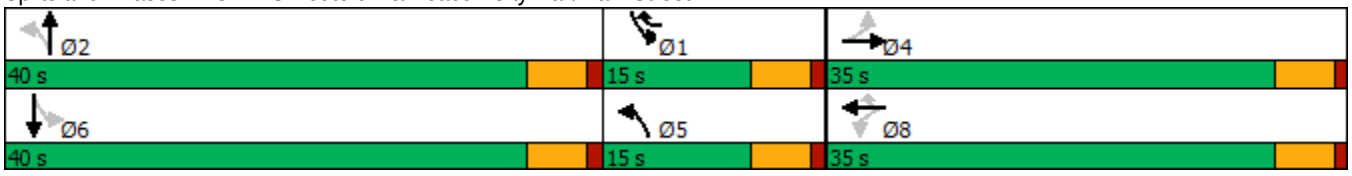


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	38	0	197	2	392	52	293	339	3
Future Volume (vph)	2	2	2	38	0	197	2	392	52	293	339	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
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		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.982			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1817	0	1760	1851	0
Flt Permitted		0.872			0.833		0.531			0.383		
Satd. Flow (perm)	0	1544	0	0	1646	1619	1024	1817	0	710	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3									1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	43	0	221	2	445	59	318	368	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	43	221	2	504	0	318	371	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.05			0.19	0.58	0.00	0.49		0.44	0.25	
Control Delay		23.3			28.9	25.0	3.5	12.1		7.1	5.5	
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.2	
Total Delay		23.3			28.9	25.0	3.5	12.1		7.1	5.7	
Queue Length 50th (ft)		2			17	69	0	131		32	39	
Queue Length 95th (ft)		11			43	121	2	217		63	152	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		746			794	391	871	1023		730	1469	
Starvation Cap Reductn		0			0	0	0	0		0	460	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.01			0.05	0.57	0.00	0.49		0.44	0.37	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 63	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	38	0	197	2	392	52	293	339	3
Future Volume (veh/h)	2	2	2	38	0	197	2	392	52	293	339	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	0.99		0.96	0.99		0.99
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
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	43	0	221	2	445	59	318	368	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	299	0	315	708	916	121	582	1038	8
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	290	761	526	1423	0	1624	1837	1620	215	1765	1835	15
Grp Volume(v), veh/h	9	0	0	43	0	221	2	0	504	318	0	371
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1835	1765	0	1850
Q Serve(g_s), s	0.0	0.0	0.0	1.3	0.0	3.8	0.0	0.0	10.2	0.0	0.0	6.7
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.6	0.0	3.8	0.0	0.0	10.2	0.0	0.0	6.7
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	299	0	315	708	0	1037	582	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.14	0.00	0.70	0.00	0.00	0.49	0.55	0.00	0.35
Avail Cap(c_a), veh/h	800	0	0	801	0	894	886	0	1037	754	0	1046
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.2	0.0	23.3	7.1	0.0	8.1	13.9	0.0	7.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	2.8	0.0	0.0	1.6	0.8	0.0	0.9
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	0.1	0.0	0.0	0.7	0.0	3.5	0.0	0.0	5.5	4.6	0.0	3.7
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.4	0.0	26.1	7.1	0.0	9.7	14.7	0.0	8.3
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		9			264			506			689	
Approach Delay, s/veh		23.7			25.9			9.7			11.2	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	12.2		2.3	2.0	8.7		5.8
Green Ext Time (p_c), s	1.0	1.3		0.0	0.0	0.9		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	3	3	10	5	82	3	353	10	45	328	7
Future Volume (vph)	10	3	3	10	5	82	3	353	10	45	328	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974			0.886			0.996			0.997	
Flt Protected		0.970			0.995						0.994	
Satd. Flow (prot)	0	1638	0	0	1646	0	0	1853	0	0	1810	0
Flt Permitted		0.970			0.995						0.994	
Satd. Flow (perm)	0	1638	0	0	1646	0	0	1853	0	0	1810	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	16	5	5	11	6	93	4	415	12	49	357	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	110	0	0	431	0	0	414	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	3	3	10	5	82	3	353	10	45	328	7
Future Vol, veh/h	10	3	3	10	5	82	3	353	10	45	328	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
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, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	415	12	49	357	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	960	899	368	899	897	442	368	0	0	429	0	0
Stage 1	462	462	-	431	431	-	-	-	-	-	-	-
Stage 2	498	437	-	468	466	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	238	233	682	291	298	641	1202	-	-	1130	-	-
Stage 1	584	492	-	629	586	-	-	-	-	-	-	-
Stage 2	558	505	-	604	568	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	187	218	678	270	279	630	1199	-	-	1128	-	-
Mov Cap-2 Maneuver	187	218	-	270	279	-	-	-	-	-	-	-
Stage 1	580	464	-	625	582	-	-	-	-	-	-	-
Stage 2	462	502	-	559	536	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	23.3	13.7	0.1	1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1199	-	-	524	223	1128	-	-
HCM Lane V/C Ratio	0.003	-	-	0.21	0.118	0.043	-	-
HCM Control Delay (s)	8	0	-	13.7	23.3	8.3	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.4	0.1	-	-



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	21	6	7	343	313	26
Future Volume (vph)	21	6	7	343	313	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.968				0.990	
Flt Protected	0.963			0.999		
Satd. Flow (prot)	1736	0	0	1861	1844	0
Flt Permitted	0.963			0.999		
Satd. Flow (perm)	1736	0	0	1861	1844	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	7	8	373	340	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	0	0	381	368	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

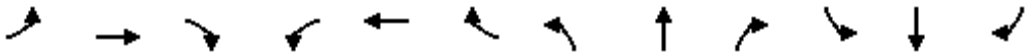
Intersection	
Int Delay, s/veh	0.6

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	21	6	7	343	313	26
Future Vol, veh/h	21	6	7	343	313	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	7	8	373	340	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	743	354	368	0	-	0
Stage 1	354	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	383	690	1191	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	685	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	380	690	1191	-	-	-
Mov Cap-2 Maneuver	490	-	-	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	685	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	12.3	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1191	-	524	-	-
HCM Lane V/C Ratio	0.006	-	0.056	-	-
HCM Control Delay (s)	8	0	12.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

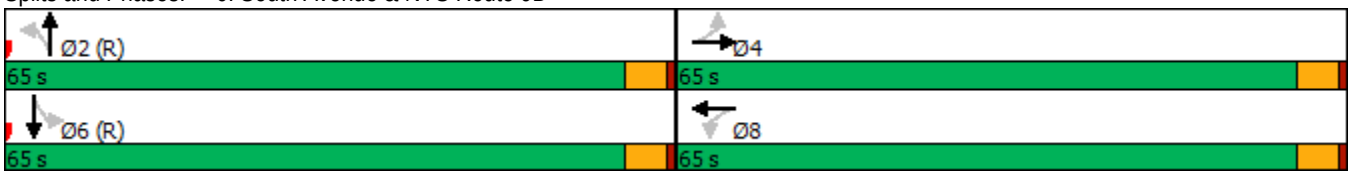


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	194	16	13	208	37	14	27	13	32	35	9
Future Volume (vph)	9	194	16	13	208	37	14	27	13	32	35	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			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
Ped Bike Factor								0.99			0.99	
Frt		0.990			0.980			0.967			0.984	
Flt Protected		0.998			0.998			0.987			0.979	
Satd. Flow (prot)	0	1821	0	0	1844	0	0	1822	0	0	1686	0
Flt Permitted		0.984			0.980			0.926			0.866	
Satd. Flow (perm)	0	1795	0	0	1810	0	0	1701	0	0	1491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9			17			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	237	20	15	245	44	25	49	24	39	43	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	268	0	0	304	0	0	98	0	0	93	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	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
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)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.32			0.36			0.12			0.13	
Control Delay		23.1			23.5			16.9			19.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.1			23.5			16.9			19.2	
Queue Length 50th (ft)		138			157			38			41	
Queue Length 95th (ft)		181			213			39			67	
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		830			840			794			691	
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			0.36			0.12			0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	194	16	13	208	37	14	27	13	32	35	9
Future Volume (veh/h)	9	194	16	13	208	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	237	20	15	245	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	44	752	62	49	694	121	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	32	1630	134	44	1504	262	384	887	412	590	721	176
Grp Volume(v), veh/h	268	0	0	304	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1796	0	0	1810	0	0	1683	0	0	1487	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	12.1	0.0	0.0	13.9	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.07	0.05		0.14	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	858	0	0	864	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.35	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	858	0	0	864	0	0	812	0	0	726	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	22.1	0.0	0.0	22.6	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.4	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	6.3	0.0	0.0	7.3	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	23.1	0.0	0.0	23.7	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		268			304			98			93	
Approach Delay, s/veh		23.1			23.7			20.2			20.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

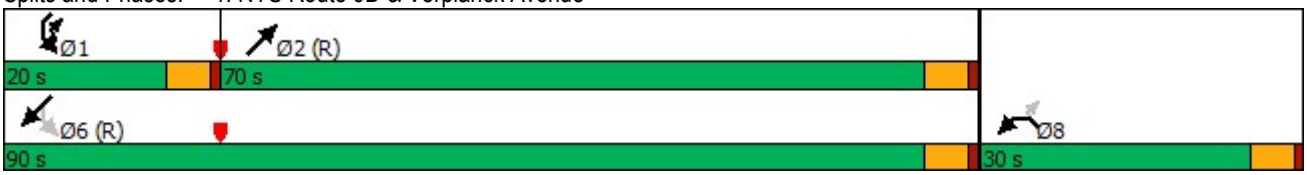
Intersection Summary	
HCM 2010 Ctrl Delay	22.6
HCM 2010 LOS	C

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	81	232	581	65	159	692
Future Volume (vph)	81	232	581	65	159	692
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1809	0	1778	1872
Flt Permitted	0.950				0.198	
Satd. Flow (perm)	1725	1544	1809	0	371	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	252	632	71	173	752
Shared Lane Traffic (%)						
Lane Group Flow (vph)	88	252	703	0	173	752
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.25	0.44	0.72		0.39	0.57
Control Delay	41.8	31.0	25.8		8.4	10.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.8	31.0	25.8		8.4	10.6
Queue Length 50th (ft)	57	144	391		39	254
Queue Length 95th (ft)	106	222	544		62	349

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	979		438	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.25	0.44	0.72		0.39	0.57

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	

Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	81	232	581	65	159	692
Future Volume (veh/h)	81	232	581	65	159	692
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	88	252	632	71	173	752
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	878	99	468	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1621	182	1783	1872
Grp Volume(v), veh/h	88	252	0	703	173	752
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1803	1783	1872
Q Serve(g_s), s	5.1	15.6	0.0	35.2	4.1	23.5
Cycle Q Clear(g_c), s	5.1	15.6	0.0	35.2	4.1	23.5
Prop In Lane	1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	360	515	0	976	468	1326
V/C Ratio(X)	0.24	0.49	0.00	0.72	0.37	0.57
Avail Cap(c_a), veh/h	360	515	0	976	468	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	31.9	0.0	20.7	14.2	8.5
Incr Delay (d2), s/veh	1.6	3.3	0.0	4.6	2.2	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.1	0.0	18.6	2.6	12.6
LnGrp Delay(d),s/veh	41.2	35.2	0.0	25.2	16.4	10.3
LnGrp LOS	D	D		C	B	B
Approach Vol, veh/h	340		703			925
Approach Delay, s/veh	36.7		25.2			11.4
Approach LOS	D		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	2	28	9	12	20	66	517	4	17	642	179
Future Volume (vph)	33	2	28	9	12	20	66	517	4	17	642	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.967	
Flt Protected		0.955			0.989		0.950			0.950		
Satd. Flow (prot)	0	1780	1599	0	1815	0	1771	1936	0	1778	1775	0
Flt Permitted		0.699			0.911		0.174			0.433		
Satd. Flow (perm)	0	1303	1533	0	1672	0	324	1936	0	810	1775	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	3	38	12	16	27	70	550	4	18	676	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	48	38	0	55	0	70	554	0	18	864	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.29	0.14		0.23		0.18	0.39		0.03	0.74	
Control Delay		30.4	2.4		18.8		4.0	6.5		3.3	17.9	
Queue Delay		0.0	0.0		0.0		0.0	0.5		0.0	0.0	
Total Delay		30.4	2.4		18.8		4.0	6.9		3.3	17.9	
Queue Length 50th (ft)		18	0		10		6	63		2	267	
Queue Length 95th (ft)		37	0		30		17	219		6	#562	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		648	805		845		480	1416		748	1165	
Starvation Cap Reductn		0	0		0		0	430		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.07	0.05		0.07		0.15	0.56		0.02	0.74	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 61
Natural Cycle: 75
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	2	28	9	12	20	66	517	4	17	642	179
Future Volume (veh/h)	33	2	28	9	12	20	66	517	4	17	642	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.95		0.98	1.00		1.00	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1881	1864	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	3	38	12	16	27	70	550	4	18	676	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	240	12	127	97	56	74	355	1220	9	573	842	234
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.63	0.63	0.02	0.61	0.61
Sat Flow, veh/h	1349	139	1442	238	636	843	1775	1921	14	1782	1390	387
Grp Volume(v), veh/h	48	0	38	55	0	0	70	0	554	18	0	864
Grp Sat Flow(s),veh/h/ln	1488	0	1442	1717	0	0	1775	0	1935	1782	0	1777
Q Serve(g_s), s	0.0	0.0	1.4	0.0	0.0	0.0	0.8	0.0	8.5	0.2	0.0	21.6
Cycle Q Clear(g_c), s	1.5	0.0	1.4	1.6	0.0	0.0	0.8	0.0	8.5	0.2	0.0	21.6
Prop In Lane	0.94		1.00	0.22		0.49	1.00		0.01	1.00		0.22
Lane Grp Cap(c), veh/h	252	0	127	228	0	0	355	0	1228	573	0	1076
V/C Ratio(X)	0.19	0.00	0.30	0.24	0.00	0.00	0.20	0.00	0.45	0.03	0.00	0.80
Avail Cap(c_a), veh/h	837	0	748	945	0	0	579	0	1228	850	0	1076
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.7	24.8	0.0	0.0	8.2	0.0	5.4	4.6	0.0	8.8
Incr Delay (d2), s/veh	0.4	0.0	1.3	0.5	0.0	0.0	0.3	0.0	1.2	0.0	0.0	6.4
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	0.7	0.0	0.6	0.9	0.0	0.0	0.5	0.0	4.9	0.1	0.0	12.2
LnGrp Delay(d),s/veh	25.1	0.0	26.0	25.3	0.0	0.0	8.4	0.0	6.6	4.6	0.0	15.1
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		86			55			624			882	
Approach Delay, s/veh		25.5			25.3			6.8			14.9	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	41.7		10.1	7.7	40.0		10.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	10.5		3.5	2.8	23.6		3.6
Green Ext Time (p_c), s	0.0	1.5		0.4	0.1	2.4		0.2

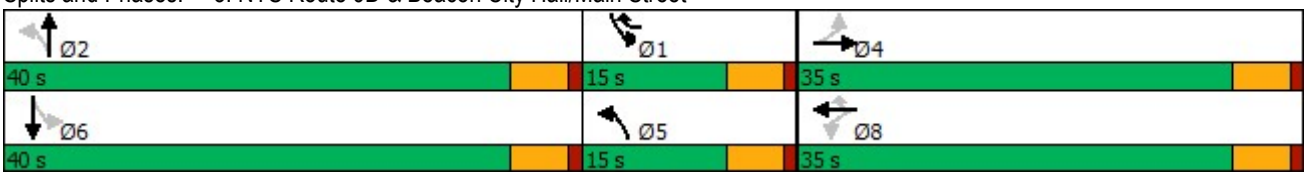
Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	46	0	197	2	389	52	293	393	3
Future Volume (vph)	2	2	2	46	0	197	2	389	52	293	393	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
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		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.982			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1817	0	1760	1851	0
Flt Permitted		0.869			0.800		0.486			0.384		
Satd. Flow (perm)	0	1538	0	0	1581	1619	937	1817	0	712	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	52	0	221	2	442	59	318	427	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	52	221	2	501	0	318	430	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.05			0.24	0.57	0.00	0.49		0.44	0.29	
Control Delay		23.2			29.5	24.7	3.5	12.2		7.3	5.9	
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.2	
Total Delay		23.2			29.5	24.7	3.5	12.2		7.3	6.2	
Queue Length 50th (ft)		2			20	69	0	130		32	47	
Queue Length 95th (ft)		11			50	121	2	219		65	185	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		742			761	395	820	1020		729	1465	
Starvation Cap Reductn		0			0	0	0	0		0	440	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.01			0.07	0.56	0.00	0.49		0.44	0.42	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 63.2	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	46	0	197	2	389	52	293	393	3
Future Volume (veh/h)	2	2	2	46	0	197	2	389	52	293	393	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	1.00		0.96	0.99		0.99
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
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	52	0	221	2	442	59	318	427	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	299	0	315	661	915	122	584	1039	7
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	291	761	526	1423	0	1624	1837	1619	216	1765	1838	13
Grp Volume(v), veh/h	9	0	0	52	0	221	2	0	501	318	0	430
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1835	1765	0	1851
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	3.8	0.0	0.0	10.1	0.0	0.0	8.1
Cycle Q Clear(g_c), s	0.3	0.0	0.0	2.0	0.0	3.8	0.0	0.0	10.1	0.0	0.0	8.1
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	280	0	0	299	0	315	661	0	1037	584	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.17	0.00	0.70	0.00	0.00	0.48	0.54	0.00	0.41
Avail Cap(c_a), veh/h	800	0	0	801	0	894	839	0	1037	756	0	1046
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.4	0.0	23.3	7.8	0.0	8.1	13.8	0.0	7.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	2.8	0.0	0.0	1.6	0.8	0.0	1.2
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	0.1	0.0	0.0	0.8	0.0	3.5	0.0	0.0	5.5	4.6	0.0	4.4
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.6	0.0	26.1	7.8	0.0	9.7	14.6	0.0	8.8
LnGrp LOS	C			C		C	A		A	B		A
Approach Vol, veh/h		9			273			503			748	
Approach Delay, s/veh		23.7			25.9			9.7			11.3	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	12.1		2.3	2.0	10.1		5.8
Green Ext Time (p_c), s	1.0	1.3		0.0	0.0	1.1		1.6

Intersection Summary		
HCM 2010 Ctrl Delay		13.4
HCM 2010 LOS		B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	3	3	10	5	82	3	350	10	45	389	7
Future Volume (vph)	10	3	3	10	5	82	3	350	10	45	389	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974			0.886			0.996			0.998	
Flt Protected		0.970			0.995						0.995	
Satd. Flow (prot)	0	1638	0	0	1646	0	0	1853	0	0	1813	0
Flt Permitted		0.970			0.995						0.995	
Satd. Flow (perm)	0	1638	0	0	1646	0	0	1853	0	0	1813	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	16	5	5	11	6	93	4	412	12	49	423	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	110	0	0	428	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	3	3	10	5	82	3	350	10	45	389	7
Future Vol, veh/h	10	3	3	10	5	82	3	350	10	45	389	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
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, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	412	12	49	423	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1023	962	434	962	960	439	434	0	0	426	0	0
Stage 1	528	528	-	428	428	-	-	-	-	-	-	-
Stage 2	495	434	-	534	532	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	216	213	626	266	276	643	1136	-	-	1133	-	-
Stage 1	538	457	-	631	588	-	-	-	-	-	-	-
Stage 2	560	507	-	562	535	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	169	199	622	246	258	632	1133	-	-	1131	-	-
Mov Cap-2 Maneuver	169	199	-	246	258	-	-	-	-	-	-	-
Stage 1	534	430	-	627	584	-	-	-	-	-	-	-
Stage 2	463	503	-	518	503	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	25.5	14	0.1	0.8
HCM LOS	D	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1133	-	-	511	202	1131	-	-
HCM Lane V/C Ratio	0.003	-	-	0.216	0.13	0.043	-	-
HCM Control Delay (s)	8.2	0	-	14	25.5	8.3	0	-
HCM Lane LOS	A	A	-	B	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.4	0.1	-	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	18	5	28	343	313	87
Future Volume (vph)	18	5	28	343	313	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.973				0.971	
Flt Protected	0.962			0.996		
Satd. Flow (prot)	1744	0	0	1855	1809	0
Flt Permitted	0.962			0.996		
Satd. Flow (perm)	1744	0	0	1855	1809	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	5	30	373	340	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	25	0	0	403	435	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	18	5	28	343	313	87
Future Vol, veh/h	18	5	28	343	313	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	5	30	373	340	95

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	821	388	435	0	-	0
Stage 1	388	-	-	-	-	-
Stage 2	433	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	344	660	1125	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	654	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	332	660	1125	-	-	-
Mov Cap-2 Maneuver	452	-	-	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	654	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	12.8	0.6	0
HCM LOS	B		

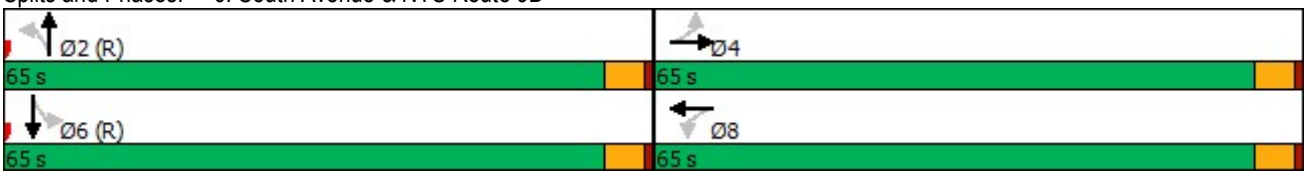
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1125	-	485	-	-
HCM Lane V/C Ratio	0.027	-	0.052	-	-
HCM Control Delay (s)	8.3	0	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	193	16	13	229	37	14	27	13	32	35	9
Future Volume (vph)	9	193	16	13	229	37	14	27	13	32	35	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			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
Ped Bike Factor								0.99			0.99	
Frt		0.990			0.982			0.967			0.984	
Flt Protected		0.998			0.998			0.987			0.979	
Satd. Flow (prot)	0	1821	0	0	1847	0	0	1822	0	0	1686	0
Flt Permitted		0.983			0.981			0.926			0.866	
Satd. Flow (perm)	0	1794	0	0	1816	0	0	1701	0	0	1491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			8			17			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	235	20	15	269	44	25	49	24	39	43	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	266	0	0	328	0	0	98	0	0	93	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	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
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)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.32			0.39			0.12			0.13	
Control Delay		23.1			24.1			16.9			19.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.1			24.1			16.9			19.2	
Queue Length 50th (ft)		137			173			38			41	
Queue Length 95th (ft)		180			232			39			67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		830			842			794			691	
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			0.39			0.12			0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	193	16	13	229	37	14	27	13	32	35	9
Future Volume (veh/h)	9	193	16	13	229	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	235	20	15	269	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	44	751	62	47	708	112	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	32	1627	135	39	1533	244	384	887	412	590	721	176
Grp Volume(v), veh/h	266	0	0	328	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1795	0	0	1816	0	0	1683	0	0	1487	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	12.0	0.0	0.0	15.2	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.08	0.05		0.13	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	857	0	0	867	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.38	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	857	0	0	867	0	0	812	0	0	726	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	22.1	0.0	0.0	22.9	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.3	0.0	0.0	0.3	0.0	0.0	0.4	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	6.2	0.0	0.0	8.0	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	23.0	0.0	0.0	24.2	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		266			328			98			93	
Approach Delay, s/veh		23.0			24.2			20.2			20.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

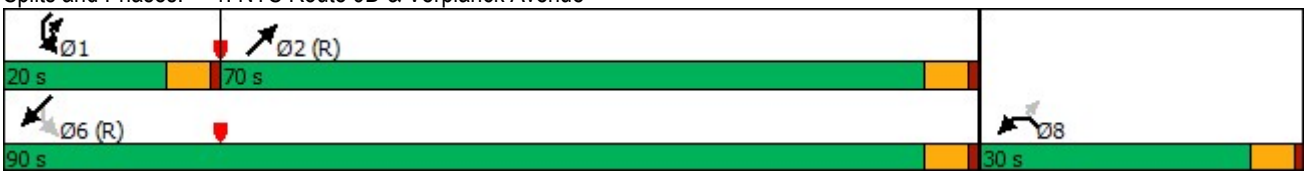
Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	72	232	626	74	159	647
Future Volume (vph)	72	232	626	74	159	647
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	5%		3%			-1%
Storage Length (ft)	85	0		0	340	
Storage Lanes	1	1		0	1	
Taper Length (ft)	86				86	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.986			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1725	1544	1809	0	1778	1872
Flt Permitted	0.950				0.161	
Satd. Flow (perm)	1725	1544	1809	0	301	1872
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	427		462			529
Travel Time (s)	9.7		10.5			12.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	78	252	680	80	173	703
Shared Lane Traffic (%)						
Lane Group Flow (vph)	78	252	760	0	173	703
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.03	1.03	1.02	1.02	0.99	0.99
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8			6	
Minimum Split (s)	21.0	9.0	15.0		9.0	15.0
Total Split (s)	30.0	20.0	70.0		20.0	90.0
Total Split (%)	25.0%	16.7%	58.3%		16.7%	75.0%
Maximum Green (s)	25.0	15.0	65.0		15.0	85.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0		5.0			
Flash Dont Walk (s)	11.0		11.0			
Pedestrian Calls (#/hr)	0		0			
v/c Ratio	0.22	0.44	0.78		0.44	0.53
Control Delay	41.3	31.0	28.6		9.2	10.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	41.3	31.0	28.6		9.2	10.0
Queue Length 50th (ft)	51	144	446		39	227
Queue Length 95th (ft)	96	222	620		62	312

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Internal Link Dist (ft)	347		382			449
Turn Bay Length (ft)	85				340	
Base Capacity (vph)	359	579	979		397	1326
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.22	0.44	0.78		0.44	0.53

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	

Splits and Phases: 1: NYS Route 9D & Verplanck Avenue



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	72	232	626	74	159	647
Future Volume (veh/h)	72	232	626	74	159	647
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1816	1816	1835	1872	1872	1872
Adj Flow Rate, veh/h	78	252	680	80	173	703
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	360	515	873	103	429	1326
Arrive On Green	0.21	0.21	0.54	0.54	0.13	0.71
Sat Flow, veh/h	1730	1544	1612	190	1783	1872
Grp Volume(v), veh/h	78	252	0	760	173	703
Grp Sat Flow(s),veh/h/ln	1730	1544	0	1801	1783	1872
Q Serve(g_s), s	4.5	15.6	0.0	40.1	4.1	21.0
Cycle Q Clear(g_c), s	4.5	15.6	0.0	40.1	4.1	21.0
Prop In Lane	1.00	1.00		0.11	1.00	
Lane Grp Cap(c), veh/h	360	515	0	976	429	1326
V/C Ratio(X)	0.22	0.49	0.00	0.78	0.40	0.53
Avail Cap(c_a), veh/h	360	515	0	976	429	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	31.9	0.0	21.8	16.5	8.2
Incr Delay (d2), s/veh	1.4	3.3	0.0	6.1	2.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.1	0.0	21.5	3.0	11.3
LnGrp Delay(d),s/veh	40.8	35.2	0.0	27.9	19.3	9.7
LnGrp LOS	D	D		C	B	A
Approach Vol, veh/h	330		760			876
Approach Delay, s/veh	36.5		27.9			11.6
Approach LOS	D		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.0	70.0				90.0		30.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	15.0	65.0				85.0		25.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		0.0
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	2	24	9	12	20	70	572	4	17	588	179
Future Volume (vph)	33	2	24	9	12	20	70	572	4	17	588	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		2%			-10%			-6%			3%	
Storage Length (ft)	0		95	0		0	75		0	75		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			86			86		
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			0.96		0.98			1.00			0.99	
Frt			0.850		0.934			0.999			0.965	
Flt Protected		0.955			0.989		0.950			0.950		
Satd. Flow (prot)	0	1780	1599	0	1815	0	1771	1936	0	1778	1770	0
Flt Permitted		0.824			0.911		0.222			0.402		
Satd. Flow (perm)	0	1536	1533	0	1672	0	414	1936	0	752	1770	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		27						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		584			328			388			335	
Travel Time (s)		13.3			7.5			8.8			7.6	
Confl. Peds. (#/hr)			12			4			1			10
Confl. Bikes (#/hr)			3									
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	5%	1%	0%	0%	1%	2%
Adj. Flow (vph)	45	3	33	12	16	27	74	609	4	18	619	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	48	33	0	55	0	74	613	0	18	807	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.01	1.01	1.01	0.94	0.94	0.94	0.96	0.96	0.96	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	1	2		2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83	83	20	83		83	6		83	6	
Trailing Detector (ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Position(ft)	0	-5	-5	0	-5		-5	0		-5	0	
Detector 1 Size(ft)	20	43	43	20	43		43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40	40		40		40			40		
Detector 2 Size(ft)		43	43		43		43			43		
Detector 2 Type		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0		0.0		0.0			0.0		
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	16.0		4.0	16.0	
Minimum Split (s)	20.0	20.0	20.0	21.0	21.0		9.0	21.0		9.0	21.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%		16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0		10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Max		None	Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				11.0	11.0							
Pedestrian Calls (#/hr)				0	0							
v/c Ratio		0.24	0.12		0.23		0.15	0.40		0.03	0.63	
Control Delay		28.3	1.2		19.0		3.5	6.1		3.3	14.3	
Queue Delay		0.0	0.0		0.0		0.0	0.3		0.0	0.0	
Total Delay		28.3	1.2		19.0		3.5	6.4		3.3	14.3	
Queue Length 50th (ft)		18	0		10		6	72		2	235	
Queue Length 95th (ft)		37	0		31		18	253		6	#507	
Internal Link Dist (ft)		504			248			308			255	
Turn Bay Length (ft)			95				75			75		
Base Capacity (vph)		815	853		900		564	1541		756	1275	
Starvation Cap Reductn		0	0		0		0	412		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.06	0.04		0.06		0.13	0.54		0.02	0.63	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 58.7
Natural Cycle: 70
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: NYS Route 9D & Beekman Street/W. Church Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	2	24	9	12	20	70	572	4	17	588	179
Future Volume (veh/h)	33	2	24	9	12	20	70	572	4	17	588	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.90	0.94		0.98	1.00		1.00	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1881	1864	1881	1995	1995	1995	1864	1938	1957	1872	1849	1872
Adj Flow Rate, veh/h	45	3	33	12	16	27	74	609	4	18	619	188
Adj No. of Lanes	0	1	1	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.73	0.73	0.73	0.75	0.75	0.75	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	0	0	0	5	1	0	0	1	2
Cap, veh/h	239	12	127	97	56	74	394	1222	8	533	822	250
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.64	0.64	0.02	0.60	0.60
Sat Flow, veh/h	1350	139	1441	239	635	843	1775	1923	13	1782	1359	413
Grp Volume(v), veh/h	48	0	33	55	0	0	74	0	613	18	0	807
Grp Sat Flow(s),veh/h/ln	1488	0	1441	1717	0	0	1775	0	1936	1782	0	1772
Q Serve(g_s), s	0.0	0.0	1.2	0.0	0.0	0.0	0.9	0.0	9.8	0.2	0.0	19.1
Cycle Q Clear(g_c), s	1.5	0.0	1.2	1.7	0.0	0.0	0.9	0.0	9.8	0.2	0.0	19.1
Prop In Lane	0.94		1.00	0.22		0.49	1.00		0.01	1.00		0.23
Lane Grp Cap(c), veh/h	251	0	127	227	0	0	394	0	1230	533	0	1072
V/C Ratio(X)	0.19	0.00	0.26	0.24	0.00	0.00	0.19	0.00	0.50	0.03	0.00	0.75
Avail Cap(c_a), veh/h	836	0	747	944	0	0	615	0	1230	810	0	1072
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	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	24.6	24.8	0.0	0.0	7.2	0.0	5.6	4.7	0.0	8.3
Incr Delay (d2), s/veh	0.4	0.0	1.1	0.5	0.0	0.0	0.2	0.0	1.4	0.0	0.0	4.9
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	0.7	0.0	0.5	0.9	0.0	0.0	0.5	0.0	5.6	0.1	0.0	10.7
LnGrp Delay(d),s/veh	25.1	0.0	25.7	25.4	0.0	0.0	7.4	0.0	7.1	4.8	0.0	13.2
LnGrp LOS	C		C	C			A		A	A		B
Approach Vol, veh/h		81			55			687			825	
Approach Delay, s/veh		25.4			25.4			7.1			13.0	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	41.8		10.1	7.8	40.0		10.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	11.8		3.5	2.9	21.1		3.7
Green Ext Time (p_c), s	0.0	1.7		0.4	0.1	2.3		0.2

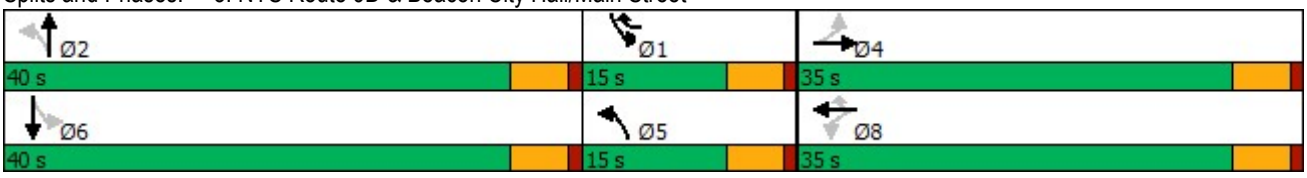
Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	2	2	37	0	197	2	448	61	293	334	3
Future Volume (vph)	2	2	2	37	0	197	2	448	61	293	334	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			-8%			-3%			3%	
Storage Length (ft)	0		0	0		70	65		0	120		0
Storage Lanes	0		0	0		1	1		0	1		0
Taper Length (ft)	25			25			86			86		
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		0.98				0.97		0.98			1.00	
Frt		0.955				0.850		0.982			0.999	
Flt Protected		0.984			0.950		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1877	1663	1832	1817	0	1760	1851	0
Flt Permitted		0.872			0.833		0.535			0.324		
Satd. Flow (perm)	0	1544	0	0	1646	1619	1032	1817	0	600	1851	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		3									1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		133			350			693			388	
Travel Time (s)		3.0			8.0			15.8			8.8	
Confl. Peds. (#/hr)			14			6			48			11
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	5%	1%	1%	0%
Adj. Flow (vph)	3	3	3	42	0	221	2	509	69	318	363	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	42	221	2	578	0	318	366	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.01	1.01	1.01	0.95	0.95	0.95	0.98	0.98	0.98	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	1		2	1	
Detector Template	Left			Left								
Leading Detector (ft)	20	83		20	83	83	83	6		83	6	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	0		-5	0	
Detector 1 Size(ft)	20	43		20	43	43	43	6		43	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		40			40	40	40			40		
Detector 2 Size(ft)		43			43	43	43			43		
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0			0.0		
Turn Type	Perm	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		8.0	8.0	4.0	4.0	31.0		4.0	35.0	
Minimum Split (s)	21.0	21.0		21.0	21.0	9.0	9.0	36.0		9.0	40.0	
Total Split (s)	35.0	35.0		35.0	35.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	38.9%	38.9%		38.9%	38.9%	16.7%	16.7%	44.4%		16.7%	44.4%	
Maximum Green (s)	30.0	30.0		30.0	30.0	10.0	10.0	35.0		10.0	35.0	
Yellow Time (s)	4.0	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	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag						Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	None	Max		None	Max	
Walk Time (s)	5.0	5.0						5.0				
Flash Dont Walk (s)	11.0	11.0						11.0				
Pedestrian Calls (#/hr)	0	0						0				
v/c Ratio		0.05			0.19	0.57	0.00	0.57		0.48	0.25	
Control Delay		23.3			28.8	24.7	3.5	13.4		9.2	5.5	
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.2	
Total Delay		23.3			28.8	24.7	3.5	13.4		9.2	5.7	
Queue Length 50th (ft)		2			16	69	0	159		32	38	
Queue Length 95th (ft)		11			43	122	2	261		63	149	
Internal Link Dist (ft)		53			270			613			308	
Turn Bay Length (ft)						70	65			120		
Base Capacity (vph)		742			790	389	870	1017		657	1469	
Starvation Cap Reductn		0			0	0	0	0		0	462	
Spillback Cap Reductn		0			0	0	0	0		0	0	
Storage Cap Reductn		0			0	0	0	0		0	0	
Reduced v/c Ratio		0.01			0.05	0.57	0.00	0.57		0.48	0.36	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 63.2	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	

Splits and Phases: 3: NYS Route 9D & Beacon City Hall/Main Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	2	2	37	0	197	2	448	61	293	334	3
Future Volume (veh/h)	2	2	2	37	0	197	2	448	61	293	334	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.95		0.98	0.99		0.96	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1890	1890	1890	1976	1976	1956	1928	1884	1928	1853	1853	1872
Adj Flow Rate, veh/h	3	3	3	42	0	221	2	509	69	318	363	3
Adj No. of Lanes	0	1	0	0	1	1	1	1	0	1	1	0
Peak Hour Factor	0.71	0.71	0.71	0.89	0.89	0.89	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	5	1	1	0
Cap, veh/h	115	97	67	299	0	315	712	913	124	531	1037	9
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.06	0.57	0.57	0.06	0.57	0.57
Sat Flow, veh/h	290	761	526	1423	0	1624	1837	1615	219	1765	1835	15
Grp Volume(v), veh/h	9	0	0	42	0	221	2	0	578	318	0	366
Grp Sat Flow(s),veh/h/ln	1577	0	0	1423	0	1624	1837	0	1834	1765	0	1850
Q Serve(g_s), s	0.0	0.0	0.0	1.3	0.0	3.8	0.0	0.0	12.4	0.0	0.0	6.6
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.6	0.0	3.8	0.0	0.0	12.4	0.0	0.0	6.6
Prop In Lane	0.33		0.33	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	279	0	0	299	0	315	712	0	1037	531	0	1046
V/C Ratio(X)	0.03	0.00	0.00	0.14	0.00	0.70	0.00	0.00	0.56	0.60	0.00	0.35
Avail Cap(c_a), veh/h	800	0	0	801	0	894	890	0	1037	703	0	1046
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	24.2	0.0	23.3	7.1	0.0	8.5	16.4	0.0	7.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	2.8	0.0	0.0	2.2	1.1	0.0	0.9
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	0.1	0.0	0.0	0.7	0.0	3.5	0.0	0.0	6.7	5.1	0.0	3.6
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.4	0.0	26.1	7.1	0.0	10.7	17.5	0.0	8.2
LnGrp LOS	C			C		C	A		B	B		A
Approach Vol, veh/h		9			263			580			684	
Approach Delay, s/veh		23.7			25.9			10.7			12.5	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	40.0		12.9	9.0	40.0		12.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.0	35.0		30.0	10.0	35.0		30.0
Max Q Clear Time (g_c+I1), s	2.0	14.4		2.3	2.0	8.6		5.8
Green Ext Time (p_c), s	1.0	1.6		0.0	0.0	0.9		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	3	3	10	5	82	3	418	10	45	320	7
Future Volume (vph)	10	3	3	10	5	82	3	418	10	45	320	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-3%			-4%			4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.974			0.886			0.997			0.997	
Flt Protected		0.970			0.995						0.994	
Satd. Flow (prot)	0	1638	0	0	1646	0	0	1855	0	0	1810	0
Flt Permitted		0.970			0.995						0.994	
Satd. Flow (perm)	0	1638	0	0	1646	0	0	1855	0	0	1810	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		162			281			312			693	
Travel Time (s)		3.7			6.4			7.1			15.8	
Confl. Peds. (#/hr)			4			19			2			3
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	11%	25%	1%	0%	4%	11%	2%	2%	0%
Adj. Flow (vph)	16	5	5	11	6	93	4	492	12	49	348	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	110	0	0	508	0	0	405	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			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97	1.03	1.03	1.03
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	3	3	10	5	82	3	418	10	45	320	7
Future Vol, veh/h	10	3	3	10	5	82	3	418	10	45	320	7
Conflicting Peds, #/hr	0	0	4	0	0	19	0	0	2	0	0	3
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, %	-	0	-	-	-3	-	-	-4	-	-	4	-
Peak Hour Factor	61	61	61	88	88	88	85	85	85	92	92	92
Heavy Vehicles, %	0	50	0	11	25	1	0	4	11	2	2	0
Mvmt Flow	16	5	5	11	6	93	4	492	12	49	348	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1028	967	359	967	965	519	359	0	0	506	0	0
Stage 1	453	453	-	508	508	-	-	-	-	-	-	-
Stage 2	575	514	-	459	457	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	6.61	6.15	5.91	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	5.61	5.15	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.599	4.225	3.309	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	214	212	690	264	274	584	1211	-	-	1059	-	-
Stage 1	590	497	-	578	547	-	-	-	-	-	-	-
Stage 2	507	464	-	610	573	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	165	198	686	244	256	574	1208	-	-	1057	-	-
Mov Cap-2 Maneuver	165	198	-	244	256	-	-	-	-	-	-	-
Stage 1	586	467	-	574	543	-	-	-	-	-	-	-
Stage 2	412	461	-	563	539	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	25.7	14.8	0.1	1
HCM LOS	D	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1208	-	-	477	200	1057	-	-
HCM Lane V/C Ratio	0.003	-	-	0.231	0.131	0.046	-	-
HCM Control Delay (s)	8	0	-	14.8	25.7	8.6	0	-
HCM Lane LOS	A	A	-	B	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.4	0.1	-	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	86	28	6	343	313	18
Future Volume (vph)	86	28	6	343	313	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.967				0.992	
Flt Protected	0.964			0.999		
Satd. Flow (prot)	1736	0	0	1861	1848	0
Flt Permitted	0.964			0.999		
Satd. Flow (perm)	1736	0	0	1861	1848	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	176			499	312	
Travel Time (s)	4.0			11.3	7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	93	30	7	373	340	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	123	0	0	380	360	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	86	28	6	343	313	18
Future Vol, veh/h	86	28	6	343	313	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	93	30	7	373	340	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	737	350	360	0	-	0
Stage 1	350	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	386	693	1199	-	-	-
Stage 1	713	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	383	693	1199	-	-	-
Mov Cap-2 Maneuver	493	-	-	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	686	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	13.8	0.1	0
HCM LOS	B		

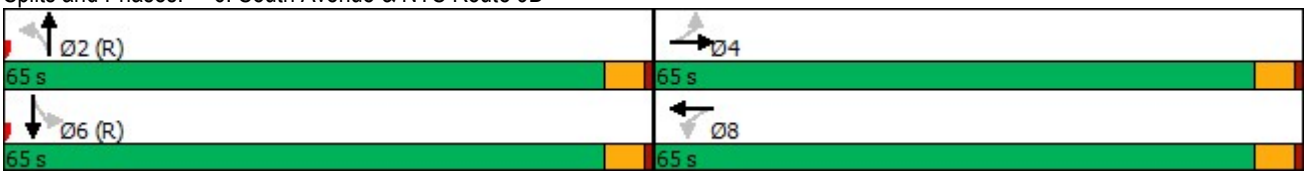
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1199	-	531	-	-
HCM Lane V/C Ratio	0.005	-	0.233	-	-
HCM Control Delay (s)	8	0	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.9	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	216	16	13	207	37	14	27	13	32	35	9
Future Volume (vph)	9	216	16	13	207	37	14	27	13	32	35	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		6%			-6%			-1%			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
Ped Bike Factor								0.99			0.99	
Frt		0.991			0.980			0.967			0.984	
Flt Protected		0.998			0.998			0.987			0.979	
Satd. Flow (prot)	0	1823	0	0	1844	0	0	1822	0	0	1686	0
Flt Permitted		0.985			0.978			0.926			0.866	
Satd. Flow (perm)	0	1799	0	0	1807	0	0	1701	0	0	1491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9			17			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		241			516			194			303	
Travel Time (s)		5.5			11.7			4.4			6.9	
Confl. Peds. (#/hr)							6					6
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	12%	4%	0%	0%	0%	0%	2%	12%	0%
Adj. Flow (vph)	11	263	20	15	244	44	25	49	24	39	43	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	294	0	0	303	0	0	98	0	0	93	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	1.04	1.04	1.04	0.96	0.96	0.96	0.99	0.99	0.99	1.02	1.02	1.02
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	65.0	65.0		65.0	65.0		65.0	65.0		65.0	65.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		60.0	60.0		60.0	60.0	
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)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
v/c Ratio		0.35			0.36			0.12			0.13	
Control Delay		23.7			23.4			16.9			19.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.7			23.4			16.9			19.2	
Queue Length 50th (ft)		154			157			38			41	
Queue Length 95th (ft)		199			213			39			67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		161			436			114			223	
Turn Bay Length (ft)												
Base Capacity (vph)		832			838			794			691	
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		0.35			0.36			0.12			0.13	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	

Splits and Phases: 6: South Avenue & NYS Route 9D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	216	16	13	207	37	14	27	13	32	35	9
Future Volume (veh/h)	9	216	16	13	207	37	14	27	13	32	35	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1843	1843	1843	1957	1885	1957	1910	1910	1910	1872	1759	1872
Adj Flow Rate, veh/h	11	263	20	15	244	44	25	49	24	39	43	11
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.55	0.55	0.55	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	12	4	0	0	0	0	2	12	0
Cap, veh/h	41	762	57	49	693	121	212	409	190	312	333	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	28	1652	123	44	1501	263	384	887	412	590	721	176
Grp Volume(v), veh/h	294	0	0	303	0	0	98	0	0	93	0	0
Grp Sat Flow(s),veh/h/ln	1802	0	0	1808	0	0	1683	0	0	1487	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	13.5	0.0	0.0	13.8	0.0	0.0	4.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.04		0.07	0.05		0.15	0.26		0.24	0.42		0.12
Lane Grp Cap(c), veh/h	860	0	0	863	0	0	812	0	0	726	0	0
V/C Ratio(X)	0.34	0.00	0.00	0.35	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	860	0	0	863	0	0	812	0	0	726	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	22.5	0.0	0.0	22.6	0.0	0.0	19.9	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.4	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	7.0	0.0	0.0	7.3	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	23.6	0.0	0.0	23.7	0.0	0.0	20.2	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	C			C			C			C		
Approach Vol, veh/h		294			303			98			93	
Approach Delay, s/veh		23.6			23.7			20.2			20.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		65.0		65.0		65.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		60.0		60.0		60.0		60.0
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Appendix

Appendix E | Traffic Volume Data

Appendix

Appendix E | Traffic Volume Data

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Bekkman_St_-_Friday_880295_09-24-2021
Site Code :
Start Date : 9/24/2021
Page No : 1

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	28	105	4	1	138	7	2	3	1	13	2	96	12	0	110	13	2	16	1	32	293
12:15 PM	24	107	1	3	135	3	2	3	2	10	4	85	8	0	97	22	1	35	2	60	302
12:30 PM	30	105	3	2	140	2	2	3	2	9	2	68	13	0	83	9	1	8	2	20	252
12:45 PM	36	101	1	1	139	3	3	2	3	11	0	93	8	0	101	7	1	22	1	31	282
Total	118	418	9	7	552	15	9	11	8	43	8	342	41	0	391	51	5	81	6	143	1129
01:00 PM	28	100	3	0	131	3	5	2	1	11	1	92	9	0	102	8	3	23	2	36	280
01:15 PM	22	101	3	0	126	5	2	3	0	10	5	67	11	0	83	16	0	27	2	45	264
01:30 PM	29	112	2	0	143	0	4	0	0	4	1	84	17	0	102	10	3	23	4	40	289
01:45 PM	36	116	2	1	155	2	6	0	1	9	1	66	9	0	76	8	0	22	1	31	271
Total	115	429	10	1	555	10	17	5	2	34	8	309	46	0	363	42	6	95	9	152	1104
02:00 PM	22	106	0	1	129	3	3	2	3	11	0	79	7	0	86	6	2	15	1	24	250
02:15 PM	17	99	0	0	116	0	1	0	2	3	2	71	9	0	82	8	1	51	0	60	261
02:30 PM	24	89	1	1	115	2	3	2	3	10	4	86	11	0	101	7	2	16	0	25	251
02:45 PM	34	101	4	1	140	9	9	0	3	21	5	65	10	0	80	5	8	14	4	31	272
Total	97	395	5	3	500	14	16	4	11	45	11	301	37	0	349	26	13	96	5	140	1034
03:00 PM	26	103	0	1	130	4	2	4	1	11	7	64	9	0	80	14	1	13	6	34	255
03:15 PM	23	66	2	2	93	2	7	1	1	11	6	49	6	0	61	21	10	38	3	72	237
03:30 PM	15	74	2	2	93	2	5	2	1	10	2	38	6	0	46	13	11	24	4	52	201
03:45 PM	28	68	3	1	100	0	7	1	2	10	3	63	9	0	75	11	4	9	1	25	210
Total	92	311	7	6	416	8	21	8	5	42	18	214	30	0	262	59	26	84	14	183	903
04:00 PM	24	73	2	2	101	5	5	2	3	15	5	112	13	0	130	7	4	12	1	24	270
04:15 PM	35	88	4	2	129	12	6	2	5	25	7	74	6	0	87	16	9	69	0	94	335
04:30 PM	39	124	1	0	164	0	3	2	2	7	4	80	4	0	88	3	2	28	0	33	292
04:45 PM	39	117	3	0	159	3	4	0	1	8	2	85	9	2	98	5	5	92	0	102	367
Total	137	402	10	4	553	20	18	6	11	55	18	351	32	2	403	31	20	201	1	253	1264
05:00 PM	32	123	1	2	158	2	3	2	5	12	0	94	8	0	102	11	4	38	2	55	327
05:15 PM	36	114	1	0	151	5	4	0	3	12	1	112	8	0	121	10	7	70	0	87	371
05:30 PM	49	99	0	5	153	3	3	1	5	12	1	81	5	0	87	7	6	32	0	45	297
05:45 PM	27	99	0	1	127	2	2	1	2	7	5	96	12	0	113	7	4	80	2	93	340
Total	144	435	2	8	589	12	12	4	15	43	7	383	33	0	423	35	21	220	4	280	1335
06:00 PM	44	99	0	0	143	4	1	0	3	8	1	83	12	0	96	2	2	18	5	27	274

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Bekkman_St_-_Friday_880295_09-24-2021
Site Code :
Start Date : 9/24/2021

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	30	86	2	1	119	1	3	0	1	5	3	82	4	0	89	15	3	74	1	93	306
06:30 PM	33	102	1	0	136	3	2	2	1	8	7	76	2	0	85	10	4	61	0	75	304
06:45 PM	32	76	1	3	112	1	2	0	1	4	0	111	7	0	118	8	0	33	0	41	275
Total	139	363	4	4	510	9	8	2	6	25	11	352	25	0	388	35	9	186	6	236	1159
07:00 PM	24	92	1	0	117	3	2	0	0	5	1	88	7	0	96	14	3	55	1	73	291
07:15 PM	20	86	1	0	107	2	2	2	0	6	0	93	5	0	98	13	3	53	0	69	280
07:30 PM	20	77	1	1	99	1	0	2	0	3	1	84	5	0	90	9	1	23	1	34	226
07:45 PM	22	61	3	0	86	3	3	1	2	9	1	79	5	0	85	13	1	54	3	71	251
Total	86	316	6	1	409	9	7	5	2	23	3	344	22	0	369	49	8	185	5	247	1048
Grand Total	928	3069	53	34	4084	97	108	45	60	310	84	2596	266	2	2948	328	108	1148	50	1634	8976
Apprch %	22.7	75.1	1.3	0.8		31.3	34.8	14.5	19.4		2.8	88.1	9	0.1		20.1	6.6	70.3	3.1		
Total %	10.3	34.2	0.6	0.4	45.5	1.1	1.2	0.5	0.7	3.5	0.9	28.9	3	0	32.8	3.7	1.2	12.8	0.6	18.2	
Lights	905	2989	48	0	3942	95	101	42	0	238	82	2508	251	0	2841	326	107	1124	0	1557	8578
% Lights	97.5	97.4	90.6	0	96.5	97.9	93.5	93.3	0	76.8	97.6	96.6	94.4	0	96.4	99.4	99.1	97.9	0	95.3	95.6
Buses	9	32	1	0	42	0	1	1	0	2	1	24	12	0	37	0	0	10	0	10	91
% Buses	1	1	1.9	0	1	0	0.9	2.2	0	0.6	1.2	0.9	4.5	0	1.3	0	0	0.9	0	0.6	1
Trucks	14	48	4	0	66	2	6	2	0	10	1	64	3	0	68	2	1	14	0	17	161
% Trucks	1.5	1.6	7.5	0	1.6	2.1	5.6	4.4	0	3.2	1.2	2.5	1.1	0	2.3	0.6	0.9	1.2	0	1	1.8
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0	0	5	5	8
% Bicycles on Crosswalk	0	0	0	2.9	0	0	0	0	1.7	0.3	0	0	0	50	0	0	0	0	10	0.3	0.1
Pedestrians	0	0	0	33	33	0	0	0	59	59	0	0	0	1	1	0	0	0	45	45	138
% Pedestrians	0	0	0	97.1	0.8	0	0	0	98.3	19	0	0	0	50	0	0	0	0	90	2.8	1.5

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Bekkman_St_-_Friday_880295_09-24-2021
Site Code :
Start Date : 9/24/2021
Page No : 3

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	39	117	3	0	159	3	4	0	1	8	2	85	9	2	98	5	5	92	0	102	367
05:00 PM	32	123	1	2	158	2	3	2	5	12	0	94	8	0	102	11	4	38	2	55	327
05:15 PM	36	114	1	0	151	5	4	0	3	12	1	112	8	0	121	10	7	70	0	87	371
05:30 PM	49	99	0	5	153	3	3	1	5	12	1	81	5	0	87	7	6	32	0	45	297
Total Volume	156	453	5	7	621	13	14	3	14	44	4	372	30	2	408	33	22	232	2	289	1362
% App. Total	25.1	72.9	0.8	1.1		29.5	31.8	6.8	31.8		1	91.2	7.4	0.5		11.4	7.6	80.3	0.7		
PHF	.796	.921	.417	.350	.976	.650	.875	.375	.700	.917	.500	.830	.833	.250	.843	.750	.786	.630	.250	.708	.918
Lights	154	447	5	0	606	13	13	3	0	29	4	364	29	0	397	33	21	226	0	280	1312
% Lights	98.7	98.7	100	0	97.6	100	92.9	100	0	65.9	100	97.8	96.7	0	97.3	100	95.5	97.4	0	96.9	96.3
Buses	1	4	0	0	5	0	0	0	0	0	0	2	1	0	3	0	0	3	0	3	11
% Buses	0.6	0.9	0	0	0.8	0	0	0	0	0	0	0.5	3.3	0	0.7	0	0	1.3	0	1.0	0.8
Trucks	1	2	0	0	3	0	1	0	0	1	0	6	0	0	6	0	1	3	0	4	14
% Trucks	0.6	0.4	0	0	0.5	0	7.1	0	0	2.3	0	1.6	0	0	1.5	0	4.5	1.3	0	1.4	1.0
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	3
% Bicycles on Crosswalk	0	0	0	14.3	0.2	0	0	0	7.1	2.3	0	0	0	50.0	0.2	0	0	0	0	0	0.2
Pedestrians	0	0	0	6	6	0	0	0	13	13	0	0	0	1	1	0	0	0	2	2	22
% Pedestrians	0	0	0	85.7	1.0	0	0	0	92.9	29.5	0	0	0	50.0	0.2	0	0	0	100	0.7	1.6

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Beekman_St_-_Saturday_880298_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 1

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	48	125	5	6	184	3	1	0	6	10	1	95	10	0	106	8	0	27	3	38	338
12:15 PM	55	104	1	1	161	2	1	2	0	5	0	88	9	1	98	14	2	36	3	55	319
12:30 PM	45	98	2	8	153	1	3	1	0	5	1	117	18	0	136	15	2	37	12	66	360
12:45 PM	46	125	6	2	179	4	1	3	2	10	0	112	11	1	124	7	1	24	0	32	345
Total	194	452	14	17	677	10	6	6	8	30	2	412	48	2	464	44	5	124	18	191	1362
01:00 PM	35	137	5	0	177	5	6	0	0	11	2	120	16	0	138	6	2	36	0	44	370
01:15 PM	42	129	3	0	174	0	1	4	2	7	0	108	15	0	123	15	1	31	3	50	354
01:30 PM	42	115	1	0	158	4	3	2	1	10	1	84	12	2	99	20	2	43	3	68	335
01:45 PM	44	111	2	1	158	2	2	1	4	9	0	109	16	2	127	12	0	30	0	42	336
Total	163	492	11	1	667	11	12	7	7	37	3	421	59	4	487	53	5	140	6	204	1395
02:00 PM	36	106	1	1	144	0	3	3	3	9	0	99	7	0	106	15	0	18	4	37	296
02:15 PM	48	94	0	3	145	3	1	4	0	8	3	107	13	0	123	6	2	48	3	59	335
02:30 PM	33	112	3	0	148	2	1	3	1	7	0	97	15	0	112	12	3	37	3	55	322
02:45 PM	45	104	3	1	153	2	5	1	2	10	3	102	17	0	122	9	2	34	3	48	333
Total	162	416	7	5	590	7	10	11	6	34	6	405	52	0	463	42	7	137	13	199	1286
03:00 PM	42	102	1	0	145	0	2	3	1	6	3	101	10	0	114	16	0	39	1	56	321
03:15 PM	42	132	1	2	177	1	6	1	6	14	1	112	9	1	123	9	1	44	2	56	370
03:30 PM	49	112	0	4	165	2	0	2	6	10	0	90	12	0	102	10	0	24	3	37	314
03:45 PM	34	112	0	3	149	2	0	0	4	6	0	88	13	0	101	6	3	26	2	37	293
Total	167	458	2	9	636	5	8	6	17	36	4	391	44	1	440	41	4	133	8	186	1298
04:00 PM	32	128	4	0	164	2	2	3	1	8	0	99	22	0	121	7	2	34	0	43	336
04:15 PM	28	115	1	3	147	3	1	3	1	8	4	98	10	1	113	11	3	60	2	76	344
04:30 PM	25	103	3	2	133	3	1	1	2	7	1	97	10	0	108	14	1	32	3	50	298
04:45 PM	33	125	1	6	165	3	0	0	7	10	2	111	9	0	122	5	0	37	2	44	341
Total	118	471	9	11	609	11	4	7	11	33	7	405	51	1	464	37	6	163	7	213	1319
05:00 PM	29	125	3	0	157	3	0	0	1	4	1	80	10	0	91	11	2	22	5	40	292
05:15 PM	31	99	1	3	134	2	1	3	5	11	1	93	6	0	100	15	2	52	3	72	317
05:30 PM	41	99	1	0	141	3	2	4	6	15	3	82	11	0	96	6	1	26	3	36	288
05:45 PM	45	116	2	3	166	1	1	2	1	5	1	84	9	0	94	9	1	25	0	35	300
Total	146	439	7	6	598	9	4	9	13	35	6	339	36	0	381	41	6	125	11	183	1197
06:00 PM	35	92	2	5	134	6	2	1	9	18	0	114	9	1	124	12	2	70	0	84	360

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Beekman_St_-_Saturday_880298_09-25-2021
Site Code :
Start Date : 9/25/2021

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	28	94	3	2	127	2	3	4	1	10	2	81	7	1	91	8	1	44	0	53	281
06:30 PM	33	89	3	0	125	1	0	2	1	4	0	96	3	1	100	15	1	17	4	37	266
06:45 PM	36	70	1	3	110	2	3	0	1	6	2	95	11	0	108	9	1	26	0	36	260
Total	132	345	9	10	496	11	8	7	12	38	4	386	30	3	423	44	5	157	4	210	1167
07:00 PM	21	84	2	0	107	4	2	2	0	8	2	73	5	2	82	13	1	60	0	74	271
07:15 PM	9	90	5	0	104	2	2	0	0	4	1	69	4	1	75	16	1	35	1	53	236
07:30 PM	10	72	3	0	85	2	0	1	8	11	0	84	5	2	91	7	1	11	4	23	210
07:45 PM	27	57	3	0	87	3	1	2	0	6	2	68	8	1	79	10	1	34	2	47	219
Total	67	303	13	0	383	11	5	5	8	29	5	294	22	6	327	46	4	140	7	197	936
Grand Total	1149	3376	72	59	4656	75	57	58	82	272	37	3053	342	17	3449	348	42	1119	74	1583	9960
Apprch %	24.7	72.5	1.5	1.3		27.6	21	21.3	30.1		1.1	88.5	9.9	0.5		22	2.7	70.7	4.7		
Total %	11.5	33.9	0.7	0.6	46.7	0.8	0.6	0.6	0.8	2.7	0.4	30.7	3.4	0.2	34.6	3.5	0.4	11.2	0.7	15.9	
Lights	1144	3357	72	0	4573	75	55	57	0	187	35	3021	322	0	3378	348	42	1113	0	1503	9641
% Lights	99.6	99.4	100	0	98.2	100	96.5	98.3	0	68.8	94.6	99	94.2	0	97.9	100	100	99.5	0	94.9	96.8
Buses	3	9	0	0	12	0	1	0	0	1	0	11	17	0	28	0	0	4	0	4	45
% Buses	0.3	0.3	0	0	0.3	0	1.8	0	0	0.4	0	0.4	5	0	0.8	0	0	0.4	0	0.3	0.5
Trucks	2	10	0	0	12	0	1	1	0	2	2	21	3	0	26	0	0	2	0	2	42
% Trucks	0.2	0.3	0	0	0.3	0	1.8	1.7	0	0.7	5.4	0.7	0.9	0	0.8	0	0	0.2	0	0.1	0.4
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	4	4	0	0	0	1	1	0	0	0	16	16	22
% Bicycles on Crosswalk	0	0	0	1.7	0	0	0	0	4.9	1.5	0	0	0	5.9	0	0	0	0	21.6	1	0.2
Pedestrians	0	0	0	58	58	0	0	0	78	78	0	0	0	16	16	0	0	0	58	58	210
% Pedestrians	0	0	0	98.3	1.2	0	0	0	95.1	28.7	0	0	0	94.1	0.5	0	0	0	78.4	3.7	2.1

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 1-North_Ave_and_W_Church_St-Beekman_St_-_Saturday_880298_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 3

	North Ave From North					W Church St From East					North Ave From South					Beekman St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:30 PM																					
12:30 PM	45	98	2	8	153	1	3	1	0	5	1	117	18	0	136	15	2	37	12	66	360
12:45 PM	46	125	6	2	179	4	1	3	2	10	0	112	11	1	124	7	1	24	0	32	345
01:00 PM	35	137	5	0	177	5	6	0	0	11	2	120	16	0	138	6	2	36	0	44	370
01:15 PM	42	129	3	0	174	0	1	4	2	7	0	108	15	0	123	15	1	31	3	50	354
Total Volume	168	489	16	10	683	10	11	8	4	33	3	457	60	1	521	43	6	128	15	192	1429
% App. Total	24.6	71.6	2.3	1.5		30.3	33.3	24.2	12.1		0.6	87.7	11.5	0.2		22.4	3.1	66.7	7.8		
PHF	.913	.892	.667	.313	.954	.500	.458	.500	.500	.750	.375	.952	.833	.250	.944	.717	.750	.865	.313	.727	.966
Lights	165	485	16	0	666	10	11	8	0	29	3	451	57	0	511	43	6	127	0	176	1382
% Lights	98.2	99.2	100	0	97.5	100	100	100	0	87.9	100	98.7	95.0	0	98.1	100	100	99.2	0	91.7	96.7
Buses	1	1	0	0	2	0	0	0	0	0	0	1	3	0	4	0	0	1	0	1	7
% Buses	0.6	0.2	0	0	0.3	0	0	0	0	0	0	0.2	5.0	0	0.8	0	0	0.8	0	0.5	0.5
Trucks	2	3	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	10
% Trucks	1.2	0.6	0	0	0.7	0	0	0	0	0	0	1.1	0	0	1.0	0	0	0	0	0	0.7
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.0	1.6	0.2
Pedestrians	0	0	0	10	10	0	0	0	4	4	0	0	0	1	1	0	0	0	12	12	27
% Pedestrians	0	0	0	100	1.5	0	0	0	100	12.1	0	0	0	100	0.2	0	0	0	80.0	6.3	1.9

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-Main_St_and_North_Ave-Walcott_Ave_-_Friday_880304_09-24-2021
Site Code :
Start Date : 9/24/2021

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					Municipal Plaza From East					Wolcott Ave From South					Main St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	4	56	58	0	118	38	1	9	0	48	15	66	1	2	84	1	0	3	1	5	255
12:15 PM	2	58	73	1	134	39	3	4	0	46	16	62	0	1	79	1	0	0	0	1	260
12:30 PM	2	51	62	0	115	27	2	6	0	35	10	50	1	2	63	0	2	5	0	7	220
12:45 PM	0	51	53	6	110	30	2	3	0	35	20	71	0	5	96	1	0	2	2	5	246
Total	8	216	246	7	477	134	8	22	0	164	61	249	2	10	322	3	2	10	3	18	981
01:00 PM	0	51	57	3	111	42	1	9	0	52	9	62	0	1	72	0	2	0	0	2	237
01:15 PM	0	63	55	3	121	27	1	4	0	32	15	52	2	4	73	1	1	1	3	6	232
01:30 PM	3	66	48	4	121	47	2	9	0	58	15	63	1	5	84	4	1	2	1	8	271
01:45 PM	0	65	56	2	123	32	0	8	1	41	11	40	0	8	59	2	1	0	2	5	228
Total	3	245	216	12	476	148	4	30	1	183	50	217	3	18	288	7	5	3	6	21	968
02:00 PM	0	62	51	0	113	26	1	4	1	32	10	58	1	10	79	0	2	0	2	4	228
02:15 PM	0	48	57	0	105	34	1	2	1	38	11	49	1	2	63	0	1	0	0	1	207
02:30 PM	0	45	49	5	99	43	1	7	1	52	12	62	4	3	81	0	1	1	0	2	234
02:45 PM	0	61	41	7	109	36	3	6	1	46	10	43	0	6	59	0	2	1	1	4	218
Total	0	216	198	12	426	139	6	19	4	168	43	212	6	21	282	0	6	2	3	11	887
03:00 PM	0	56	58	5	119	34	0	10	4	48	13	57	1	8	79	1	2	0	0	3	249
03:15 PM	0	36	54	4	94	33	2	15	0	50	16	30	3	9	58	0	0	0	2	2	204
03:30 PM	2	32	53	6	93	19	3	9	0	31	6	20	0	7	33	0	3	0	1	4	161
03:45 PM	2	43	39	2	86	28	3	10	0	41	8	47	0	4	59	4	1	0	2	7	193
Total	4	167	204	17	392	114	8	44	4	170	43	154	4	28	229	5	6	0	5	16	807
04:00 PM	1	45	36	3	85	39	0	6	0	45	16	82	0	5	103	2	3	2	1	8	241
04:15 PM	0	55	50	1	106	36	1	5	0	42	17	47	2	15	81	2	1	4	2	9	238
04:30 PM	0	65	64	0	129	31	1	3	0	35	7	56	0	4	67	1	0	0	0	1	232
04:45 PM	0	76	49	0	125	32	0	10	0	42	10	58	0	3	71	0	0	0	1	1	239
Total	1	241	199	4	445	138	2	24	0	164	50	243	2	27	322	5	4	6	4	19	950
05:00 PM	0	73	61	2	136	35	1	4	2	42	17	66	0	3	86	1	0	0	1	2	266
05:15 PM	0	69	51	2	122	37	0	10	6	53	25	81	0	6	112	0	1	0	1	2	289
05:30 PM	0	64	41	4	109	41	0	4	3	48	10	56	0	7	73	0	0	0	3	3	233
05:45 PM	0	54	56	4	114	39	0	6	4	49	12	64	0	6	82	0	0	0	5	5	250
Total	0	260	209	12	481	152	1	24	15	192	64	267	0	22	353	1	1	0	10	12	1038
06:00 PM	0	52	48	4	104	33	0	8	0	41	8	57	0	3	68	0	0	0	1	1	214

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-Main_St_and_North_Ave-Walcott_Ave_-_Friday_880304_09-24-2021
Site Code :
Start Date : 9/24/2021
Page No : 2

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					Municipal Plaza From East					Wolcott Ave From South					Main St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	0	42	51	4	97	38	0	3	1	42	14	55	0	5	74	0	1	0	0	1	214
06:30 PM	0	51	68	1	120	20	0	3	0	23	17	61	0	4	82	0	0	0	0	0	225
06:45 PM	0	35	44	5	84	41	0	4	0	45	8	66	1	2	77	0	1	0	2	3	209
Total	0	180	211	14	405	132	0	18	1	151	47	239	1	14	301	0	2	0	3	5	862
07:00 PM	0	43	59	1	103	29	1	5	0	35	8	70	0	10	88	1	1	0	1	3	229
07:15 PM	0	47	50	6	103	25	0	7	0	32	6	67	0	2	75	0	0	0	1	1	211
07:30 PM	1	33	54	0	88	35	1	6	0	42	6	57	0	3	66	1	0	1	1	3	199
07:45 PM	0	34	39	2	75	28	0	2	1	31	7	51	1	0	59	0	0	0	1	1	166
Total	1	157	202	9	369	117	2	20	1	140	27	245	1	15	288	2	1	1	4	8	805
Grand Total	17	1682	1685	87	3471	1074	31	201	26	1332	385	1826	19	155	2385	23	27	22	38	110	7298
Apprch %	0.5	48.5	48.5	2.5		80.6	2.3	15.1	2		16.1	76.6	0.8	6.5		20.9	24.5	20	34.5		
Total %	0.2	23	23.1	1.2	47.6	14.7	0.4	2.8	0.4	18.3	5.3	25	0.3	2.1	32.7	0.3	0.4	0.3	0.5	1.5	
Lights	16	1615	1662	0	3293	1056	30	200	0	1286	361	1744	19	0	2124	22	24	22	0	68	6771
% Lights	94.1	96	98.6	0	94.9	98.3	96.8	99.5	0	96.5	93.8	95.5	100	0	89.1	95.7	88.9	100	0	61.8	92.8
Buses	0	25	9	0	34	1	0	1	0	2	17	42	0	0	59	1	0	0	0	1	96
% Buses	0	1.5	0.5	0	1	0.1	0	0.5	0	0.2	4.4	2.3	0	0	2.5	4.3	0	0	0	0.9	1.3
Trucks	1	42	14	0	57	17	1	0	0	18	7	40	0	0	47	0	3	0	0	3	125
% Trucks	5.9	2.5	0.8	0	1.6	1.6	3.2	0	0	1.4	1.8	2.2	0	0	2	0	11.1	0	0	2.7	1.7
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	0	0	0	0	0	3	3	0	0	0	4	4	8
% Bicycles on Crosswalk	0	0	0	1.1	0	0	0	0	0	0	0	0	0	1.9	0.1	0	0	0	10.5	3.6	0.1
Pedestrians	0	0	0	86	86	0	0	0	26	26	0	0	0	152	152	0	0	0	34	34	298
% Pedestrians	0	0	0	98.9	2.5	0	0	0	100	2	0	0	0	98.1	6.4	0	0	0	89.5	30.9	4.1

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-Main_St_and_North_Ave-Walcott_Ave_-_Friday_880304_09-24-2021
Site Code :
Start Date : 9/24/2021

	North Ave From North					Municipal Plaza From East					Wolcott Ave From South					Main St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	73	61	2	136	35	1	4	2	42	17	66	0	3	86	1	0	0	1	2	266
05:15 PM	0	69	51	2	122	37	0	10	6	53	25	81	0	6	112	0	1	0	1	2	289
05:30 PM	0	64	41	4	109	41	0	4	3	48	10	56	0	7	73	0	0	0	3	3	233
05:45 PM	0	54	56	4	114	39	0	6	4	49	12	64	0	6	82	0	0	0	5	5	250
Total Volume	0	260	209	12	481	152	1	24	15	192	64	267	0	22	353	1	1	0	10	12	1038
% App. Total	0	54.1	43.5	2.5		79.2	0.5	12.5	7.8		18.1	75.6	0	6.2		8.3	8.3	0	83.3		
PHF	.000	.890	.857	.750	.884	.927	.250	.600	.625	.906	.640	.824	.000	.786	.788	.250	.250	.000	.500	.600	.898
Lights	0	257	206	0	463	149	1	24	0	174	61	258	0	0	319	1	1	0	0	2	958
% Lights	0	98.8	98.6	0	96.3	98.0	100	100	0	90.6	95.3	96.6	0	0	90.4	100	100	0	0	16.7	92.3
Buses	0	2	1	0	3	0	0	0	0	0	3	4	0	0	7	0	0	0	0	0	10
% Buses	0	0.8	0.5	0	0.6	0	0	0	0	0	4.7	1.5	0	0	2.0	0	0	0	0	0	1.0
Trucks	0	1	2	0	3	3	0	0	0	3	0	5	0	0	5	0	0	0	0	0	11
% Trucks	0	0.4	1.0	0	0.6	2.0	0	0	0	1.6	0	1.9	0	0	1.4	0	0	0	0	0	1.1
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	2
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	4.5	0.3	0	0	0	10.0	8.3	0.2
Pedestrians	0	0	0	12	12	0	0	0	15	15	0	0	0	21	21	0	0	0	9	9	57
% Pedestrians	0	0	0	100	2.5	0	0	0	100	7.8	0	0	0	95.5	5.9	0	0	0	90.0	75.0	5.5

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-_Main_St_and_North_Ave-Wolcott_Ave_-_Saturday_880306_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 1

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					Main St From East					Wolcott Ave From South					Municipal Plaza From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	0	77	59	5	141	40	0	7	0	47	11	68	0	4	83	0	0	0	1	1	272
12:15 PM	0	52	64	2	118	35	0	8	6	49	21	63	2	3	89	1	1	1	3	6	262
12:30 PM	0	55	57	5	117	54	0	3	3	60	7	85	0	27	119	1	0	0	3	4	300
12:45 PM	1	72	61	1	135	45	0	7	2	54	13	77	0	6	96	0	1	0	2	3	288
Total	1	256	241	13	511	174	0	25	11	210	52	293	2	40	387	2	2	1	9	14	1122
01:00 PM	1	78	67	2	148	46	0	6	0	52	7	90	0	4	101	0	0	1	5	6	307
01:15 PM	0	72	74	3	149	40	0	6	1	47	10	82	1	11	104	0	0	0	4	4	304
01:30 PM	0	57	73	10	140	31	1	3	1	36	15	73	0	20	108	0	0	0	3	3	287
01:45 PM	0	58	68	0	126	41	2	1	1	45	10	79	0	3	92	0	2	1	2	5	268
Total	1	265	282	15	563	158	3	16	3	180	42	324	1	38	405	0	2	2	14	18	1166
02:00 PM	1	50	73	3	127	49	0	2	2	53	17	63	0	6	86	0	0	0	1	1	267
02:15 PM	0	51	49	2	102	38	0	8	0	46	22	82	0	8	112	0	3	0	4	7	267
02:30 PM	0	69	54	1	124	51	3	3	0	57	20	71	0	6	97	0	0	0	4	4	282
02:45 PM	1	52	58	4	115	43	1	3	1	48	17	78	1	6	102	1	0	0	7	8	273
Total	2	222	234	10	468	181	4	16	3	204	76	294	1	26	397	1	3	0	16	20	1089
03:00 PM	0	48	71	3	122	35	0	6	0	41	16	77	0	9	102	0	0	0	2	2	267
03:15 PM	0	58	78	5	141	48	2	5	0	55	14	78	1	7	100	1	0	1	2	4	300
03:30 PM	0	67	55	11	133	39	1	3	3	46	16	64	1	12	93	0	2	1	7	10	282
03:45 PM	0	54	58	3	115	41	2	9	2	54	13	62	2	12	89	0	0	0	1	1	259
Total	0	227	262	22	511	163	5	23	5	196	59	281	4	40	384	1	2	2	12	17	1108
04:00 PM	0	70	64	5	139	53	1	6	2	62	10	69	1	4	84	0	0	1	2	3	288
04:15 PM	0	64	62	12	138	42	0	5	0	47	10	72	0	6	88	0	0	0	2	2	275
04:30 PM	0	58	60	10	128	43	0	6	0	49	15	67	0	13	95	0	0	0	11	11	283
04:45 PM	0	65	64	12	141	50	0	12	2	64	16	74	0	15	105	0	0	0	2	2	312
Total	0	257	250	39	546	188	1	29	4	222	51	282	1	38	372	0	0	1	17	18	1158
05:00 PM	0	67	68	8	143	41	0	7	0	48	13	44	0	10	67	0	2	0	9	11	269
05:15 PM	0	48	65	3	116	39	0	9	8	56	15	70	0	14	99	0	0	0	1	1	272
05:30 PM	0	65	38	18	121	38	0	7	0	45	18	61	0	17	96	0	0	0	1	1	263
05:45 PM	1	61	68	21	151	30	1	6	5	42	12	63	2	16	93	0	0	0	5	5	291
Total	1	241	239	50	531	148	1	29	13	191	58	238	2	57	355	0	2	0	16	18	1095
06:00 PM	0	45	58	2	105	42	0	10	2	54	5	74	0	6	85	0	0	0	1	1	245

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-_Main_St_and_North_Ave-Wolcott_Ave_-_Saturday_880306_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 2

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	North Ave From North					Main St From East					Wolcott Ave From South					Municipal Plaza From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	2	50	53	9	114	37	2	6	0	45	9	53	0	13	75	0	1	1	4	6	240
06:30 PM	0	50	55	5	110	37	0	10	1	48	8	66	0	16	90	0	1	0	1	2	250
06:45 PM	0	32	48	16	96	43	2	6	0	51	8	65	0	9	82	1	1	0	2	4	233
Total	2	177	214	32	425	159	4	32	3	198	30	258	0	44	332	1	3	1	8	13	968
07:00 PM	0	44	53	1	98	35	3	6	0	44	11	45	0	9	65	0	1	1	2	4	211
07:15 PM	0	42	64	3	109	37	0	4	1	42	8	34	0	5	47	1	0	0	1	2	200
07:30 PM	0	34	46	3	83	41	0	2	0	43	6	48	0	3	57	0	0	0	1	1	184
07:45 PM	0	28	38	4	70	47	0	5	5	57	3	31	0	13	47	0	0	0	1	1	175
Total	0	148	201	11	360	160	3	17	6	186	28	158	0	30	216	1	1	1	5	8	770
Grand Total	7	1793	1923	192	3915	1331	21	187	48	1587	396	2128	11	313	2848	6	15	8	97	126	8476
Apprch %	0.2	45.8	49.1	4.9		83.9	1.3	11.8	3		13.9	74.7	0.4	11		4.8	11.9	6.3	77		
Total %	0.1	21.2	22.7	2.3	46.2	15.7	0.2	2.2	0.6	18.7	4.7	25.1	0.1	3.7	33.6	0.1	0.2	0.1	1.1	1.5	
Lights	7	1780	1912	0	3699	1321	21	186	0	1528	381	2087	11	0	2479	5	15	8	0	28	7734
% Lights	100	99.3	99.4	0	94.5	99.2	100	99.5	0	96.3	96.2	98.1	100	0	87	83.3	100	100	0	22.2	91.2
Buses	0	3	8	0	11	4	0	0	0	4	15	24	0	0	39	0	0	0	0	0	54
% Buses	0	0.2	0.4	0	0.3	0.3	0	0	0	0.3	3.8	1.1	0	0	1.4	0	0	0	0	0	0.6
Trucks	0	10	3	0	13	6	0	1	0	7	0	17	0	0	17	1	0	0	0	1	38
% Trucks	0	0.6	0.2	0	0.3	0.5	0	0.5	0	0.4	0	0.8	0	0	0.6	16.7	0	0	0	0.8	0.4
Bicycles on Crosswalk	0	0	0	8	8	0	0	0	3	3	0	0	0	8	8	0	0	0	14	14	33
% Bicycles on Crosswalk	0	0	0	4.2	0.2	0	0	0	6.2	0.2	0	0	0	2.6	0.3	0	0	0	14.4	11.1	0.4
Pedestrians	0	0	0	184	184	0	0	0	45	45	0	0	0	305	305	0	0	0	83	83	617
% Pedestrians	0	0	0	95.8	4.7	0	0	0	93.8	2.8	0	0	0	97.4	10.7	0	0	0	85.6	65.9	7.3

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 2-_Main_St_and_North_Ave-Wolcott_Ave_-_Saturday_880306_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 3

	North Ave From North					Main St From East					Wolcott Ave From South					Municipal Plaza From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:30 PM																					
12:30 PM	0	55	57	5	117	54	0	3	3	60	7	85	0	27	119	1	0	0	3	4	300
12:45 PM	1	72	61	1	135	45	0	7	2	54	13	77	0	6	96	0	1	0	2	3	288
01:00 PM	1	78	67	2	148	46	0	6	0	52	7	90	0	4	101	0	0	1	5	6	307
01:15 PM	0	72	74	3	149	40	0	6	1	47	10	82	1	11	104	0	0	0	4	4	304
Total Volume	2	277	259	11	549	185	0	22	6	213	37	334	1	48	420	1	1	1	14	17	1199
% App. Total	0.4	50.5	47.2	2		86.9	0	10.3	2.8		8.8	79.5	0.2	11.4		5.9	5.9	5.9	82.4		
PHF	.500	.888	.875	.550	.921	.856	.000	.786	.500	.888	.712	.928	.250	.444	.882	.250	.250	.250	.700	.708	.976
Lights	2	275	257	0	534	183	0	22	0	205	35	326	1	0	362	1	1	1	0	3	1104
% Lights	100	99.3	99.2	0	97.3	98.9	0	100	0	96.2	94.6	97.6	100	0	86.2	100	100	100	0	17.6	92.1
Buses	0	0	2	0	2	1	0	0	0	1	2	4	0	0	6	0	0	0	0	0	9
% Buses	0	0	0.8	0	0.4	0.5	0	0	0	0.5	5.4	1.2	0	0	1.4	0	0	0	0	0	0.8
Trucks	0	2	0	0	2	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	7
% Trucks	0	0.7	0	0	0.4	0.5	0	0	0	0.5	0	1.2	0	0	1.0	0	0	0	0	0	0.6
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	11	11	0	0	0	6	6	0	0	0	48	48	0	0	0	14	14	79
% Pedestrians	0	0	0	100	2.0	0	0	0	100	2.8	0	0	0	100	11.4	0	0	0	100	82.4	6.6

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott__Ave_and_Beacon_St-Liam_Dr_-_Friday_880310_09-24-2021
Site Code :
Start Date : 9/24/2021
Page No : 1

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	Wolcott Ave From North					Beacon St From East					Wolcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	4	54	7	0	65	11	0	1	0	12	3	53	3	0	59	2	3	4	1	10	146
12:15 PM	2	62	3	0	67	11	2	2	0	15	2	60	1	1	64	2	1	2	1	6	152
12:30 PM	2	50	6	1	59	10	1	2	3	16	1	47	1	0	49	1	2	0	1	4	128
12:45 PM	0	52	5	2	59	16	0	1	1	18	1	60	0	0	61	0	0	4	0	4	142
Total	8	218	21	3	250	48	3	6	4	61	7	220	5	1	233	5	6	10	3	24	568
01:00 PM	1	55	6	0	62	18	1	2	0	21	0	50	0	0	50	1	1	1	0	3	136
01:15 PM	1	51	7	0	59	10	1	0	1	12	0	53	1	1	55	1	0	0	1	2	128
01:30 PM	2	72	10	1	85	11	1	1	0	13	2	56	0	1	59	1	0	1	1	3	160
01:45 PM	2	64	13	2	81	9	1	1	3	14	0	39	0	0	39	0	1	2	4	7	141
Total	6	242	36	3	287	48	4	4	4	60	2	198	1	2	203	3	2	4	6	15	565
02:00 PM	3	62	5	0	70	12	1	3	0	16	2	53	1	0	56	0	0	0	0	0	142
02:15 PM	1	49	5	0	55	10	1	2	1	14	1	47	2	0	50	0	1	1	1	3	122
02:30 PM	1	43	6	0	50	18	0	0	0	18	0	51	1	0	52	1	0	2	0	3	123
02:45 PM	0	55	14	1	70	12	0	2	1	15	2	37	0	0	39	0	1	0	0	1	125
Total	5	209	30	1	245	52	2	7	2	63	5	188	4	0	197	1	2	3	1	7	512
03:00 PM	1	54	17	0	72	19	0	2	1	22	1	61	2	0	64	0	0	4	5	9	167
03:15 PM	2	44	5	0	51	21	0	3	1	25	18	42	1	1	62	0	3	0	2	5	143
03:30 PM	2	44	5	0	51	10	0	4	1	15	17	17	1	0	35	1	1	1	1	4	105
03:45 PM	5	45	7	0	57	10	0	7	4	21	9	54	0	1	64	1	2	1	0	4	146
Total	10	187	34	0	231	60	0	16	7	83	45	174	4	2	225	2	6	6	8	22	561
04:00 PM	3	40	9	1	53	6	1	3	0	10	12	64	3	1	80	0	5	3	2	10	153
04:15 PM	2	44	12	0	58	10	0	1	1	12	1	57	2	0	60	2	1	3	0	6	136
04:30 PM	4	61	8	1	74	4	1	3	0	8	0	56	0	1	57	0	1	1	2	4	143
04:45 PM	3	66	14	1	84	11	0	1	1	13	0	56	1	2	59	1	0	2	0	3	159
Total	12	211	43	3	269	31	2	8	2	43	13	233	6	4	256	3	7	9	4	23	591
05:00 PM	1	60	16	0	77	14	0	4	2	20	0	59	0	0	59	1	0	2	0	3	159
05:15 PM	3	55	16	0	74	11	0	0	1	12	6	93	1	0	100	0	0	1	2	3	189
05:30 PM	1	60	15	0	76	8	0	0	2	10	0	45	1	0	46	0	0	5	1	6	138
05:45 PM	0	51	10	0	61	10	1	4	0	15	4	61	2	0	67	0	1	4	3	8	151
Total	5	226	57	0	288	43	1	8	5	57	10	258	4	0	272	1	1	12	6	20	637
06:00 PM	2	44	8	0	54	17	0	2	0	19	2	41	1	0	44	0	0	4	3	7	124

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott__Ave_and_Beacon_St-Liam_Dr_-_Friday_880310_09-24-2021
Site Code :
Start Date : 9/24/2021
Page No : 2

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	Wolcott Ave From North					Beacon St From East					Wolcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	2	41	10	0	53	11	1	1	0	13	1	55	2	0	58	1	2	0	0	3	127
06:30 PM	1	40	17	0	58	16	0	3	0	19	0	54	1	1	56	1	0	2	0	3	136
06:45 PM	1	33	5	1	40	14	1	3	2	20	0	58	2	1	61	2	0	2	2	6	127
Total	6	158	40	1	205	58	2	9	2	71	3	208	6	2	219	4	2	8	5	19	514
07:00 PM	4	37	12	2	55	22	1	0	1	24	1	48	2	0	51	0	0	1	1	2	132
07:15 PM	5	36	10	1	52	13	0	0	0	13	0	63	0	0	63	1	0	3	1	5	133
07:30 PM	4	30	7	0	41	9	1	1	2	13	0	50	2	1	53	1	0	2	2	5	112
07:45 PM	5	31	5	0	41	10	1	0	1	12	2	48	1	0	51	0	0	4	3	7	111
Total	18	134	34	3	189	54	3	1	4	62	3	209	5	1	218	2	0	10	7	19	488
Grand Total	70	1585	295	14	1964	394	17	59	30	500	88	1688	35	12	1823	21	26	62	40	149	4436
Apprch %	3.6	80.7	15	0.7		78.8	3.4	11.8	6		4.8	92.6	1.9	0.7		14.1	17.4	41.6	26.8		
Total %	1.6	35.7	6.7	0.3	44.3	8.9	0.4	1.3	0.7	11.3	2	38.1	0.8	0.3	41.1	0.5	0.6	1.4	0.9	3.4	
Lights	69	1520	284	0	1873	387	16	58	0	461	83	1593	33	0	1709	20	24	62	0	106	4149
% Lights	98.6	95.9	96.3	0	95.4	98.2	94.1	98.3	0	92.2	94.3	94.4	94.3	0	93.7	95.2	92.3	100	0	71.1	93.5
Buses	0	20	5	0	25	3	0	0	0	3	4	49	0	0	53	0	0	0	0	0	81
% Buses	0	1.3	1.7	0	1.3	0.8	0	0	0	0.6	4.5	2.9	0	0	2.9	0	0	0	0	0	1.8
Trucks	1	45	6	0	52	4	1	1	0	6	1	46	2	0	49	1	2	0	0	3	110
% Trucks	1.4	2.8	2	0	2.6	1	5.9	1.7	0	1.2	1.1	2.7	5.7	0	2.7	4.8	7.7	0	0	2	2.5
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	6	6	7
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	8.3	0.1	0	0	0	15	4	0.2
Pedestrians	0	0	0	14	14	0	0	0	30	30	0	0	0	11	11	0	0	0	34	34	89
% Pedestrians	0	0	0	100	0.7	0	0	0	100	6	0	0	0	91.7	0.6	0	0	0	85	22.8	2

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott__Ave_and_Beacon_St-Liam_Dr_-_Friday_880310_09-24-2021
Site Code :
Start Date : 9/24/2021
Page No : 3

	Wolcott Ave From North					Beacon St From East					Wolcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	4	61	8	1	74	4	1	3	0	8	0	56	0	1	57	0	1	1	2	4	143
04:45 PM	3	66	14	1	84	11	0	1	1	13	0	56	1	2	59	1	0	2	0	3	159
05:00 PM	1	60	16	0	77	14	0	4	2	20	0	59	0	0	59	1	0	2	0	3	159
05:15 PM	3	55	16	0	74	11	0	0	1	12	6	93	1	0	100	0	0	1	2	3	189
Total Volume	11	242	54	2	309	40	1	8	4	53	6	264	2	3	275	2	1	6	4	13	650
% App. Total	3.6	78.3	17.5	0.6		75.5	1.9	15.1	7.5		2.2	96	0.7	1.1		15.4	7.7	46.2	30.8		
PHF	.688	.917	.844	.500	.920	.714	.250	.500	.500	.663	.250	.710	.500	.375	.688	.500	.250	.750	.500	.813	.860
Lights	11	238	53	0	302	40	1	8	0	49	6	252	2	0	260	2	1	6	0	9	620
% Lights	100	98.3	98.1	0	97.7	100	100	100	0	92.5	100	95.5	100	0	94.5	100	100	100	0	69.2	95.4
Buses	0	1	1	0	2	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	9
% Buses	0	0.4	1.9	0	0.6	0	0	0	0	0	0	2.7	0	0	2.5	0	0	0	0	0	1.4
Trucks	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	8
% Trucks	0	1.2	0	0	1.0	0	0	0	0	0	0	1.9	0	0	1.8	0	0	0	0	0	1.2
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
% Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50.0	15.4	0.3
Pedestrians	0	0	0	2	2	0	0	0	4	4	0	0	0	3	3	0	0	0	2	2	11
% Pedestrians	0	0	0	100	0.6	0	0	0	100	7.5	0	0	0	100	1.1	0	0	0	50.0	15.4	1.7

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott_Ave_and_Beacon_St-Liam_Dr_-_Saturday_880316_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 1

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	Wolcott Ave From North					Beacon St From East					Walcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	1	65	10	1	77	21	1	2	3	27	3	53	0	0	56	1	0	4	0	5	165
12:15 PM	2	60	4	0	66	11	1	1	6	19	2	67	0	0	69	1	0	3	1	5	159
12:30 PM	2	45	6	0	53	13	0	0	0	13	0	71	3	0	74	0	1	3	0	4	144
12:45 PM	0	65	12	1	78	19	1	3	4	27	0	73	0	2	75	0	0	2	0	2	182
Total	5	235	32	2	274	64	3	6	13	86	5	264	3	2	274	2	1	12	1	16	650
01:00 PM	4	67	11	1	83	20	1	1	6	28	7	76	1	0	84	0	2	2	0	4	199
01:15 PM	2	66	11	0	79	15	0	2	6	23	0	63	1	0	64	1	0	4	2	7	173
01:30 PM	0	55	8	2	65	23	2	3	3	31	2	61	0	0	63	1	0	1	2	4	163
01:45 PM	1	54	5	0	60	11	0	0	3	14	1	73	0	1	75	0	0	1	0	1	150
Total	7	242	35	3	287	69	3	6	18	96	10	273	2	1	286	2	2	8	4	16	685
02:00 PM	0	42	9	0	51	17	2	0	2	21	1	48	1	0	50	0	2	3	2	7	129
02:15 PM	2	54	6	0	62	18	0	0	4	22	1	77	0	1	79	1	0	1	0	2	165
02:30 PM	0	57	13	0	70	19	2	1	0	22	1	54	1	0	56	1	0	1	3	5	153
02:45 PM	1	59	7	0	67	14	0	2	6	22	1	75	1	0	77	0	1	0	9	10	176
Total	3	212	35	0	250	68	4	3	12	87	4	254	3	1	262	2	3	5	14	24	623
03:00 PM	1	42	9	0	52	18	0	3	2	23	0	68	0	0	68	2	0	5	2	9	152
03:15 PM	4	48	12	1	65	20	0	1	0	21	0	64	0	0	64	1	0	4	3	8	158
03:30 PM	4	64	5	0	73	12	2	2	6	22	0	56	2	2	60	0	1	2	4	7	162
03:45 PM	2	55	9	0	66	7	1	2	4	14	2	57	0	0	59	1	1	3	3	8	147
Total	11	209	35	1	256	57	3	8	12	80	2	245	2	2	251	4	2	14	12	32	619
04:00 PM	3	66	10	0	79	17	1	2	2	22	0	54	0	0	54	0	0	5	4	9	164
04:15 PM	1	59	10	1	71	15	0	0	3	18	1	59	0	2	62	0	0	2	1	3	154
04:30 PM	3	44	13	0	60	23	0	1	1	25	1	56	2	2	61	1	0	4	3	8	154
04:45 PM	4	59	15	0	78	14	0	3	6	23	1	68	0	0	69	0	0	1	3	4	174
Total	11	228	48	1	288	69	1	6	12	88	3	237	2	4	246	1	0	12	11	24	646
05:00 PM	6	52	7	0	65	13	1	0	2	16	1	43	0	1	45	0	0	1	3	4	130
05:15 PM	2	53	10	0	65	18	0	0	1	19	1	53	0	0	54	1	0	6	2	9	147
05:30 PM	2	57	15	1	75	13	0	1	0	14	2	63	1	0	66	1	1	0	2	4	159
05:45 PM	1	50	12	0	63	15	0	0	1	16	2	59	2	1	64	0	2	2	1	5	148
Total	11	212	44	1	268	59	1	1	4	65	6	218	3	2	229	2	3	9	8	22	584
06:00 PM	1	50	11	0	62	17	1	1	0	19	1	53	1	0	55	0	0	3	3	6	142

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott_Ave_and_Beacon_St-Liam_Dr_-_Saturday_880316_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 2

Groups Printed- Lights - Buses - Trucks - Bicycles on Crosswalk - Pedestrians

	Wolcott Ave From North					Beacon St From East					Walcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:15 PM	3	45	6	2	56	16	0	0	0	16	0	44	1	0	45	1	0	1	3	5	122
06:30 PM	4	47	7	0	58	11	0	2	2	15	0	57	1	0	58	0	0	0	2	2	133
06:45 PM	4	32	8	2	46	17	0	1	0	18	0	51	1	0	52	2	0	5	0	7	123
Total	12	174	32	4	222	61	1	4	2	68	1	205	4	0	210	3	0	9	8	20	520
07:00 PM	1	38	8	0	47	10	0	2	0	12	1	43	0	0	44	1	0	1	6	8	111
07:15 PM	2	34	9	0	45	7	0	0	0	7	1	32	0	0	33	0	1	1	0	2	87
07:30 PM	1	23	11	0	35	10	0	0	0	10	0	43	0	0	43	0	0	1	0	1	89
07:45 PM	2	27	8	0	37	7	2	1	0	10	0	24	1	0	25	0	0	5	3	8	80
Total	6	122	36	0	164	34	2	3	0	39	2	142	1	0	145	1	1	8	9	19	367
Grand Total	66	1634	297	12	2009	481	18	37	73	609	33	1838	20	12	1903	17	12	77	67	173	4694
Apprch %	3.3	81.3	14.8	0.6		79	3	6.1	12		1.7	96.6	1.1	0.6		9.8	6.9	44.5	38.7		
Total %	1.4	34.8	6.3	0.3	42.8	10.2	0.4	0.8	1.6	13	0.7	39.2	0.4	0.3	40.5	0.4	0.3	1.6	1.4	3.7	
Lights	65	1623	293	0	1981	476	16	35	0	527	31	1784	20	0	1835	16	10	77	0	103	4446
% Lights	98.5	99.3	98.7	0	98.6	99	88.9	94.6	0	86.5	93.9	97.1	100	0	96.4	94.1	83.3	100	0	59.5	94.7
Buses	0	1	3	0	4	4	0	0	0	4	1	37	0	0	38	0	0	0	0	0	46
% Buses	0	0.1	1	0	0.2	0.8	0	0	0	0.7	3	2	0	0	2	0	0	0	0	0	1
Trucks	1	10	1	0	12	1	2	2	0	5	1	17	0	0	18	1	2	0	0	3	38
% Trucks	1.5	0.6	0.3	0	0.6	0.2	11.1	5.4	0	0.8	3	0.9	0	0	0.9	5.9	16.7	0	0	1.7	0.8
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	9
% Bicycles on Crosswalk	0	0	0	8.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.9	4.6	0.2
Pedestrians	0	0	0	11	11	0	0	0	73	73	0	0	0	12	12	0	0	0	59	59	155
% Pedestrians	0	0	0	91.7	0.5	0	0	0	100	12	0	0	0	100	0.6	0	0	0	88.1	34.1	3.3

Maser Consulting

400 Columbus Avenue, Stuite 180 E
Valhalla, NY 10595

Customer Loyalty through Client Satisfaction

File Name : 3-Wolcott_Ave_and_Beacon_St-Liam_Dr_-_Saturday_880316_09-25-2021
Site Code :
Start Date : 9/25/2021
Page No : 3

	Wolcott Ave From North					Beacon St From East					Walcott Ave From South					Liam Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:45 PM																					
12:45 PM	0	65	12	1	78	19	1	3	4	27	0	73	0	2	75	0	0	2	0	2	182
01:00 PM	4	67	11	1	83	20	1	1	6	28	7	76	1	0	84	0	2	2	0	4	199
01:15 PM	2	66	11	0	79	15	0	2	6	23	0	63	1	0	64	1	0	4	2	7	173
01:30 PM	0	55	8	2	65	23	2	3	3	31	2	61	0	0	63	1	0	1	2	4	163
Total Volume	6	253	42	4	305	77	4	9	19	109	9	273	2	2	286	2	2	9	4	17	717
% App. Total	2	83	13.8	1.3		70.6	3.7	8.3	17.4		3.1	95.5	0.7	0.7		11.8	11.8	52.9	23.5		
PHF	.375	.944	.875	.500	.919	.837	.500	.750	.792	.879	.321	.898	.500	.250	.851	.500	.250	.563	.500	.607	.901
Lights	6	249	41	0	296	76	3	8	0	87	8	261	2	0	271	2	1	9	0	12	666
% Lights	100	98.4	97.6	0	97.0	98.7	75.0	88.9	0	79.8	88.9	95.6	100	0	94.8	100	50.0	100	0	70.6	92.9
Buses	0	0	1	0	1	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	6
% Buses	0	0	2.4	0	0.3	0	0	0	0	0	0	1.8	0	0	1.7	0	0	0	0	0	0.8
Trucks	0	4	0	0	4	1	1	1	0	3	1	7	0	0	8	0	1	0	0	1	16
% Trucks	0	1.6	0	0	1.3	1.3	25.0	11.1	0	2.8	11.1	2.6	0	0	2.8	0	50.0	0	0	5.9	2.2
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bicycles on Crosswalk	0	0	0	25.0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
Pedestrians	0	0	0	3	3	0	0	0	19	19	0	0	0	2	2	0	0	0	4	4	28
% Pedestrians	0	0	0	75.0	1.0	0	0	0	100	17.4	0	0	0	100	0.7	0	0	0	100	23.5	3.9

NYSDOT VOLUME DATA SUMMARY

ROADWAY: NYS ROUTE 9D (WOLCOTT AVENUE)
SEGMENT: FROM TELLER AVE TO MAIN ST
LOCATION: 85' E OF HARBOR VIEW CT
START DATE OF COUNT: Monday, May 06, 2019
NYSDOT COUNT STATION: 820633
FUNCTIONAL CLASS: 16 - URBAN MINOR ARTERIAL
FACTOR GROUP: 30
SEASONAL FACTOR: 1.089

TIME PERIOD		DIRECTIONAL VOLUMES		TOTAL VOLUME
START	FINISH	EASTBOUND	WESTBOUND	
12:00 AM	1:00 AM	28	23	51
1:00 AM	2:00 AM	11	7	18
2:00 AM	3:00 AM	8	5	13
3:00 AM	4:00 AM	7	12	19
4:00 AM	5:00 AM	20	27	47
5:00 AM	6:00 AM	79	59	138
6:00 AM	7:00 AM	166	176	342
7:00 AM	8:00 AM	223	259	482
8:00 AM	9:00 AM	284	268	552
9:00 AM	10:00 AM	189	176	365
10:00 AM	11:00 AM	160	164	324
11:00 AM	12:00 PM	166	164	330
12:00 PM	1:00 PM	196	200	396
1:00 PM	2:00 PM	192	189	381
2:00 PM	3:00 PM	206	211	417
3:00 PM	4:00 PM	250	288	538
4:00 PM	5:00 PM	286	306	592
5:00 PM	6:00 PM	326	288	614
6:00 PM	7:00 PM	337	233	570
7:00 PM	8:00 PM	214	178	392
8:00 PM	9:00 PM	158	121	279
9:00 PM	10:00 PM	112	115	227
10:00 PM	11:00 PM	66	48	114
11:00 PM	12:00 AM	40	33	73
AVERAGE WEEKDAY DAILY TRAFFIC		**3724**	**3550**	**7274**
	AADT	**3420**	**3260**	**6680**

NOTES:

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

NYSDOT CLASSIFICATION DATA SUMMARY

ROADWAY: NYS ROUTE 9D (WOLCOTT AVENUE)
SEGMENT: FROM TELLER AVE TO MAIN ST
LOCATION: 85' E OF HARBOR VIEW CT
START DATE OF COUNT: Monday, May 06, 2019
NYSDOT COUNT STATION: 820633
FUNCTIONAL CLASS: 16 - URBAN MINOR ARTERIAL
FACTOR GROUP: 30

VEHICLE CLASS	DIRECTIONAL VOLUMES		TOTAL VEHICLES	TOTAL AXLES
	EASTBOUND	WESTBOUND		
F1	26	28	54	108
F2	2785	2856	5641	11282
F3	353	383	736	1472
F4	29	24	53	133
F5	99	67	166	332
F6	14	15	29	87
F7	0	4	4	16
F8	2	3	5	18
F9	21	16	37	185
F10	4	6	10	60
F11	0	0	0	0
F12	0	0	0	0
F13	0	0	0	0
AVERAGE WEEKDAY TOTAL	**3333**	**3402**	**6735**	**13692**

	EASTBOUND	WESTBOUND	TOTAL
% TRUCKS & BUSES (F3 - F13)	16%	15%	15%
% HEAVY VEHICLES (F4 - F13)	5%	4%	5%
% F3 - F7	4%	3%	4%
% F8 - F13	1%	1%	1%
% F1	1%	1%	1%
% F2	84%	84%	84%
% F3	11%	11%	11%
% F4	1%	1%	1%
% F5 - F7	3%	3%	3%

VEHICLE CLASSIFICATION CODES:

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

NOTES:

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

NYSDOT SPEED DATA SUMMARY

ROADWAY: NYS ROUTE 9D (WOLCOTT AVENUE)
SEGMENT: FROM TELLER AVE TO MAIN ST
LOCATION: 85' E OF HARBOR VIEW CT
START DATE OF COUNT: Monday, May 06, 2019
NYSDOT COUNT STATION: 820633
FUNCTIONAL CLASS: 16 - URBAN MINOR ARTERIAL
POSTED SPEED LIMIT: 30
FACTOR GROUP: 30

SPEEDS (MPH)	DIRECTIONAL VOLUMES		TOTAL VOLUME
	EASTBOUND	WESTBOUND	
0 - 20.0	177	104	281
20.1 - 25.0	390	271	661
25.1 - 30.0	1120	839	1959
30.1 - 35.0	1366	1607	2973
35.1 - 40.0	563	642	1205
40.1 - 45.0	89	80	169
45.1 - 50.0	5	4	9
50.1 - 55.0	0	0	0
55.1 - 60.0	0	0	0
60.1 - 65.0	0	0	0
65.1 - 70.0	0	0	0
70.1 - 75.0	0	0	0
75.1 - 80.0	0	0	0
80.1+	0	0	0
UNCLASSIFIED	0	0	0
AVERAGE SPEED (MPH)	**28**	**30**	**29**
50TH PERCENTILE SPEED (MPH)	**31**	**32**	**31**
85TH PERCENTILE SPEED (MPH)	**36**	**37**	**36**

NOTES:

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

Colliers Engineering & Design

Colliers Engineering & Design is a trusted provider of multi-discipline engineering, design and consulting services providing customized solutions for public and private clients through a network of offices nationwide.

For a full listing of our office locations, please visit colliersengineering.com

1 877 627 3772

Civil/Site • Traffic/Transportation • Governmental • Survey/Geospatial
Infrastructure • Geotechnical/Environmental • Telecommunications • Utilities/Energy

400 Columbus Avenue
Suite 180E
Valhalla New York 10595
Main: 877 627 3772
colliersengineering.com

Colliers
Engineering
& Design

February 21, 2022

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

1113 Wolcott Avenue – Prophecy Theater LLC
City of Beacon, Dutchess County, New York
Colliers Engineering & Design Project No. 21004333A

Dear Chairman Gunn and Members of the Planning Board:

We are writing on behalf of the Applicant for the proposed Prophecy Theater LLC. Based on prior comments received on the Project as well as discussions during the February 8, 2022 Planning Board meeting, the Project has been modified to eliminate the previously proposed loop driveway in front of the existing church building including elimination of the existing southern exit driveway connection to Wolcott Avenue. This has been replaced with a reestablishment of the existing northern driveway to the property to develop a one-way exit only driveway connecting to the proposed parking area behind the parsonage/hotel building. This driveway is proposed to better address on-site circulation concerns, especially as it relates to drop-off/pick-up operations associated with the proposed events.

In association with the proposed modifications to the Project, the Traffic & Parking Study previously prepared by our office has been revised to reflect the current Project configuration. This study has also been revised to address specific comments received from the Town's Consultants. The revised Traffic & Parking Study dated February 21, 2022 is included with this submission. Furthermore, our office, in association with the Applicant has begun preparing a draft Traffic & Parking Management Plan for the management of event conditions traffic and parking. This document will continue to be progressed as the plans for the Project continue to develop.

In addition to the above, we have also reviewed the most recent comments received from the Board's consultants including those contained in the Creighton Manning (CM) letter dated February 7, 2022 and the John Clarke Planning & Design letter dated February 3, 2022. The following provides specific responses to each of the traffic related comments contained in those letters.

Colliers Engineering & Design

Creighton Manning Letter Dated February 7, 2022

Site Plan

1. On-site vehicular circulation should be clarified. We have the following questions:

- CM Review #2 Follow-Up Comment: Based on Colliers' description of operations, CM understands that the southernmost existing driveway will operate as an egress-only driveway. CM agrees that this operation is beneficial as it will allow for vehicles dropping-off and picking-up to more easily enter and exit the site. However, if the southernmost driveway will be egress-only, it should be signed and striped as such with "Do Not Enter" (R5-1) Signs. These signs could be utilized for the posting of "Stop" (R1-1) Signs.
- CM Review #3 Follow-Up Comment: CM notes that these signs are absent from the plans in the Submittal Package.

  Response: ***"One-Way" and "Do Not Enter" signs have been added to the plans for the newly proposed northern exit-only driveway. The previously proposed southern one-way loop driveway has been eliminated from the plan.***

- CM Review #2 Follow-Up Comment: Colliers' vehicle size assumption for deliveries is reasonable. Upon review of the Vehicle Tracking Plan, a 30-ft single-unit box truck is able to circulate the site. However, it is evident on the Vehicle Tracking Plan that the delivery vehicle will encroach into the opposing travel lane at the Main Driveway when entering/exiting the site and it will require reverse maneuvers within the site. For these reasons, CM recommends that the Applicant agree to schedule deliveries during off-peak hours only.
- CM Review #3 Follow-Up Comment: The previous comment regarding vehicle encroachment into the opposing travel lane has not been addressed. The NYSDOT allows minor commercial driveways to have a maximum width of 30-ft. CM recommends that a driveway configuration that considers a wider driveway and a NYSDOT Type 4 driveway entrance be investigated in order to mitigate vehicle encroachment into opposing travel lanes when entering and exiting the site. Please elaborate on the frequency of deliveries and the typical times these deliveries will occur. Has the applicant identified a vendor for food deliveries? If so, can that vendor elaborate on the vehicle types used for deliveries?

  Response: ***Both the main driveway and the proposed north one-way exit-only driveway configurations are now shown to be consistent with the NYSDOT Type 4 driveway configuration. This provides additional area for vehicle maneuvers entering and exiting the site at both locations. Based on the revised turning maneuvers shown on Site Plans, which have been analyzed for a refuse truck, shuttle bus and single unit 30-ft box truck, there is not expected to be any significant encroachment of larger vehicles into opposing traffic lanes when entering or exiting the site.***

Colliers Engineering & Design

The Applicant has not yet identified a vendor for food deliveries for the Café. However, based on operations for similar sized facilities, it is anticipated that the Café will receive 1-2 deliveries per day with the deliveries typically occurring between the hours of 8 AM and 12 PM.

- CM Review #2 Follow-Up Comment: Upon review of the Vehicle Tracking Plan, a school bus is able to circulate the site. However, it is evident on the Vehicle Tracking Plan that the vehicle will encroach into the opposing travel lane at the Main Driveway when entering/exiting the site. Regarding pick-up/drop-off operations, it is recommended that signage be installed to restrict these vehicles from parking or dwelling for an extended period of time in the loop roadway.
- CM Review #3 Follow-Up Comment: As noted in the previous comment, CM recommends that an alternate driveway configuration be investigated in order to mitigate vehicle encroachment into opposing lanes. The plans included in the Submittal package do not indicate any landscaping or hardscape features to impede vehicles from straddling the edge travel in order to park.

  Response: ***The southern loop driveway previously proposed for drop-off operations for events has been eliminated. Drop-off/pick-up is now proposed to occur along the main driveway with vehicles ultimately circulating through the parking area behind the hotel and exiting the site at the northern driveway location. The main driveway will be curbed, which will eliminate the possibility of parking along the edges of the driveway. The draft Traffic & Parking Management Plan discusses further strategies for control of drop-off/pick-up operations and on-site traffic flow during events.***

- CM Review #2 Follow-Up Comment: Upon review of the Vehicle Tracking Plan, a front-end loading garbage truck is able to circulate the site. However, it is evident on the Vehicle Tracking Plan that the garbage apparatus will encroach on the opposing travel lane at the Main Driveway when entering/exiting the site and it will require reverse maneuvers within the site. For these reasons, CM recommends that the Applicant agree to schedule garbage pickup during off-peak hours only.
- CM Review #3 Follow-Up Comment: Colliers did not provide a response to this comment. As noted in the previous comment, CM recommends that an alternate driveway configuration be investigated in order to mitigate vehicle encroachment into opposing lanes. CM continues to recommend that the Applicant agree to schedule garbage pickup during off-peak hours only.

  Response: ***See above response. The Applicant will agree to limit garbage pick-up to off-peak hours.***

Colliers Engineering & Design

2. Please provide intersection and stopping sight distances for the existing driveway.

- CM Review #3 Follow-Up Comment: CM notes that the even though the intersection sight distance is short by 4-ft, the driveway is not critically limited as the available intersection sight distance exceeds the recommended stopping sight distance.

  Response: The southern driveway location is no longer proposed to be utilized. See Section III.F.5 of the revised Traffic Impact Study for discussion of sight distance at the northern exit-only driveway location.

Traffic Impact & Parking Study

3. CM reviewed the trip generation methodology:

- CM Review #2 Follow-Up Comment: Vendors and employees will have a vehicle occupancy rate of 1.0. Please provide in more detail the number of attendees, vendors, and employees. Please update traffic assessment based on the updated trip generation.
- CM Review #3 Follow-Up Comment: CM generally agrees with the statements above. However, to provide clarity on the number of site-generated trips and vehicle occupancy rates being applied, it would be beneficial for the applicant to provide an approximate breakdown of the number of attendees, vendors, and staff.

  Response: The Applicant does not currently have any estimate of the breakdown of vendors and staff for events. This will also fluctuate based on the type of event.

- CM Review #3 Follow-Up Comment: CM agrees with the 10% credit being taken for non-vehicular traffic. The level of service reports provided by Colliers indicate that the reduction in credit being taken results in minor increases in delay.

  Response: The traffic analysis associated with the 10% credit provided in our January 24, 2022 letter has now been incorporated into the revised Traffic & Parking Study dated February 21, 2022.

5. CM Review #3 Follow-Up Comment: Based on CM's understanding of Colliers' calculations, the 52 parking spaces required off-site was determined by:

i. Using the City of Beacon Zoning Code, the event space requires 88 spaces and the hotel requires 31 spaces for a total of 119 spaces.
ii. Colliers assumes that the parking requirements for the hotel can be omitted as 100% of the hotel will be occupied by event occupants. Thus, the required parking would be 89 spaces (88 for the 350-person event space and 1 for the hotel employee).
iii. Colliers then reduced the 89 spaces by the spaces provided on-site to arrive at the number of spaces required off-site, 58.
iv. Colliers then reduced the spaces required off-site by 10% to take credit for event occupants not arriving by personal car. Thus, they state that 52 spaces are required off-site.

Colliers Engineering & Design

- CM disagrees with the how Colliers considers the internal capture for the hotel use. Colliers' method assumes that one hotel room would be used by four event occupants and those four occupants would be arriving in one vehicle. Rather, CM proposes that the development requires 72 spaces off- site. Below is a detailed explanation on how that number was arrived upon:

i. 10% of event occupants will arrive via non-vehicular modes. Therefore: 350 - (350*0.10) = 315 event occupants will arrive via personal vehicles.
ii. 100% of the hotel rooms will be occupied by event occupants. Assuming two (2) event occupants per room there will be 255 event occupants arriving via personal vehicles.
iii. Utilizing the City of Beacon Zoning Code for a Conference Center (1 space for each 4 seats), remaining 255 event occupants will require 64 parking spaces. Because the internal capture for hotel occupants was accounted for in ii., the 30 spaces intended for the hotel cannot be credited to the 64 parking spaces. Therefore, 64 spaces will need to be identified off-site.

Response: Colliers agrees with the above assessment of the parking numbers prepared by CM. The revised Traffic & Parking Study has been updated to reflect these same calculations.

6. CM Review #3 Follow-Up Comment: Based on the off-site parking requirements calculated by CM, 64, the Tompkins lot would be 98% utilized. When the lot capacity is reduced by the anticipated 14+ spaces, the lot will be over capacity. In this case, the municipal lot could provide the necessary supply to meet the demand.

   CM notes that the Café/Restaurant/Bar will require 17 parking spaces. In conjunction with the hotel use, the site will require 48 parking spaces in a typical non-event scenario. In this scenario, 17 spaces will be sourced off-site. If sourced from the Tompkins lot, they would require 25% of its capacity. Based on the future condition, where the lot's capacity is reduced by 14+, they would require 30% of the lot's capacity.

   Response: Comment noted. There is sufficient off-site public parking available in the vicinity of the site to accommodate the additional parking needs associated with the café use under typical conditions.

John Clarke Planning & Design letter dated February 3, 2022

2. Adequate parking is a specific Special Permit condition and access details for the varied uses remain serious concerns, including:

a. The 31 parking spaces only covers the hotel use. If the hotel is full, there will be little or no parking available for non-hotel café customers during the day or for event space participants during scheduled times. The Traffic and Parking Study cites remote public parking lots to the north and on-street parking along Beekman Street down the hill, but none of these location are nearly as convenient as on-street parking along Academy Street directly across Wolcott avenue to the east or the end of Rombout avenue just to the south. How is this parking on nearby residential streets and random crossings of Wolcott Avenue to be avoided?

Colliers Engineering & Design

Response: *It is the opinion of Colliers Engineering & Design that the example of Academy Street as a parking location for event attendees is not reasonable. Academy Street is approximately 15 ft. above the elevation of Wolcott Avenue, requires traversing steep hill to get from the elevation of Academy Street down to Wolcott Avenue and Academy Street is not visible from Wolcott Avenue by vehicles passing the Site due to the large retaining wall separating Academy Street from Wolcott Avenue. It is our opinion that only people familiar with the Beacon area, such as Beacon residents would know to look for parking along Academy Street.*

Regardless of the above, it is possible that event attendees may look to park along nearby residential streets such as Academy Street, Beacon Street and Rombout Avenue. It is not that there is technically nothing that prohibits parking along these roadways. However, our office, in conjunction with the Applicant has prepared a draft Traffic & Parking Management Plan for the management of traffic & parking during events. This plan will ultimately incorporate strategies to limit parking on these residential streets.

c. The Traffic and Parking Study suggested a reduced event parking demand with a 25% or perhaps 10% deduction for transit use and walking. The Study assumed 2.75 occupants per vehicle for its event traffic generation calculation and yet the minimum parking requirement is only 1 space for every 4 occupants, so it seems that the parking standard already factors in a reduction for transportation alternatives.

Response: *When estimating traffic generation and parking requirements for a project, car occupancy ratios utilized for each are not necessarily the same. In this instance the use of the 2.75 persons per vehicle car occupancy ration was meant to account for anticipated use of taxi services including uber and lyft, shuttles, etc. which will result in traffic generated by the Site but not additional parking. The 10% credit now used in the Traffic & Parking Study, is specifically a credit to account for non-vehicular traffic.*

Sincerely,

Colliers Engineering & Design CT, P.C.



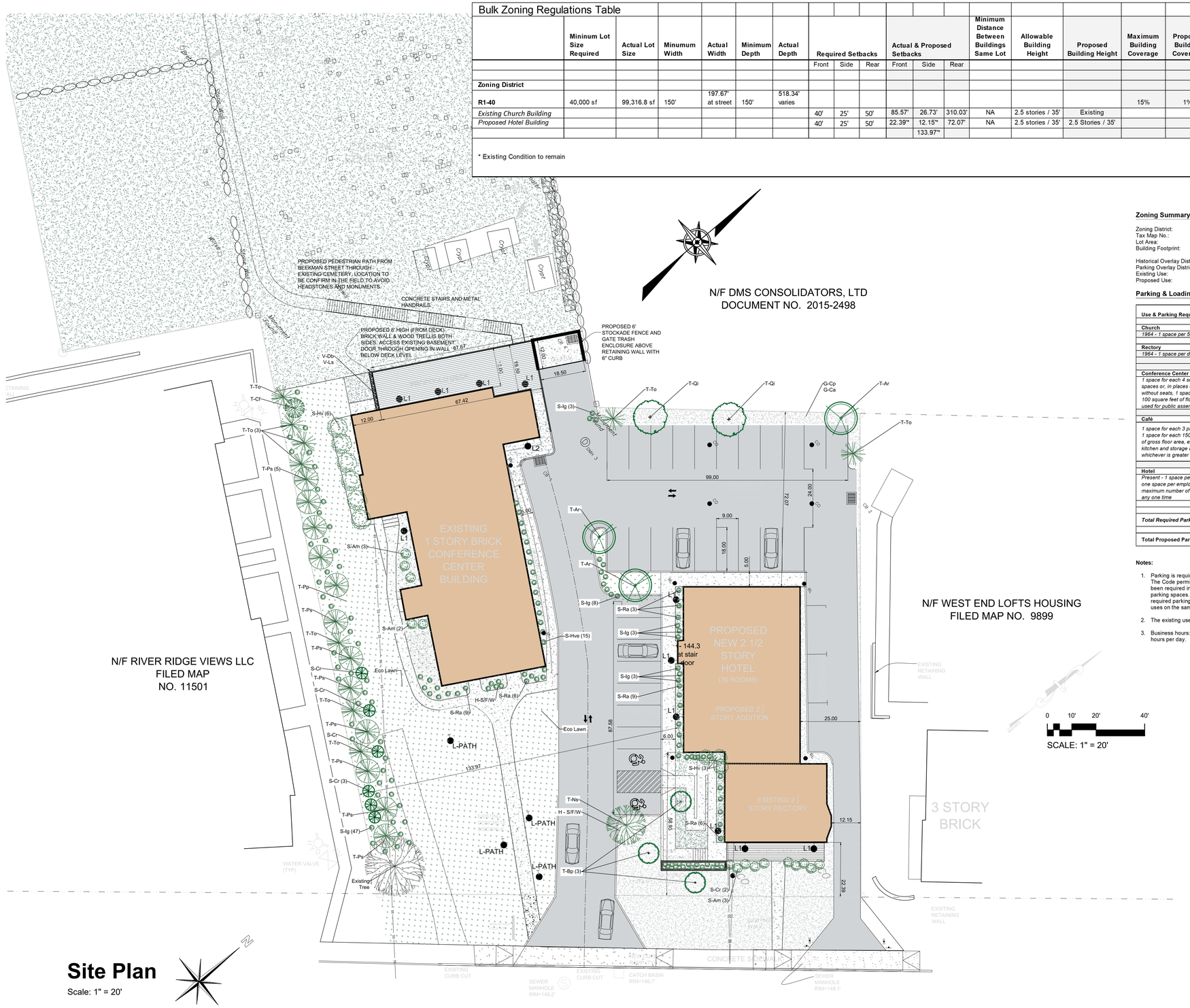
Richard D'Andrea, P.E., PTOE
Assistant Department Manager

R:\Projects\2021\21004333A\Correspondence\OUT\220221RGD_CM 2.7.2022 Comment Response.docx

Bulk Zoning Regulations Table

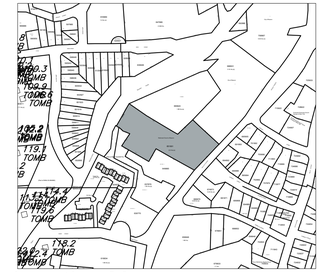
	Mininum Lot Size Required	Actual Lot Size	Minumum Width	Actual Width	Minimum Depth	Actual Depth	Required Setbacks			Actual & Proposed Setbacks			Minimum Distance Between Buildings Same Lot	Allowable Building Height	Proposed Building Height	Maximum Building Coverage	Proposed Building Coverage
							Front	Side	Rear	Front	Side	Rear					
Zoning District																	
R1-40	40,000 sf	99,316.8 sf	150'	197.67' at street	150'	518.34' varies										15%	1%
Existing Church Building							40'	25'	50'	85.57'	26.73'	310.03'	NA	2.5 stories / 35'	Existing		
Proposed Hotel Building							40'	25'	50'	22.39'*	12.15'*	72.07'	NA	2.5 stories / 35'	2.5 Stories / 35'		
											133.97'*						

* Existing Condition to remain



Site Plan

Scale: 1" = 20'



Location Map

Scale: 1" = 400'

Zoning Summary

Zoning District:	R1-40
Tax Map No.:	5954-26-651901
Lot Area:	2.28 Acres
Building Footprint:	10,279 square feet (existing church building + proposed hotel building)
Historical Overlay District:	Yes
Parking Overlay District:	Yes
Existing Use:	Church / Rectory
Proposed Use:	Hotel, Event Space accessory to the Hotel Use

Parking & Loading

Use & Parking Requirements	1964 Units	1964 Parking Requirement	Proposed Units	Current Parking Requirement
Church				
1964 - 1 space per 5 seats	336 occupants	68 parking spaces		
Rectory				
1964 - 1 space per dwelling unit	1 dwelling unit	1 parking space		
Conference Center				
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			350 occupants	88 parking spaces
Café				
1 space for each 3 patron seats or 1 space for each 150 square feet of gross floor area, excluding kitchen and storage areas, whichever is greater			Non-simultaneous use with confernce center	0 parking spaces
Hotel				
Present - 1 space per room plus one space per employee for the maximum number of employees at any one time			30 rooms plus 1 employee	31 parking spaces
Total Required Parking Spaces		***69 Parking Spaces***		***119 Parking Spac***
Total Proposed Parking Spaces				**32 Parking Space (Note 1)**

Notes:

1. Parking is required per Beacon Zoning Code Section 223-26 (B.2): The building was in existence on April 20, 1964. The Code permits no more than 25% greater intensity than the use existing in 1964. 69 parking spaces would have been required in 1964 for the uses in existence at that time. The 1964 exception would allow for a total of 86 parking spaces. 119 parking spaces are required for the current proposed hotel and event space uses. The total required parking is subject to a determination from the Building Inspector regarding shared parking for 2 or multiple uses on the same lot.
2. The existing use in 1964 was a Church with 336 seats, plus the Rectory.
3. Business hours: 8am – 11pm Monday through Sunday inclusive for the Conference Center. The Hotel is open 24 hours per day.

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	08/31/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	09/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	01/25/22	REVISED PER PLANNING BOARD COMMENTS	AJS
6	02/22/22	REVISED PER PLANNING BOARD COMMENTS	AJS

Index of Drawings

Sheet 1 of 13	Site Plan
Sheet 2 of 13	Full Site Plan
Sheet 3 of 13	Existing Conditions & Demolition Plan
Sheet 4 of 13	Landscape & Lighting Plan
Sheet 5 of 13	Hotel Building Plans & Elevations
Sheet 6 of 13	Conference Center Plans
Sheet 7 of 13	Conference Center Elevations
Sheet 8 of 13	Grading & Utility Plans
Sheet 9 of 13	Erosion and Sediment Control Plan
Sheet 10 of 13	Vehicle Tracking Plan
Sheet 11 of 13	Site Details
Sheet 12 of 13	Stormwater Details
Sheet 13 of 13	Water & Sewer Details

Special Use Permit Application

Sheet 1 of 13 - Site Plan

Owner:
Prophecy Theater, LLC
36 South Brett 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

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: 1" = 20'
June 29, 2021

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	08/31/21	ADDED PER PLANNING BOARD COMMENTS	AJS
2	09/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	01/25/22	REVISED PER PLANNING BOARD COMMENTS	AJS
6	02/22/22	REVISED PER PLANNING BOARD COMMENTS	AJS



Site Plan

Scale: 1" = 30'

Special Use Permit Application

Sheet 2 of 13 - Full Site Plan

Owner:
Prophecy Theater, LLC
36 South Brett 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

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: 1" = 30'
June 29, 2021

DMS CONSOLIDATORS, LTD
DOCUMENT NO. 2015-2498

N/F
WEST END LOFTS HOUSING
FILED MAP NO. 9899

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	08/31/21	ADDED PER PLANNING BOARD COMMENTS	AJS
2	09/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	01/25/22	NO CHANGE	AJS
6	02/22/22	NO CHANGE	AJS

N 27°44'52" E 64.36'
N 34°22'48" E 72.03'
S 59°50'43" E 319.50'
306.3'
AREA= 2.28 ACRES +/-
N 41°16'37" E 108.64'
S 50°07'23" E 198.84'
25.1'
4'53"W
.50'
4°04'53"W
20.83'
N68°54'53"W
46.42'
N 32°45'07" E 82.36'
N61°04'53"W 174.76'
S29°14'17"W 82.00'
28.7'
N61°49'53"W 243.00'
85.6'
S40°23'53"W 197.67'
22.3'
15.7'

REMOVE EXISTING GRAVEL DRIVEWAY
REMOVE EXISTING STAIR AND PORCH
REMOVE EXISTING ADDITIONS TO BUILDING
REMOVE EXISTING WALK

CATCH BASIN RIM=79.1'
STONE WALL
TOMB
GARBAGE
CONCRETE SIDEWALK
RETAINING WALL
GRAVEL PARKING
3 STORY BRICK
BLACKTOP PARKING
2 STORY WOOD CHURCH
UTILITIES
RELOCATE SIGN
REMOVE BLACKTOP DRIVEWAY
SEWER MANHOLE RIM=149.1'
LIGHT POST (TYP)
CATCH BASIN RIM=146.7'
FIRE HYDRANT (TYP)
SEWER MANHOLE RIM=146.2'
CATCH BASIN RIM=146.7'
WATER VALVE (TYP)
WOLCOTT AVENUE

N/F
RIVER RIDGE VIEWS LLC
FILED MAP NO. 11501

N/F
RIVER RIDGE VIEWS LLC
FILED MAP NO. 11501

Site Plan
Scale: 1" = 20'

Special Use Permit Application

Sheet 3 of 13 - Existing Conditions & Demolition Plan

Owner:
Prophecy Theater, LLC
36 South Brett 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

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: 1" = 20'
June 29, 2021





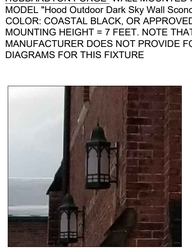
POLE MOUNTED LIGHT (L1A)

STERNBERG LIGHTING "1527LED Omega™ Medium Scale" POLE MOUNTED 2700K LED FIXTURE. LOW GLARE CUTOFF SHIELD, DARK SKY COMPLIANT. COLOR: BLACK. PHOTOCELL CONTROL. OR APPROVED EQUAL. MOUNTING HEIGHT ON BLACK ALUMINUM "CONCORD" POLE = 12 FEET



WALL MOUNTED HOUSE LIGHT (L1)

HUBBARDTON FORGE WALL MOUNTED FIXTURE. MODEL "Hood Outdoor Dark Sky Wall Sconce", 60W, 2700K. COLOR: COASTAL BLACK, OR APPROVED EQUAL. MOUNTING HEIGHT = 7 FEET. NOTE THAT THE MANUFACTURER DOES NOT PROVIDE FOOTCANDLE DIAGRAMS FOR THIS FIXTURE



WALL MOUNTED HOUSE LIGHT (L2)

MATCH EXISTING BUILDING MOUNTED LIGHTS ON CHURCH. PROVIDE CUSTOM FABRICATED LIGHTING IF A SUITABLE MATCH CANNOT BE FOUND FROM AVAILABLE MANUFACTURERS.



PATH LIGHT (L-PATH)

DWELED Chamber Outdoor Post Lantern. 3000K, COLOR: BRONZE, OR APPROVED EQUAL. DARK SKY COMPLIANT. 30" HIGH POST MOUNTED. NOTE THAT THE MANUFACTURER DOES NOT PROVIDE FOOTCANDLE DIAGRAMS FOR THIS FIXTURE

NOTE: ALL EXTERIOR LIGHTING ON THE SITE SHALL BE DIRECTED AND/OR SHIELDED SO AS NOT TO CAUSE ANY OBJECTIONABLE GLARE OBSERVABLE FROM NEIGHBORING STREETS AND PROPERTIES. THE SOURCE (BULBS) OF SUCH LIGHTING SHALL NOT BE VISIBLE FROM SAID NEIGHBORING STREETS AND PROPERTIES. PHOTOMETRIC DIAGRAMS ARE SHOWN WITH SHIELDED CONDITIONS.

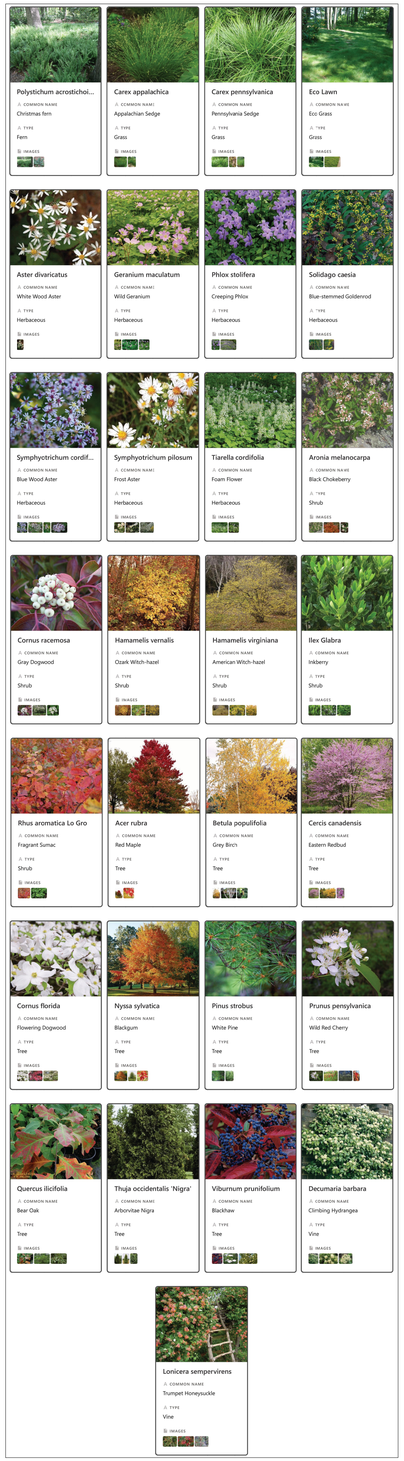
Planting Schedule

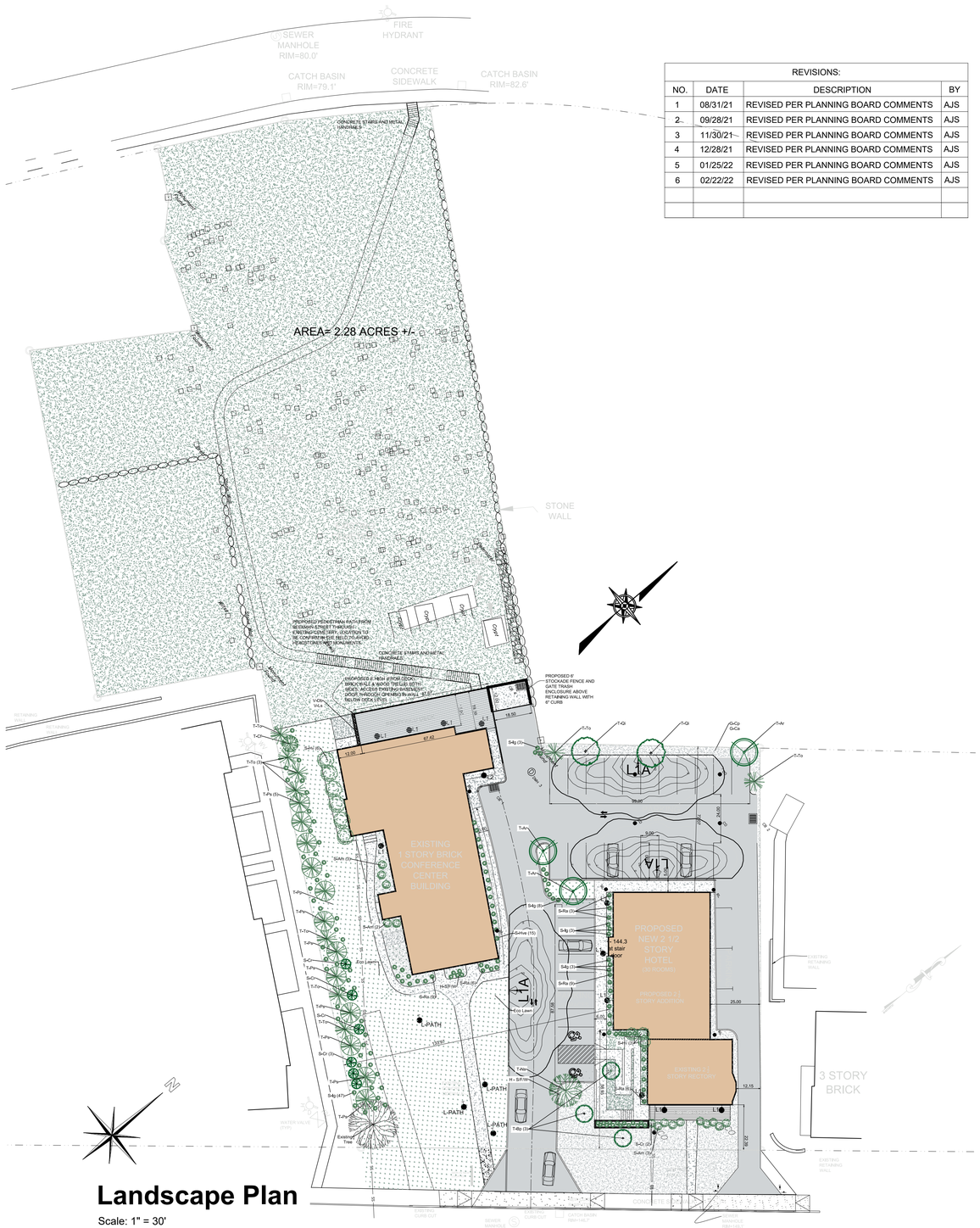
Symbol	Quantity	Type	Common Name	Botanical Name	Size	Planting Time
T-Ar	3	Tree	Red Maple	Acer rubrum	7'-8'	Spring/Fall
T-Bp	3	Tree	Grey Birch	Betula populifolia	7'-8'	Spring/Fall
T-Cc	2	Tree	Eastern Redbud	Cercis canadensis	6'-7'	Spring/Fall
T-Cf	1	Tree	Flowering Dogwood	Cornus florida	6'-7'	Spring/Fall
T-Ns	2	Tree	Blackgum	Nyssa sylvatica	7'-8'	Spring/Fall
T-Ps	12	Tree	White Pine	Pinus strobus	7'-8'	Spring/Fall
T-Pp	1	Tree	Wild Red Cherry	Prunus pensylvanica	7'-8'	Spring/Fall
T-Qi	2	Tree	Bear Oak	Quercus illicifolia	7'-8'	Spring/Fall
T-To	14	Tree	Arborvitae 'Nigra'	Thuja occidentalis 'Nigra'	7'-8'	Spring/Fall
S-Am	5	Shrub	Black Chokeberry	Aronia melanocarpa	3 Gallon	Spring/Fall
S-Cr	7	Shrub	Gray Dogwood American	Cornus racemosa	3 Gallon	Spring/Fall
S-Hw	15	Shrub	Ozark Witch-hazel	Hamamelis vernalis	3 Gallon	Spring/Fall
S-Hv	9	Shrub	Witch-hazel	Hamamelis virginiana	3 Gallon	Spring/Fall
S-Ig	61	Shrub	Inkberry	Ilex glabra	3 Gallon	Spring/Fall
S-Ra	33	Shrub	Low-grow Sumac	Rhus aromatica	3 Gallon	Spring/Fall
H-S/F/W	15	Fern	Christmas Fern	Polystichum arostichoides	1 Gallon	Spring, Summer or Fall
H-S/F/W	20	Herbaceous	White Wood Aster	Aster divaricatus	Plugs	Spring, Summer or Fall
H-S/F/W	20	Herbaceous	Wild Geranium	Geranium maculatum	Plugs	Spring, Summer or Fall
H-S/F/W	20	Herbaceous	Creeping Phlox	Phlox stolifera	Plugs	Spring, Summer or Fall
H-S/F/W	20	Herbaceous	Blue-stemmed Goldenrod	Solidago caesia	Plugs	Spring, Summer or Fall
H-S/F/W	20	Herbaceous	Blue Wood Aster	Symphyotrichum cordifolia	Plugs	Spring, Summer or Fall
H-S/F/W	20	Herbaceous	Frost Aster	Symphyotrichum pilosum	Plugs	Spring, Summer or Fall
V-Db	25	Vine	Climbing Hydrangea	Decumaria barbara	Plugs	Spring, Summer or Fall
V-Ls	25	Vine	Trumpet Honeysuckle	Lonicera sempervirens	Plugs	Spring, Summer or Fall
G-Ca	100	Grass	Appalachian Sedge	Carex appalachica	Plugs	Spring, Summer or Fall
G-Cp	100	Grass	Pennsylvania Sedge	Carex pennsylvanica	Plugs	Spring, Summer or Fall
G-Eg	10	Grass	Eco Grass	Eco Lawn	Seed	Spring/Fall

Planting and Landscape Notes

1. Contractors shall enter and exit site through pre-approved routes only.
2. No non-native plant species shall be introduced onto the site. All species shall be indigenous to the northeast region of North America.
3. If a straight specie is specified, no cultivars will be accepted without prior approval of designer.
4. No plants will be accepted that display mechanical injury, disease or specie irregularities.
5. Soil shall be prepped by removing all construction debris, loose roots and stones larger than 3".
6. All plants must be labeled when delivered to site.
7. Areas to be planted shall be marked and labeled by designer.
8. All plant locations and orientations in the field require approval from designer and owner prior to installation.
9. Test tree-pit for drainage before planting. Do not plant tree in pit if water is still evident after one hour. Contact site engineer or landscape designer if this condition is encountered.
10. All tree-planting to be coordinated with as-built utilities. Trees to be located minimum of 5' from active lines.
11. All trees shall be ball and burlap unless otherwise specified on Plant List.
12. Each new tree hole tree shall be twice the width of the rootball.
13. Burlap, wire, cords, ties and any wrapping materials must be removed from all rootballs before backfilling.
14. Plant all plants so top of rootball is slightly above surrounding soil(small and large plants)
15. No planting shall be done in muddy, rainy or frozen conditions.
16. All plants calling for 'Overflowing" in the notes shall not be accepted by designer if plants are thin.
17. If planting is delayed for more than 3 hours after delivery, set plants in shade. Protect from weather and mechanical damage. Keep roots moist and cover with mulch.
18. Contractors shall leave site neat and orderly during course of project, and store materials and equipment in owner-approved locations away from all trees and plants. Store all unplanted plant material away from damaging sun.
19. If site conditions conflict with intended design, contractor shall alert Owner and designer.
20. No substitutions are to be made without the written or verbal consent of landscape designer and owner.
21. Create a size-specific water-well around each plant, 3' from center of tree, and mulch from the outside. Do not mulch crown.
22. Water thoroughly after planting each plant. Water schedule to be determined.
23. Spray for deer if planted in fall. Sometimes bucks mark their territory with their antlers.
24. Keep planting areas weed-free until plant is established.
25. Eco Lawn seeding shall be implemented by contractor familiar with this specie mix and with the process and approved by designer. This is not the same as casting contractor grass seed.
26. Pervious/Permeable Pavers and associated grass seeding shall be installed by contractor with experience in this process. This process requires establishment maintenance, in order to succeed.
27. Bermed areas shall be built with designer directing construction.
28. Street tree and surrounding tree-pit shall be installed by contractor experienced with these materials and approved by designer.
29. All plants require regular watering for the first two seasons to succeed.

Illustrated Plant List





Landscape Plan

Scale: 1" = 30'

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	08/31/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	09/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
5	01/25/22	REVISED PER PLANNING BOARD COMMENTS	AJS
6	02/22/22	REVISED PER PLANNING BOARD COMMENTS	AJS

Special Use Permit Application

Sheet 4 of 13 - Landscape and Lighting Plan

Owner:
Prophecy Theater, LLC
36 South Brett 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

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: 1" = 30'
June 29, 2021



Elevation: Side Facing Church

Scale: $\frac{3}{32}$" = 1'-0"

Elevation: Rear

Scale: $\frac{3}{32}$" = 1'-0"



Elevation: Side

Scale: $\frac{3}{32}$" = 1'-0"



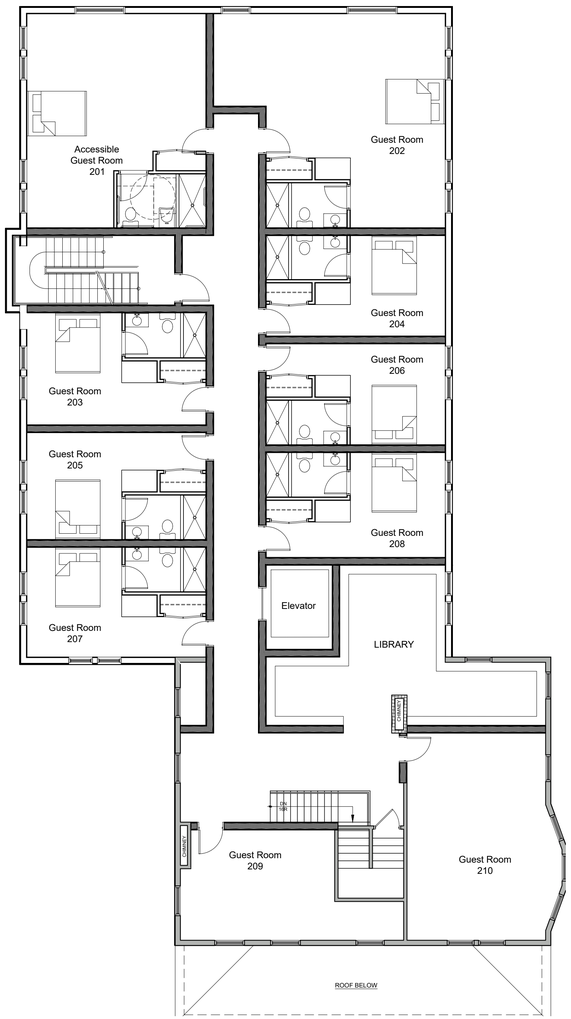
Elevation: Front - Facing Wolcott

Scale: $\frac{3}{32}$" = 1'-0"



3rd Floor Plan: Hotel

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



2nd Floor Plan: Hotel

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



1st Floor Plan: Hotel

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



View



View



View

Special Use Permit Application

Sheet 5 of 13 - Hotel Plans & Elevations

Owner:
Prophecy Theater, LLC
36 South Brett Street
Beacon, NY 12508

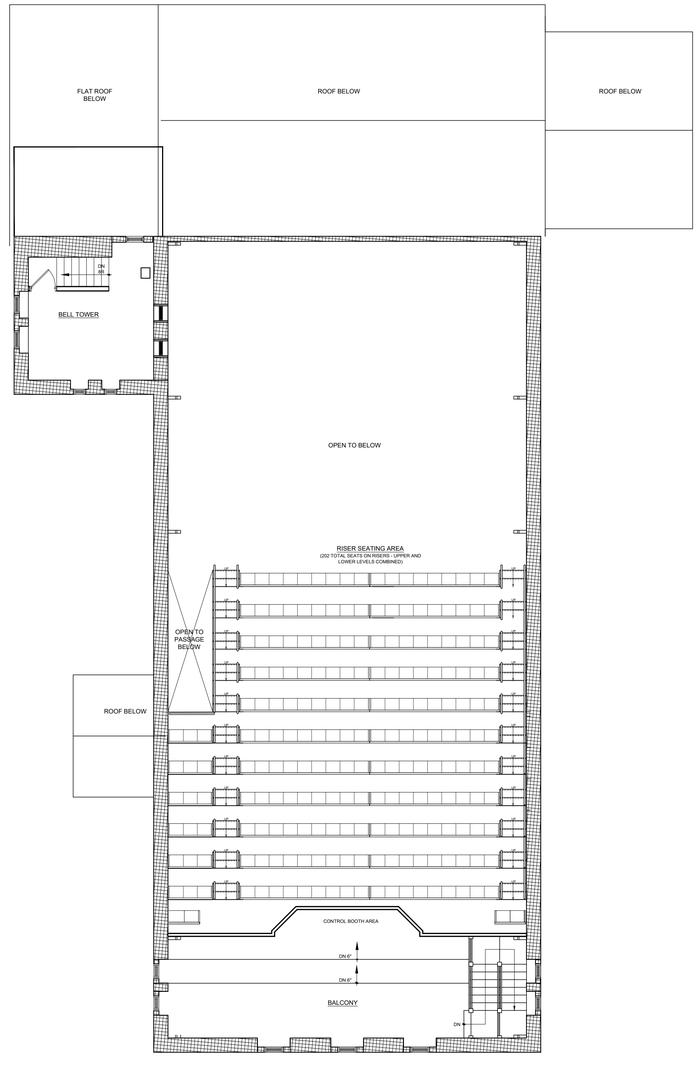
Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

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

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

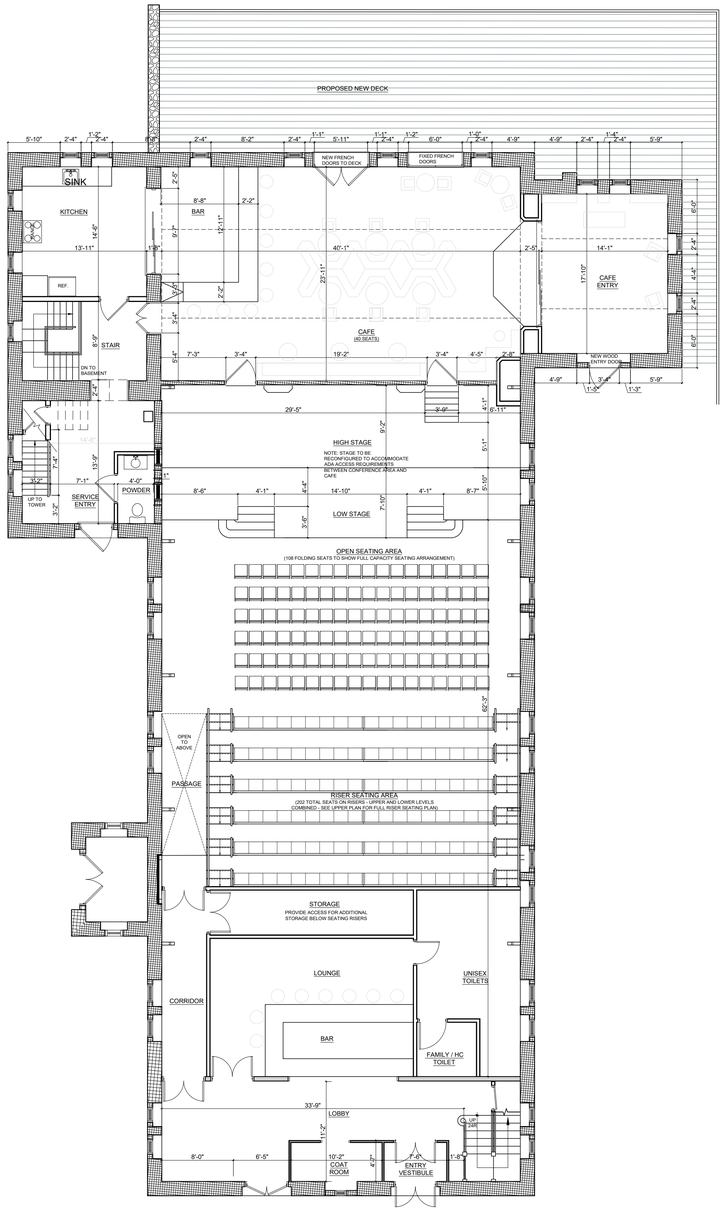
Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: AS NOTED
April 29, 2021



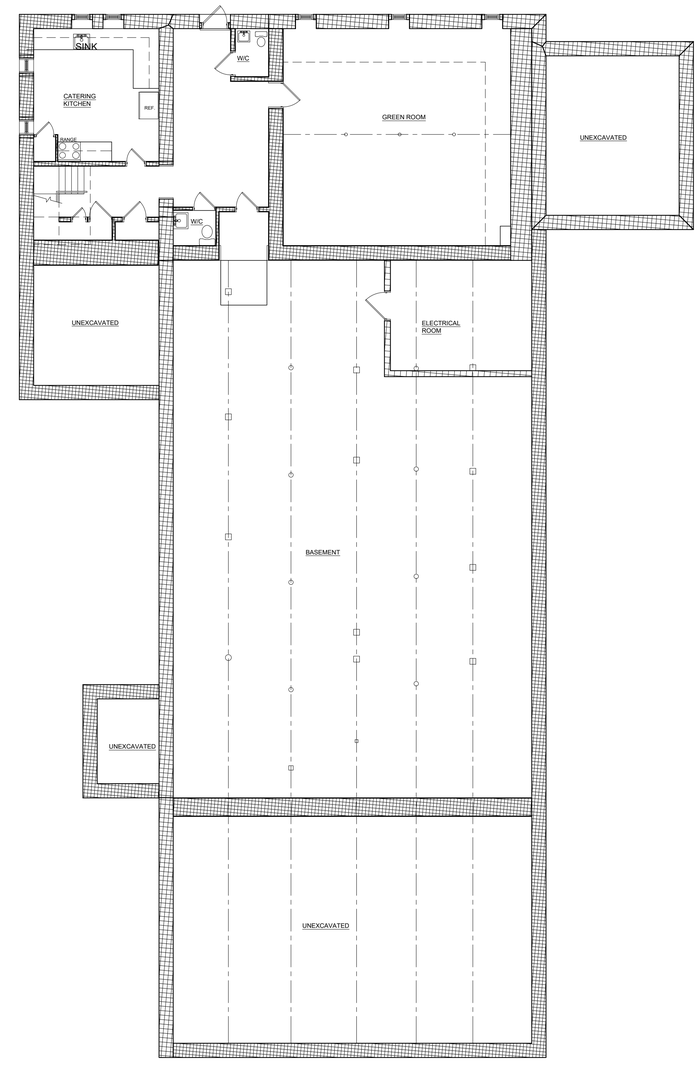
Upper Level Plan: Conference Center

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



Main Level Plan: Conference Center

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



Basement Plan: Conference Center

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

Special Use Permit Application

Sheet 6 of 13 - Conference Center Plans

Owner:
Prophecy Theater, LLC
36 South Brett Street
Beacon, NY 12508

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

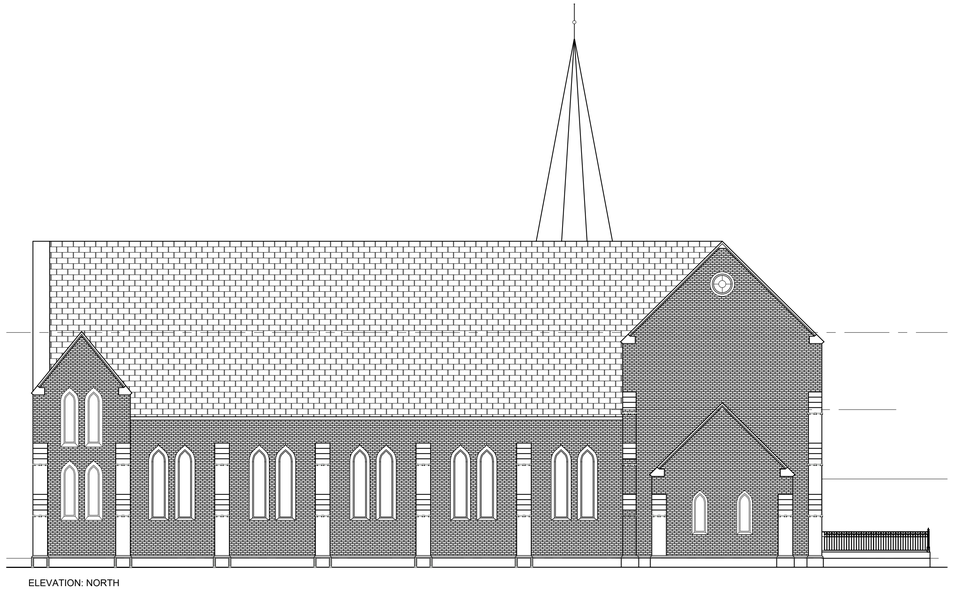
Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: $\frac{1}{8}$" = 1'-0"
April 29, 2021

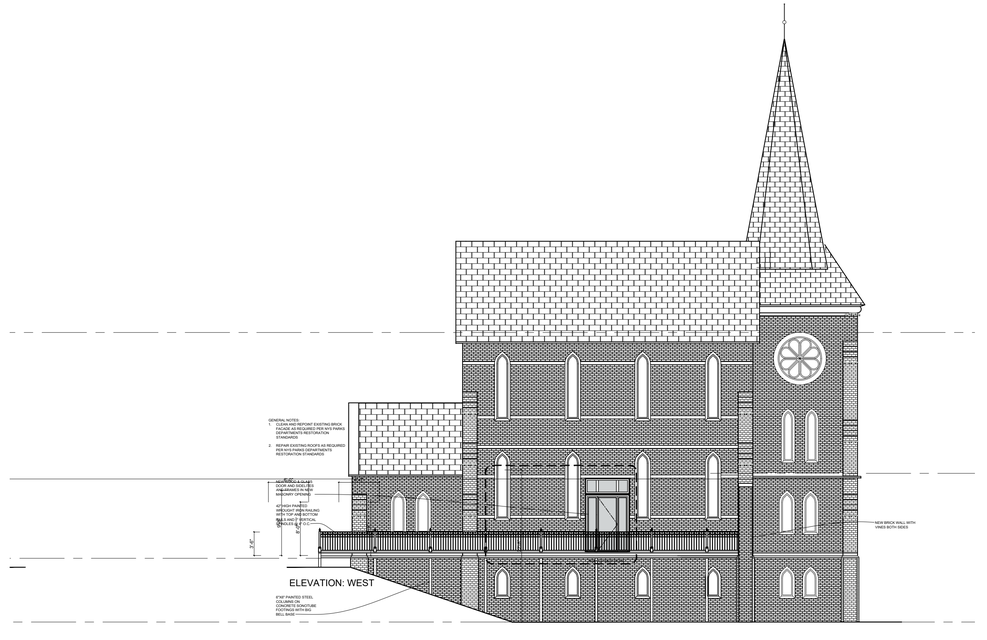
REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	08/31/21	REVISED PER PLANNING BOARD COMMENTS	AJS
2	09/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
3	11/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
4	12/28/21	REVISED PER PLANNING BOARD COMMENTS	AJS
6	02/22/22	REVISED PER PLANNING BOARD COMMENTS	AJS



ELEVATION: NORTH

Elevation: Conference Center Building - North

Scale: $\frac{3}{32}$" = 1'-0"



ELEVATION: WEST

Elevation: Conference Center Building - West

Scale: $\frac{3}{32}$" = 1'-0"



ELEVATION: EAST

Elevation: Conference Center Building - East

Scale: $\frac{3}{32}$" = 1'-0"



ELEVATION: SOUTH

Elevation: Conference Center Building - South

Scale: $\frac{3}{32}$" = 1'-0"

Special Use Permit Application

Sheet 7 of 13 - Conference Center Elevations

Owner:
Prophecy Theater, LLC
36 South Brett Street
Beacon, NY 12508

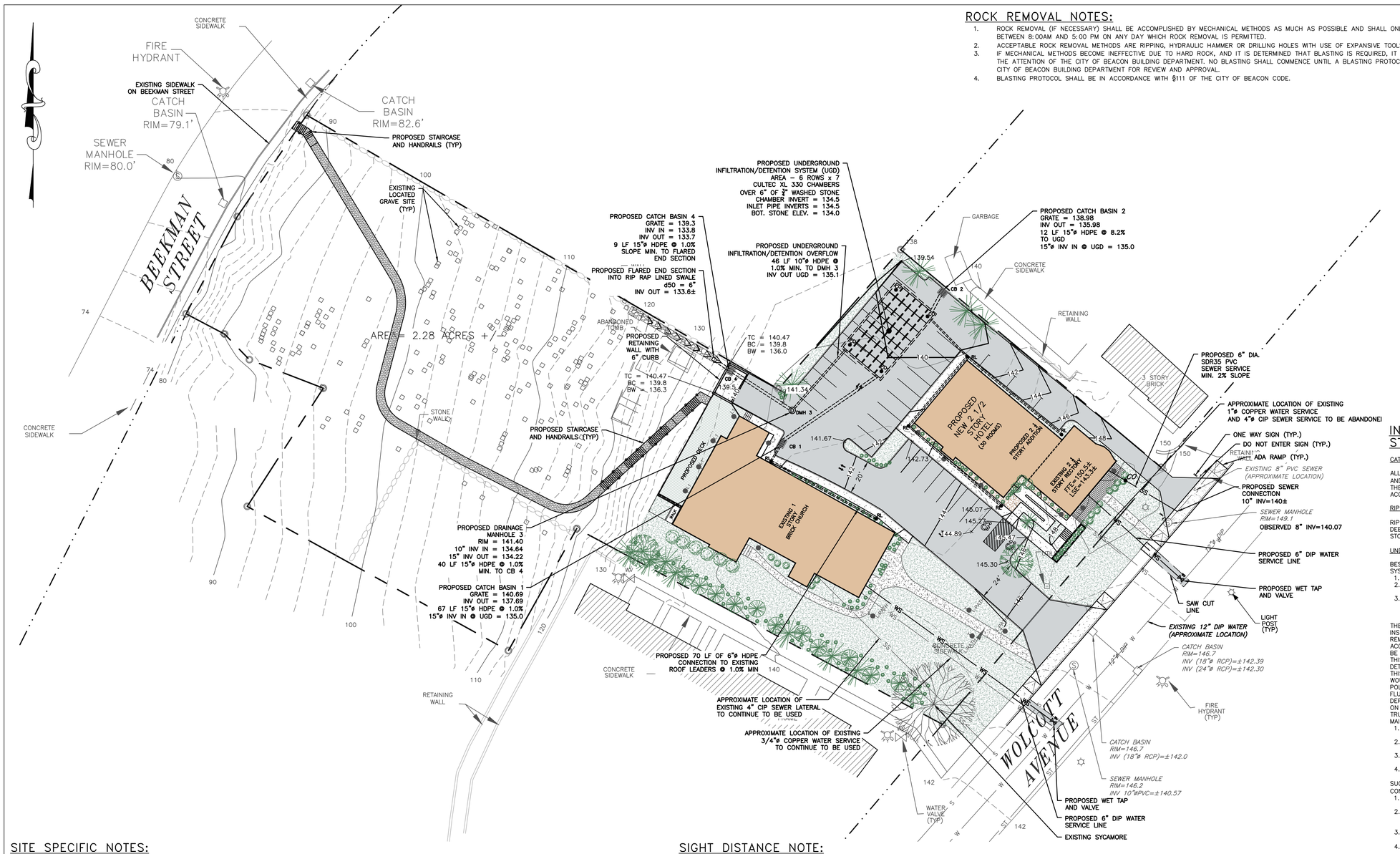
Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

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

Surveyor:
Robert Oswald
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

Landscape Designer:
Landscape Restorations
7 Creek Drive
Beacon, New York 12508

1113 Wolcott Avenue
Beacon, New York
Scale: $\frac{3}{32}$" = 1'-0"
April 29, 2021



ROCK REMOVAL NOTES:

1. ROCK REMOVAL (IF NECESSARY) SHALL BE ACCOMPLISHED BY MECHANICAL METHODS AS MUCH AS POSSIBLE AND SHALL ONLY BE PERMITTED BETWEEN 8:00AM AND 5:00 PM ON ANY DAY WHICH ROCK REMOVAL IS PERMITTED.
2. ACCEPTABLE ROCK REMOVAL METHODS ARE RIPPING, HYDRAULIC HAMMER OR DRILLING HOLES WITH USE OF EXPANSIVE TOOLS AND/OR WEDGES.
3. IF MECHANICAL METHODS BECOME INEFFECTIVE DUE TO HARD ROCK, AND IT IS DETERMINED THAT BLASTING IS REQUIRED, IT SHALL BE BROUGHT TO THE ATTENTION OF THE CITY OF BEACON BUILDING DEPARTMENT. NO BLASTING SHALL COMMENCE UNTIL A BLASTING PROTOCOL IS SUBMITTED TO THE CITY OF BEACON BUILDING DEPARTMENT FOR REVIEW AND APPROVAL.
4. BLASTING PROTOCOL SHALL BE IN ACCORDANCE WITH §111 OF THE CITY OF BEACON CODE.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- EXISTING ROOF LEADER
- EXISTING CATCH BASIN
- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S PROPOSED SEWER LINE
- SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W PROPOSED WATER LINE
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES

CATCH BASINS AND PIPING:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED.

RIP RAP OUTLET PROTECTION:

RIP RAP OUTLET PROTECTION SHALL BE INSPECTED AFTER EACH STORM AND CLEARED OF ANY SEDIMENT AND/OR DEBRIS. IF THE RIP RAP STONE BECOMES SILTED WITH SEDIMENT, IT MAY REQUIRE REMOVAL OF THE RIP RAP STONE SO THAT THE SEDIMENT CAN BE REMOVED PROPERLY. REPLACE RIP RAP STONE AS REQUIRED.

UNDERGROUND INFILTRATION/DETENTION/INFILTRATION:

BEST MANAGEMENT PRACTICE FOR MAINTAINING OPTIMUM PERFORMANCE OF THE UNDERGROUND INFILTRATION SYSTEM IS A COMBINATION OF THE FOLLOWING:

1. PROPER MAINTENANCE OF THE INLET ROW,
2. REMOVAL OF ACCUMULATED SEDIMENT FROM THE UPSTREAM CATCH BASIN AND STORMWATER COLLECTION SYSTEM, AND
3. MAINTAINING THE SITE IMPERVIOUS AND LAWN AREAS IN A STABLE CONDITION. ANY FUTURE LAND DISTURBANCE ASSOCIATED WITH MAINTENANCE OF THE BUILDINGS AND GROUNDS SHALL CAREFULLY PREPARE AN EROSION AND SEDIMENT CONTROL PLAN TO LIMIT TRANSPORT OF SEDIMENT LADEN RUNOFF TO THE COLLECTION SYSTEM.

THE CULTEC SYSTEM SHALL BE EQUIPPED WITH AN INSPECTION PORT LOCATED ON THE INLET ROW. THE INSPECTION PORT IS A CIRCULAR CAST BOX PLACED IN A RECTANGULAR CONCRETE COLLAR. WHEN THE LID IS REMOVED, A 6-INCH PIPE WITH A SCREW-IN PLUG WILL BE EXPOSED. REMOVE THE PLUG. THIS WILL PROVIDE ACCESS TO THE CULTEC CHAMBER ROW BELOW. FROM THE SURFACE, THE SEDIMENT MAY BE MEASURED AT THIS LOCATION. A STADIA ROD MAY BE USED TO MEASURE THE DEPTH OF SEDIMENT IF ANY IN THIS ROW. ADDITIONALLY, CCTV INSPECTION OF THIS ROW CAN BE DEPLOYED THROUGH THIS ACCESS PORT TO DETERMINE IF ANY SEDIMENT HAS ACCUMULATED. IF THE DEPTH OF SEDIMENT IS IN EXCESS OF 3 INCHES, THEN THIS ROW SHOULD BE CLEANED WITH HIGH PRESSURE WATER THROUGH A CULVERT CLEANING NOZZLE. THIS WOULD BE CARRIED OUT THROUGH THE UPSTREAM STRUCTURES. THE INLET ROW IS PLACED ON A POLYETHYLENE LINER TO PREVENT SCOURING OF THE WASHED STONE BENEATH THIS ROW. THIS FACILITATES THE FLUSHING OF THIS ROW WITH HIGH PRESSURE WATER THROUGH A CULVERT CLEANING NOZZLE. THE NOZZLE IS DEPLOYED THROUGH THE UPSTREAM STRUCTURE AND EXTENDED TO THE END OF THE ROW. THE WATER IS TURNED ON AND THE INLET ROW IS BACK-FLUSHED INTO THE STRUCTURE WHERE IT IS REMOVED BY USING A VACUUM TRUCK.

MAINTENANCE GUIDELINES:

1. THE OWNER SHALL KEEP A MAINTENANCE LOG WHICH SHALL INCLUDE DETAILS OF ANY EVENTS WHICH WOULD HAVE AN EFFECT ON THE SYSTEM'S OPERATIONAL CAPACITY.
2. THE OPERATION AND MAINTENANCE PROCEDURE SHALL BE REVIEWED PERIODICALLY AND CHANGED TO MEET SITE CONDITIONS.
3. MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM SHALL BE PERFORMED BY QUALIFIED WORKERS AND SHALL FOLLOW APPLICABLE OCCUPATIONAL HEALTH AND SAFETY REQUIREMENTS.
4. DEBRIS REMOVED FROM THE STORMWATER MANAGEMENT SYSTEM SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.

SUGGESTED MAINTENANCE SCHEDULE (TO BE RE-ASSESSED BY THE OPERATOR PERIODICALLY BASED ON SITE CONDITIONS AND EVALUATION OF SYSTEM FUNCTIONALITY):

1. YEAR 1: INSPECT INLETS AND OUTLETS MONTHLY FOR ANY CLOGGING, AND REMOVE DEBRIS AS MAY BE NECESSARY. INSPECT THE SURFACE AROUND THE CHAMBERS FOR ANY DEPRESSIONS.
2. YEAR 2 AND AFTER: INSPECT INLETS AND OUTLETS EVERY SPRING AND FALL FOR ANY CLOGGING, AND REMOVE DEBRIS AS MAY BE NECESSARY. INSPECT THE SURFACE AROUND THE CHAMBERS FOR ANY DEPRESSIONS.
3. 2 YEARS AFTER COMMISSIONING: INSPECT THE INTERIOR OF THE STORMWATER MANAGEMENT CHAMBERS THROUGH INSPECTION PORT FOR DEFICIENCIES USING CCTV OR COMPARABLE TECHNIQUE.
4. 9 YEARS AFTER COMMISSIONING, AND EVERY 9 YEARS THEREAFTER (OR AS MAY BE NEEDED): CLEAN STORMWATER MANAGEMENT CHAMBERS AND FEED CONNECTORS OF ANY DEBRIS. INSPECT THE INTERIOR OF THE STORMWATER MANAGEMENT CHAMBERS THROUGH INSPECTION PORT FOR DEFICIENCIES USING CCTV OR COMPARABLE TECHNIQUE.
5. 45 YEARS AFTER COMMISSIONING: A PROFESSIONAL ENGINEER SHALL ASSESS THE REMAINING LIFE EXPECTANCY OF THE STORMWATER MANAGEMENT CHAMBERS AND RECOMMEND ACTIONS TO REHABILITATE, RESTORE OR REPLACE THE STORMWATER MANAGEMENT CHAMBERS AS MAY BE REQUIRED.
6. ANNUALLY: CONFIRM THAT NO UNAUTHORIZED MODIFICATIONS HAVE BEEN PERFORMED TO THE SITE THAT MAY IMPACT THE ADEQUATE FUNCTIONING OF THE SYSTEM.
7. PERIODICALLY: MONITOR WATER LEVELS IN THE CHAMBER SYSTEM FOLLOWING SIGNIFICANT STORM EVENTS. DEWATERING OF THE SYSTEM SHOULD TAKE NO LONGER THAN 24 HOURS.

THE FACILITY OWNER SHALL PROVIDE FOR THE PERIODIC INSPECTION OF THE STORMWATER FACILITIES IN ACCORDANCE WITH THE SWPPP, AND SHALL HAVE THE FACILITIES INSPECTED ON A YEARLY BASIS BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK, TO DETERMINE THE CONDITION AND INTEGRITY OF THE STORMWATER CONTROL MEASURES. THE INSPECTING PROFESSIONAL SHALL PREPARE AND SUBMIT TO THE CITY OF BEACON WITHIN 30 DAYS OF THE INSPECTION BUT NOT LATER THAN JUNE 1 OF EACH YEAR, A WRITTEN REPORT OF THE FINDINGS INCLUDING RECOMMENDATIONS FOR THOSE ACTIONS NECESSARY FOR THE CONTINUATION OF THE STORMWATER CONTROL MEASURES. SEE "APPENDIX O" OF THE STORMWATER POLLUTION PREVENTION PLAN FOR DETAILED OPERATIONS AND MAINTENANCE PROCEDURES.

SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS, WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE LINES.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL DRAINAGE, SANITARY SEWER, WATER AND GAS LINES AND STRUCTURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT.
3. THE PROPOSED LOT SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES. AS SUCH, THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
4. THE WATER SERVICE LINE AND METER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
5. THE NEW WATER SERVICE LINE SHALL BE CLASS 52 DIP, SIZE TO BE DETERMINED.
6. THE SEWER SERVICE LATERAL SHALL BE 6"ø SDR-35 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN.
7. STREET CLOSURE FOR WATER, SEWER AND GAS SERVICE CONNECTIONS AND DRIVEWAY CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON AND NYSDOT REQUIREMENTS. A PLAN SHALL BE IN PLACE FOR MAINTENANCE AND PROTECTION OF TRAFFIC.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. WOLLCOTT AVENUE SHALL BE KEPT CLEAN AND SWEPT DURING CONSTRUCTION.
9. SUMP PUMPS TO BE PROVIDED FOR FOOTING DRAINS, AS REQUIRED. THE TYPES OF PUMPS AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT.
10. THE BUILDING DEPARTMENT SHALL HAVE THE RIGHT TO INSPECT THE EXISTING BUILDING TO CONFIRM THAT THERE ARE NOT EXISTING STORMWATER CONNECTIONS TO THE CITY'S SANITARY SEWER SYSTEM PRIOR TO THE MAP BEING SIGNED.
11. WATER AND SEWER FOR THE RECTORY WILL BE ABANDONED IN ACCORDANCE WITH CITY REQUIREMENTS.
12. IN ORDER TO PROTECT THE FEDERALLY-LISTED ENDANGERED INDIANA BAT (MYOTIS SODALIS) AND THE FEDERALLY-LISTED THREATENED NORTHERN LONG-EARED BAT (MYOTIS SEPTENTRIONALIS), THE CLEARING OF POTENTIAL ROOSTING TREES SHALL OCCUR ONLY BETWEEN NOVEMBER 1 AND MARCH 31. ORANGE CONSTRUCTION FENCING SHALL BE USED TO SEPARATE AREAS TO BE GRADED FROM AREAS NOT TO BE DISTURBED. NO ARTIFICIAL DYES, COLORING, INSECTICIDE, OR ALGAECIDE SUCH AS COPPER SULFATE SHALL BE USED IN STORMWATER CONTROL STRUCTURES.

SIGHT DISTANCE NOTE:

MAIN ENTRANCE:

THE SIGHT DISTANCES AT THE PROPOSED DRIVEWAY LOCATION WERE ANALYZED. BASED ON FIELD MEASUREMENTS, THE EXISTING SIGHT DISTANCES ARE APPROXIMATELY 433 FEET LOOKING LEFT (NORTH) AND 544 FEET RIGHT (SOUTH) FROM THE PROPOSED ACCESS. EXISTING STOPPING SIGHT DISTANCES ARE APPROXIMATELY 336 FEET LOOKING LEFT (NORTH) AND 534 FEET RIGHT (SOUTH) FROM THE PROPOSED ACCESS. SIGHT DISTANCES ARE BASED ON AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) CRITERIA THE STOPPING SIGHT DISTANCE (200 FEET) AND INTERSECTION SIGHT DISTANCE (335 FEET) FOR THE 30 MPH POSTED SPEED LIMIT ALONG ROUTE 9D WILL BE SATISFIED. AVAILABLE NYSDOT SPEED DATA FOR ROUTE 9D IN THIS AREA INDICATES THAT THE 85TH PERCENTILE SPEEDS ARE APPROXIMATELY 37 TO 38 MPH. FOR A 40 MPH DESIGN SPEED, AASHTO REQUIRES A MINIMUM 305 FOOT STOPPING SIGHT DISTANCE, 385 FEET MINIMUM INTERSECTION SIGHT DISTANCE LEFT, 445 FEET MINIMUM INTERSECTION SIGHT DISTANCE RIGHT. AND TO ALLOW FOR THE SAFE OPERATION OF THE INTERSECTION. THIS REQUIRED STOPPING SIGHT DISTANCE WILL ALSO BE SATISFIED. IT SHOULD BE NOTED THAT SOME PRUNING/CLEARING OF VEGETATION IMMEDIATELY NORTH OF THE PROPOSED DRIVEWAY LOCATION ON THE WEST SIDE OF ROUTE 9D SHOULD BE COMPLETED IN ORDER TO MAXIMIZE THE SIGHT DISTANCE LOOKING TO THE NORTH FROM THE SITE DRIVEWAY.

SOUTHERLY EGRESS ONLY LOOP:

THE SIGHT DISTANCES AT THE PROPOSED DRIVEWAY LOCATION WERE ANALYZED. BASED ON FIELD MEASUREMENTS, THE EXISTING SIGHT DISTANCES ARE APPROXIMATELY 389 FEET LOOKING LEFT (NORTH) AND 536 FEET RIGHT (SOUTH) FROM THE PROPOSED ACCESS. EXISTING STOPPING SIGHT DISTANCES ARE APPROXIMATELY 331 FEET LOOKING LEFT (NORTH) AND 501 FEET RIGHT (SOUTH) FROM THE PROPOSED ACCESS. SIGHT DISTANCES ARE BASED ON AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) CRITERIA THE STOPPING SIGHT DISTANCE (200 FEET) AND INTERSECTION SIGHT DISTANCE (335 FEET) FOR THE 30 MPH POSTED SPEED LIMIT ALONG ROUTE 9D WILL BE SATISFIED. AVAILABLE NYSDOT SPEED DATA FOR ROUTE 9D IN THIS AREA INDICATES THAT THE 85TH PERCENTILE SPEEDS ARE APPROXIMATELY 37 TO 38 MPH. FOR A 40 MPH DESIGN SPEED, AASHTO REQUIRES A MINIMUM 305 FOOT STOPPING SIGHT DISTANCE, 385 FEET MINIMUM INTERSECTION SIGHT DISTANCE LEFT, 445 FEET MINIMUM INTERSECTION SIGHT DISTANCE RIGHT. AND TO ALLOW FOR THE SAFE OPERATION OF THE INTERSECTION. THIS REQUIRED STOPPING SIGHT DISTANCE WILL ALSO BE SATISFIED.

SNOW REMOVAL AND STORAGE NOTES:

1. SNOW SHALL BE REMOVED WITHIN 8 HOURS AFTER A SNOW EVENT.

DRAWN BY: ESR				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	8/31/21	PER PLANNING BOARD COMMENTS	CMB				
2	11/30/21	PER PLANNING BOARD COMMENTS	MAB				
3	12/28/21	PER PLANNING BOARD COMMENTS	MAB				
4	1/25/22	PER PLANNING BOARD COMMENTS	CMB				
5	2/22/22	PER PLANNING BOARD COMMENTS	CMB				

GRADING & UTILITY PLAN
SCALE: 1" = 30'
GRAPHIC SCALE

30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

STATE OF NEW YORK · BOBBIE A. BOSCHKER · 084466 · LICENSED PROFESSIONAL ENGINEER
SEAL

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

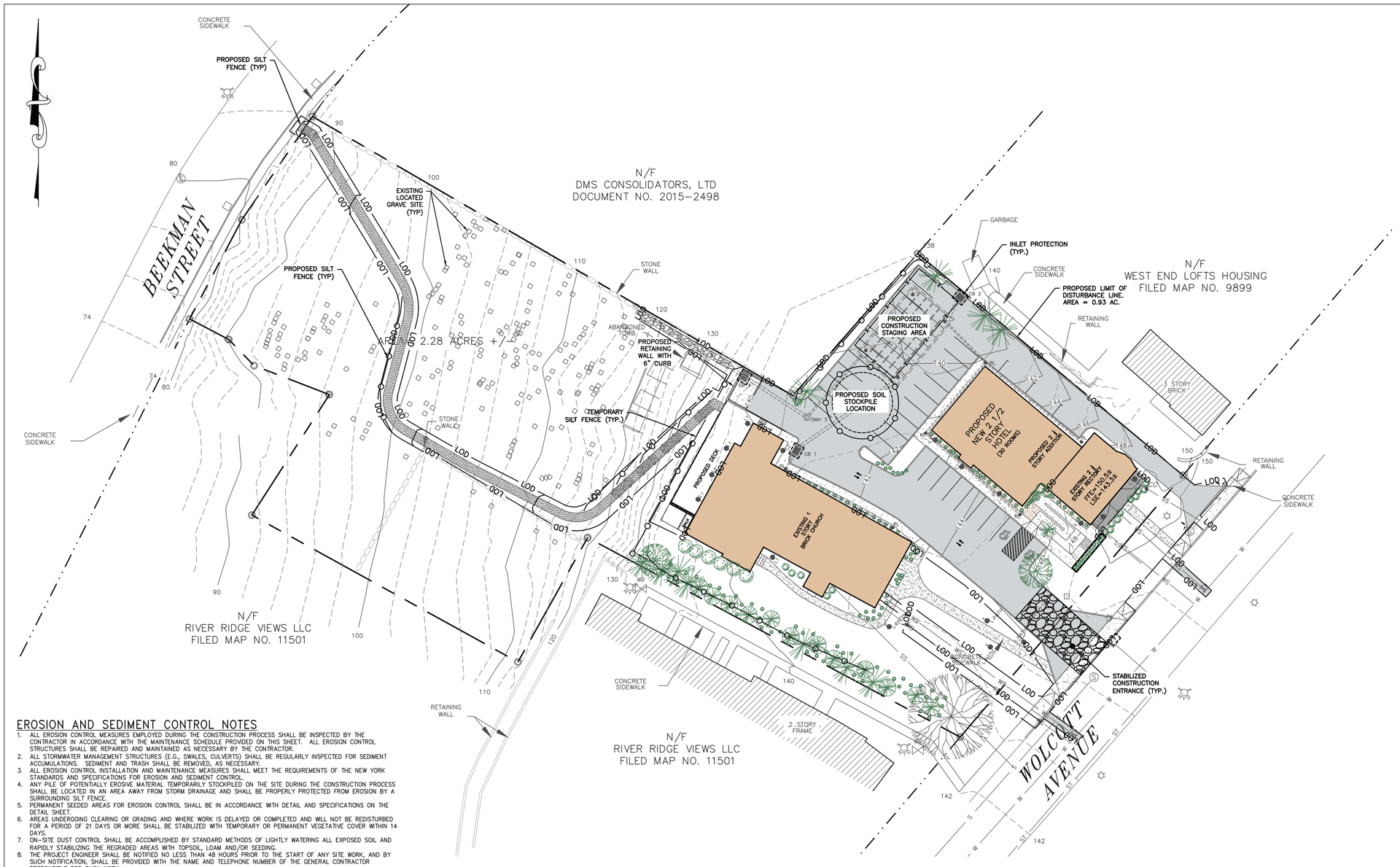
GRADING & UTILITY PLAN

1113 WOLCOTT AVENUE

1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

JOB #:	2021:022
DATE:	6/29/2021
SCALE:	1" = 30'
TITLE:	GU-1
SHEET:	8 OF 13

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



LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- EXISTING ROOF LEADER
- EXISTING CATCH BASIN

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S PROPOSED SEWER LINE
- SS SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W PROPOSED WATER LINE
- WS WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE
- PROPOSED SILT FENCE
- LOD PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CONSTRUCTION ENTRANCE

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

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

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

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

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

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

CHECK DAM:
(IF REQUIRED) INSPECT CHECK DAMS EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. IF SIGNIFICANT EROSION OCCURS BETWEEN STRUCTURES, A LINER OF STONE OR OTHER SUITABLE MATERIAL SHOULD BE INSTALLED IN THAT PORTION OF THE CHANNEL. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAM AS NEEDED TO ALLOW CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. REPLACE STONES AS NEEDED TO MAINTAIN THE DESIGN CROSS SECTION OF THE STRUCTURES. REMOVE CHECK DAMS AS PER APPROVAL OF THE PROJECT ENGINEER.

EROSION CONTROL BLANKET:
(IF REQUIRED) INSPECT THE BLANKET EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. REPLACE WIRE STAPLES AS REQUIRED. REPAIR AND RESEED WHERE CRACKS AND DAMAGED VEGETATION IS EVIDENT. WHEN DAMAGED BEYOND REPAIR OR NO LONGER FUNCTIONING, THE BLANKET SHALL BE REPLACED.

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.

SEDIMENT TRAP:
(IF REQUIRED) SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO THE ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF OF THE DESIGN DEPTH OF THE TRAP. SEDIMENT REMOVED FROM THE TRAP SHALL BE DEPOSITED IN A PROTECTED AREA IN SUCH A MANNER THAT IT WILL NOT ERODE.

CATCH BASINS:
ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARRY. THE INLET PROTECTION SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESARRY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.

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 EROSIVE MATERIAL TEMPORARILY STOCKPILED ON THE SITE DURING THE CONSTRUCTION PROCESS SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE.
5. PERMANENT SEEDED AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THE 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.
9. 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. THE NOTICE OF INTENT (NOI) MAY NEED TO BE UPDATED AS A RESULT OF THE CHANGES.
10. THE CONTRACTOR/OWNER SHALL MAINTAIN A RECORD OF ALL EROSION AND SEDIMENT CONTROL INSPECTION REPORTS AT THE SITE IN A LOG BOOK. THE SITE LOG BOOK SHALL BE MAINTAINED ON SITE AND BE MADE AVAILABLE TO THE PERMITTING AUTHORITY. THE OWNER/CONTRACTOR SHALL, ON A MONTHLY BASIS, POST AT THE SITE A SUMMARY OF THE SITE INSPECTION ACTIVITIES IN A PUBLICLY ACCESSIBLE LOCATION.
11. THE OWNER SHALL FILE A NOI WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES AND A NOTICE OF TERMINATION (NOT) WITH THE NYSDEC FOLLOWING CONSTRUCTION ACTIVITIES.
12. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT A DEWATERING PIT IN ACCORDANCE WITH NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (AKA SUMP PIT) TO FILTER WATER FOR PUMPING TO A SUITABLE LOCATION.
13. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARRY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED PER THE APPROVAL OF THE CITY AND QUALIFIED PROFESSIONAL.
14. UPON COMPLETION OF CONSTRUCTION, THE PARCEL OWNER(S) AND SUBSEQUENTLY THE HOMEOWNERS ASSOCIATION SHALL BE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM. THE STORMWATER MANAGEMENT SYSTEM SHALL BE INSPECTED QUARTERLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT. THE OWNER(S) SHALL MAINTAIN A RECORD OF INSPECTION AND MAINTENANCE REPORTS AT THE SITE. REFER TO THE SWPPP FOR INSPECTION REQUIREMENTS AND FUTURE MAINTENANCE.

SOIL RESTORATION NOTES:

1. THE CONSTRACTOR SHALL EMPLOY SOIL RESTORATION TO ALL DISTURBED AREAS THAT WILL REMAIN LANDSCAPED.
2. FOR HEAVY TRAFFIC AREAS, FULL SOIL REASTORATION WILL BE REQUIRED. FULL SOIL RESTORATION CONSISTS OF USE OF A BULLDOZER WITH A DEEP RIPPER ATTACHED TO IT. THE RIPPING SHALL BE DONE TO A DEPTH OF 12"-24". COMPOST IS PLACED OVER THE RIPPED SOIL, THEN WORKED INTO THE SOIL WITH A DEEP SUB-SOILER.
3. FOR LIGHT TRAFFIC AREAS, SOIL RESTORATION MAY BE ACCOMPLISHED BY MEANS OF TILLING THE SOIL WITH A DISK TYPE TILLER PULLED BY A TRACTOR OR PLACEMENT OF TOPSOIL OVER THE EXISTING SOIL A.O.B.E..

DRAWN BY: ESR				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	8/31/21	PER PLANNING BOARD COMMENTS	CMB				
2	11/30/21	PER PLANNING BOARD COMMENTS	MAB				
3	12/28/21	PER PLANNING BOARD COMMENTS	MAB				
4	1/25/22	PER PLANNING BOARD COMMENTS	MAB				
5	2/22/22	PER PLANNING BOARD COMMENTS	CMB				

EROSION & SEDIMENT CONTROL PLAN
SCALE: 1" = 30'
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

STATE OF NEW YORK · ANDREA A. BOSSHART · 084466 · LICENSED PROFESSIONAL ENGINEER
SEAL

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

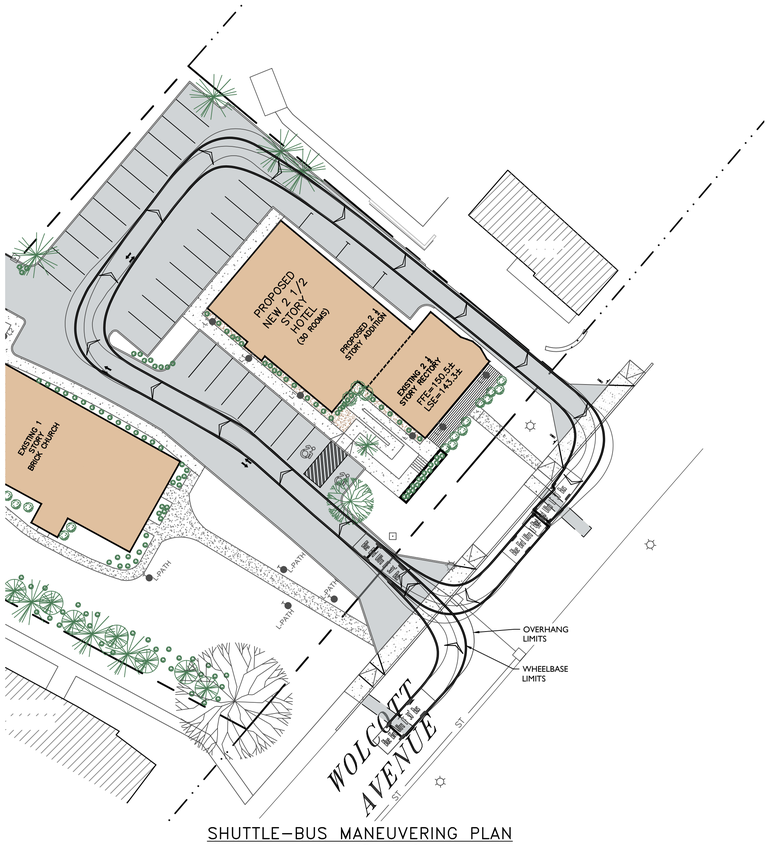
EROSION & SEDIMENT CONTROL PLAN

1113 WOLCOTT AVENUE

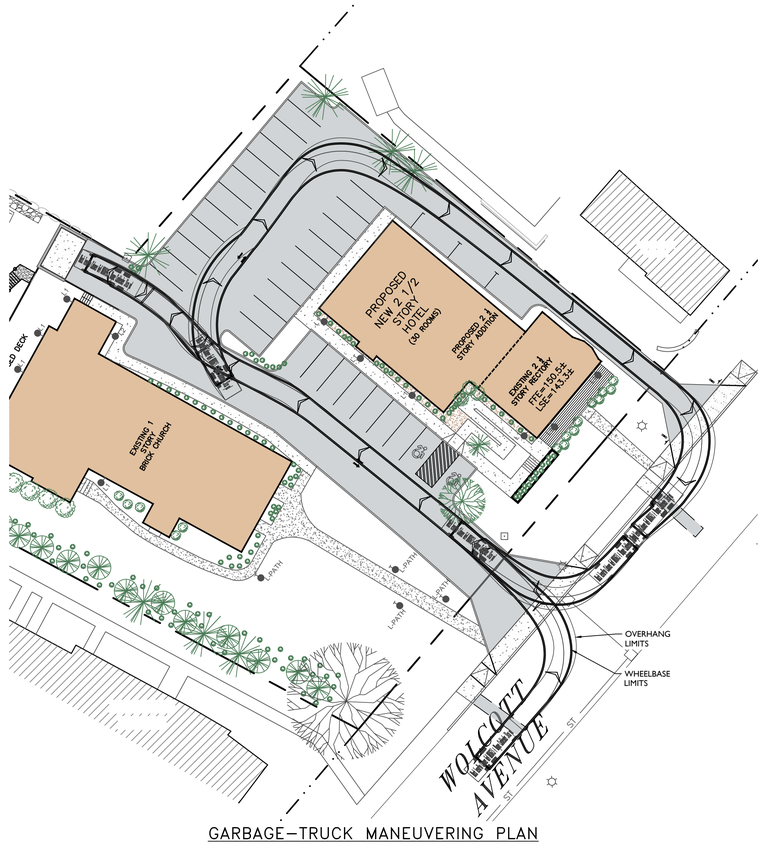
1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

JOB #:	2021:022
DATE:	6/29/2021
SCALE:	1" = 30'
TITLE:	EC-1
SHEET:	9 OF 13

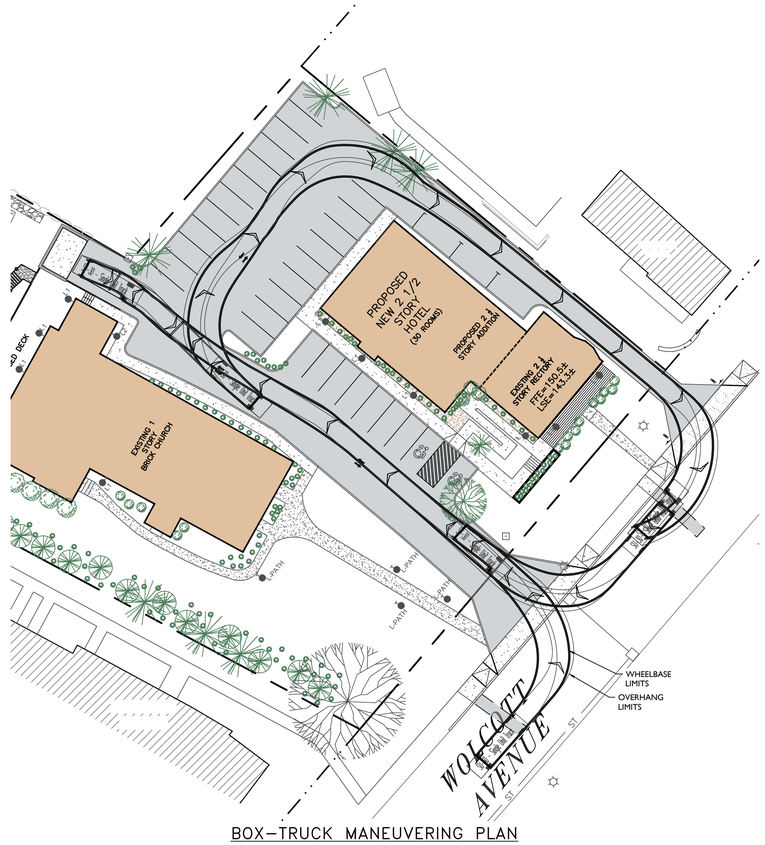
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



SHUTTLE–BUS MANEUVERING PLAN
SCALE: 1" = 30'



GARBAGE–TRUCK MANEUVERING PLAN
SCALE: 1" = 30'



BOX–TRUCK MANEUVERING PLAN
SCALE: 1" = 30'

DRAWN BY: ESR				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	12/28/21	SHEET CREATED	CMB				
2	1/25/22	PER PLANNING BOARD COMMENTS	MAB				
3	2/22/22	PER PLANNING BOARD COMMENTS	CMB				

VEHICLE TRACKING PLAN
SCALE: 1" = 30'
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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

VEHICLE TRACKING PLAN

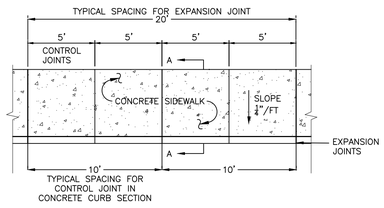
1113 WOLCOTT AVENUE

1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

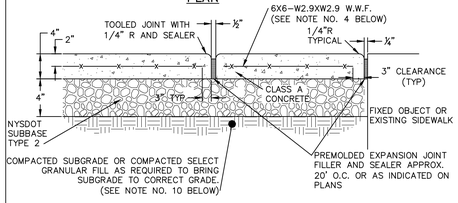
JOB #:	2021:022
DATE:	6/29/2021
SCALE:	1" = 30'
TITLE:	VHC-1
SHEET:	10 OF 13

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

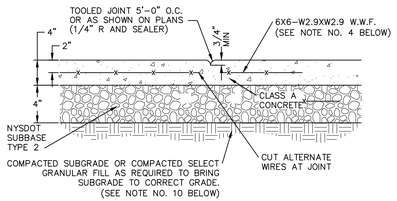
SITE DETAILS



PLAN



EXPANSION JOINT

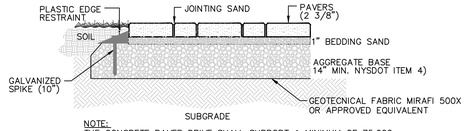


CONTROL JOINT

NOTES:

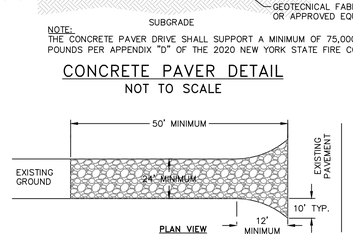
1. 10' SPACING OF CONTROL JOINTS SHALL BE USED FOR CAST IN PLACE CONCRETE CURBS.
2. MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002, AND ALL ADDENDA THERETO; THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
3. ALL CONCRETE SHALL BE 3,500 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
5. ALL EXPOSED SURFACED SHALL HAVE A BROOM TEXTURED FINISH.
6. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
7. JOINTS SHALL NOT BE SAW CUT.
8. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFEBOND"SB-7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
9. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD.
10. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMATION WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11. ALL WORK SHALL CONFORM WITH SECTION 608–SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE



NOTE:
THE CONCRETE PAVER DRIVE SHALL SUPPORT A MINIMUM OF 75,000 POUNDS PER APPENDIX "D" OF THE 2020 NEW YORK STATE FIRE CODE.

CONCRETE PAVER DETAIL
NOT TO SCALE



NOTES:
1) STONE SIZE – USE 1–4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.

2) LENGTH – NOT LESS THAN 50 FEET FOR A COMMERCIAL.

3) THICKNESS – NOT LESS THAN SIX (6) INCHES.

4) WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.

5) GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

6) SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.

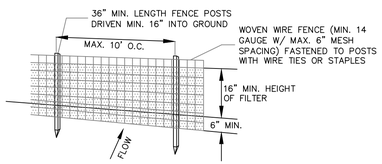
7) MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.

8) WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

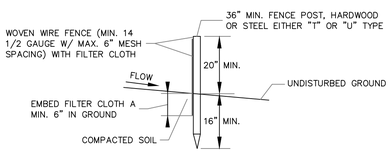
9) PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

EROSION AND SEDIMENT CONTROL DETAILS



PERSPECTIVE VIEW



SECTION VIEW

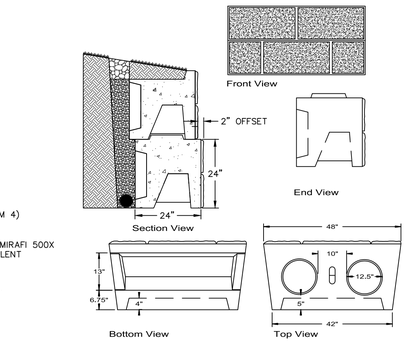
NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.

2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.

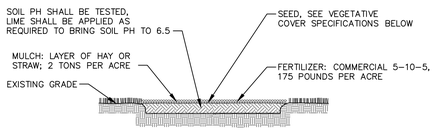
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.

4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL
NOT TO SCALE



WOODARD'S CONCRETE BLOCK WALL DETAIL
NOT TO SCALE



NOTES:
1. TOPSOIL, SEED, MULCH, AND FERTILIZE DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 14 DAYS OR MORE.
2. SEED MIXTURE FOR USE ON LAWNS IN SUNNY AREAS:

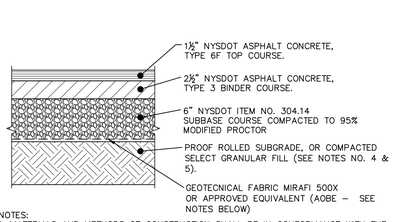
65% KENTUCKY BLUE GRASS BLEND	114 POUNDS PER ACRE
20% PERENNIAL RYEGRASS	35 POUNDS PER ACRE
15% FINE FESCUE	26 POUNDS PER ACRE
	175 POUNDS PER ACRE

3. SEED MIXTURE FOR USE IN SHADY AREAS:

80% BLEND OF SHADE TOLERANT	
KENTUCKY BLUEGRASS	138 POUNDS PER ACRE
20% FINE FESCUE	37 POUNDS PER ACRE
	175 POUNDS PER ACRE

4. SEED BETWEEN APRIL 1ST AND MAY 15TH OR AUGUST 15TH AND OCTOBER 15TH. SEEDING MAY OCCUR BETWEEN MAY 15TH AND AUGUST 15TH IF ADEQUATE IRRIGATION IS PROVIDED.
5. TOPSOIL SHALL HAVE AT LEAST 6% BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN 20%. TOPSOIL SHALL HAVE NOT LESS THAN 20% FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15% CLAY.

TOPSOIL, SEED AND MULCH DETAIL
NOT TO SCALE



NOTES:
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002.

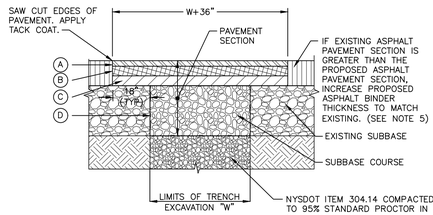
2. SUBGRADE SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS.

3. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407–TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.

4. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.

5. IT IS EXPECTED THAT THE EXISTING SITE SUB–SOILS ARE SAND AND GRAVEL IN NATURE (CALIFORNIA BEARING RATIO RANGE BETWEEN 40 AND 80) IF UNSUITABLE SOILS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR POSSIBLE MODIFICATIONS TO THE PAVEMENT DETAIL.

PAVEMENT SECTION DETAIL
NOT TO SCALE

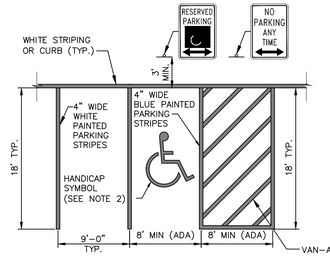


LEGEND
- (A) 1–1/2" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE 6F
- (B) 3" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE 3
- (C) 3" ASPHALT CONCRETE BASE COURSE– NYSDOT TYPE 1
- (D) 6" GRANULAR SUBBASE COURSE– NYSDOT ITEM 304.14

NOTES:

1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.
5. IF THE PAVEMENT SECTION IS OVER A CONCRETE SLAB, THE RESTORED PAVEMENT SECTION SHALL MATCH THE TOTAL THICKNESS OF THE EXISTING CONCRETE SLAB AND PAVEMENT.

NYSDOT ROW PAVEMENT RESTORATION DETAIL
NOT TO SCALE

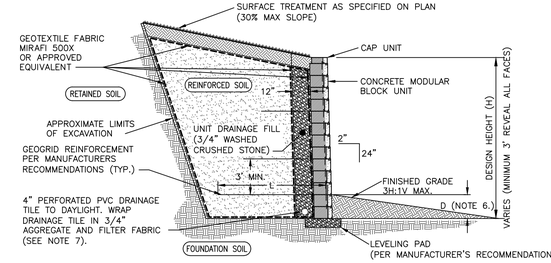


TYPICAL PARKING STRIPING

HANDICAP PARKING STRIPING

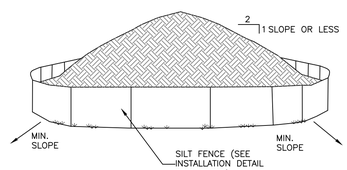
NOTES:
1. ALL DIMENSIONS SUBJECT TO CURRENT MUNICIPALITY ZONING AND SITE REGULATIONS.
2. PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE WITH NYSDOT AND ADA STANDARDS.
3. IF PARKING ABUTS A SIDEWALK, THEN THE REGULATORY SIGNS SHALL BE PLACED BEHIND THE SIDEWALK.

PARKING AND STRIPING DETAIL
NOT TO SCALE



MODULAR RETAINING WALL NOTES:
1. MODULAR RETAINING WALL MANUFACTURED BY WOODARD'S OR APPROVED EQUAL.
2. GRID TYPE SHALL BE AS SPECIFIED BY THE MANUFACTURER.
3. GRID SPACING AND LENGTH VARY BASED ON OVERALL WALL HEIGHT, SOIL AND LOADING CONDITIONS. WALLS OF LIMITED HEIGHT (I.E., 4' OR LESS) MAY NOT REQUIRE THE INSTALLATION OF GRID.
4. LEVELING PAD DEPTH SHALL BE SPECIFIED BY THE MANUFACTURER BASED ON ENGINEERING DESIGN SPECIFIC FOR THE SITE.
5. MANUFACTURER TO PROVIDE FINAL ENGINEERING CALCULATIONS AND DETAILS TO THE OWNER FOR REVIEW BY THE OWNERS ENGINEER.
6. D SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
7. RELOCATE PERFORATED PIPE WITHIN STONE CROSS SECTION FOR STEPPED WALLS TO ACHIEVE CONTINUOUS FLOW TOWARD DISCHARGE POINT.
8. SEE MANUFACTURER'S DETAILS AND INSTALLATION GUIDELINES FOR FURTHER REQUIREMENTS.

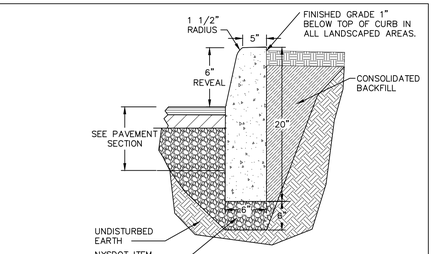
CONCRETE MODULAR RETAINING WALL DETAIL
NOT TO SCALE



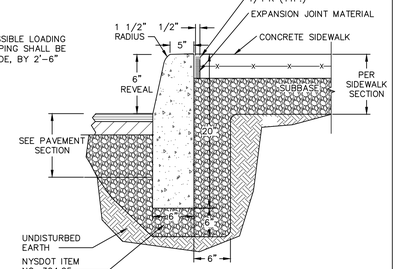
NOTES:

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



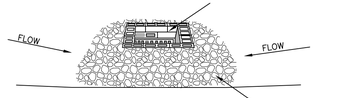
ABUTTING GRASS OR LANDSCAPE



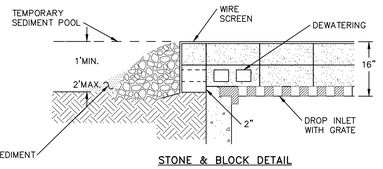
ABUTTING SIDEWALK

NOTES:
1. CONCRETE CURB SHALL BE 4,000 PSI CAST–IN–PLACE, AND IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 609.
2. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL BE PLACED AT 10 FOOT INTERVALS.
3. FOR MOUNTABLE CURBS ABUTTING SIDEWALK OR OTHER HARDSCAPE, REFER TO "ABUTTING SIDEWALK" DETAIL.

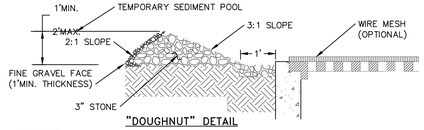
CAST–IN–PLACE CONCRETE CURB DETAIL
NOT TO SCALE



STONE & BLOCK PLAN VIEW



STONE & BLOCK DETAIL



"DOUGHNUT" DETAIL

NOTES:
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2–3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE

CATCH BASIN INLET PROTECTION DETAIL
NOT TO SCALE

DRAWN BY: ESR				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	8/31/21	PER PLANNING BOARD COMMENTS	CMB				
2	11/30/21	PER PLANNING BOARD COMMENTS	MAB				
3	12/28/21	PER PLANNING BOARD COMMENTS	MAB				
4	1/25/22	PER PLANNING BOARD COMMENTS	MAB				
5	2/22/22	PER PLANNING BOARD COMMENTS	CMB				

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

SEAL

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

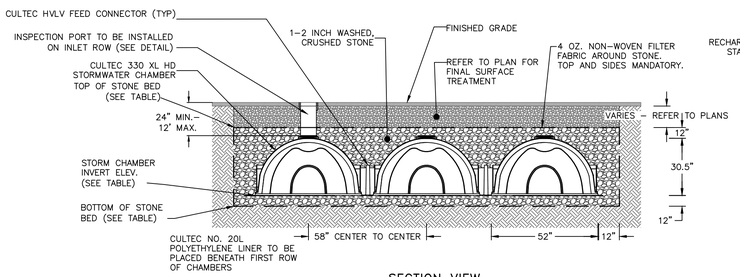
SITE AND E&SC CONSTRUCTION DETAILS

1113 WOLCOTT AVENUE

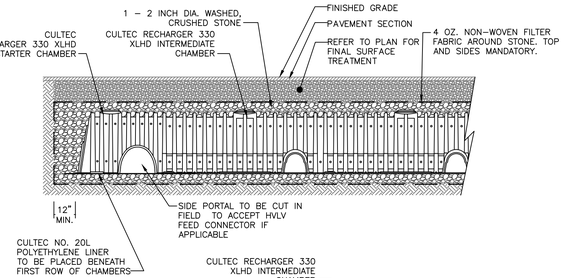
1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954–26–651901

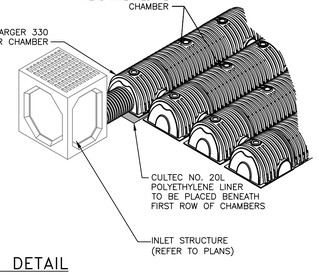
JOB #: 2021:022
DATE: 6/29/2021
SCALE: AS SHOWN
TITLE: CD–1
SHEET: 11 OF 13

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



SECTION VIEW

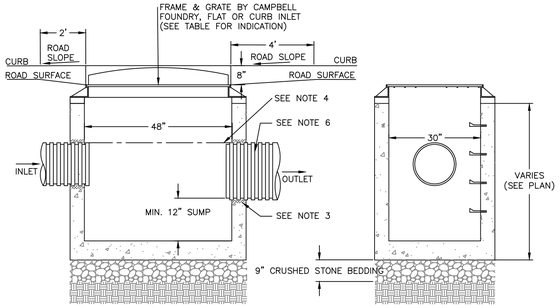




NOTES:
1. CULTEC RECHARGER 330XLHD CHAMBERS BY CULTEC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTEC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
2. THE BED OF THE SYSYTEM FOOTPRINT SHALL BE LAID NEARLY LEVEL.
3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12" MANIFOLD WITH TEE CONNECTIONS BY CULTEC OR EQUAL.
4. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IF SUBSURFACE CONDITIONS IN THE AREAS OF THE INFILTRATOR TRENCHES ARE NOT CONSISTENT WITH THE TEST PIT OR PERCOLATION DATA (E.G. GROUNDWATER OR BEDROCK ENCOUNTERED, SOIL PROPERTIES ARE NOT CONSISTENT, ETC.).
5. REFER TO THE INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES NOTES ON THE GRADING SHEET.
6. SEE ALSO CLAY KEY DETAIL THIS SHEET.

BOTTOM OF STONE BED ELEVATION	CHAMBER INVERT	TOP OF STONE BED ELEVATION	STONE BED FOOTPRINT	STONE BED DIMENSIONS	NO. OF CHAMBERS
134.0	134.5	137.54	1,601 S.F.	30.5'X52.5'	42

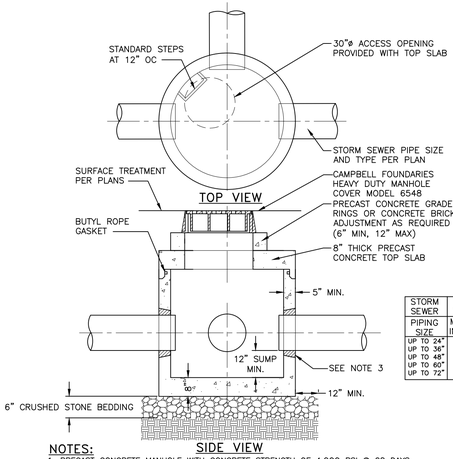
UNDERGROUND INFILTRATION/DETENTION SYSTEM DETAIL
NOT TO SCALE



FRONT VIEW SIDE VIEW

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

CATCH BASIN DETAIL
NOT TO SCALE

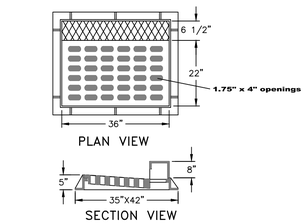


STORM SEWER	CB/MH
PIPING SIZE	MINIMUM INSIDE ø
UP TO 24"	48"
UP TO 36"	60"
UP TO 48"	72"
UP TO 60"	84"
UP TO 72"	96"

SIDE VIEW

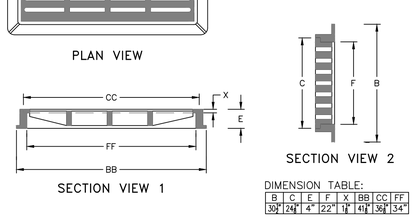
NOTES:
1. PRECAST CONCRETE MANHOLE WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE MANHOLE AND PARGED AROUND.
3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE.
4. CONCRETE STRUCTURE AND CASTING SHALL BE RATED FOR H20 TRAFFIC LOADING.
5. INLET FRAME SHALL BE FULLY SUPPORTED ON THE CONCRETE STRUCTURE FOR H20 LOADING.
6. MANHOLES WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.

STORMWATER MANHOLE DETAIL
NOT TO SCALE



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 1&2. CB 4 TO RECEIVE A FLAT GRATE

CAST IRON STORMWATER CURB INLET GRATE DETAIL
NOT TO SCALE

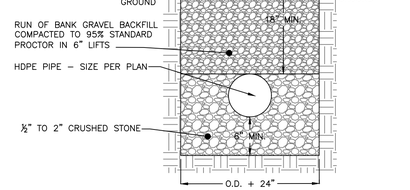


DIMENSION TABLE:

B	C	E	F	X	BB	CC	FF
39"	24"	4"	22"	1"	41"	36"	34"

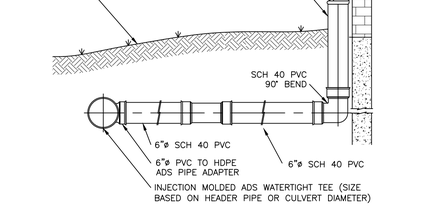
NOTES:
1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 3433, OR APPROVED EQUAL.
2. STMH1 AND STMH 2 RECEIVE SOLID CAST IRON COVERS.

CAST IRON STORMWATER FLAT INLET GRATE DETAIL
NOT TO SCALE



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

STORMWATER PIPE IN TRENCH DETAIL
NOT TO SCALE



NOTES:
1. ROOF LEADER LOCATIONS AND SIZES TO BE DETERMINED BY THE PROJECT ARCHITECT. DOWNSPOUT ADAPTER TO MATCH DOWNSPOUT SIZE.
2. PVC JOINT CONNECTIONS SHALL BE MADE WITH PVC CEMENT.
3. ROOF DRAINAGE HEADER PIPES SHALL BE AS NOTED ON THE UTILITY SHEET.
4. SUBSTITUTIONS OF PIPE MATERIAL SHALL BE BROUGHT TO THE DESIGN ENGINEER'S ATTENTION FOR REVIEW.

ROOF LEADER CONNECTION DETAIL
NOT TO SCALE

DRAWN BY: ESR				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	8/31/21	PER PLANNING BOARD COMMENTS	CMB				
2	11/30/21	PER PLANNING BOARD COMMENTS	MAB				
3	12/28/21	PER PLANNING BOARD COMMENTS	MAB				
4	1/25/22	PER PLANNING BOARD COMMENTS	MAB				
5	2/22/22	PER PLANNING BOARD COMMENTS	CMB				

STATE OF NEW YORK · MICHAEL A. BODENDORF · 084469 · LICENSED PROFESSIONAL ENGINEER

SEAL

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

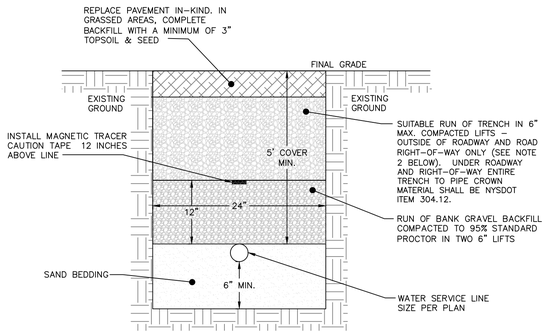
STORMWATER CONSTRUCTION DETAILS

1113 WOLCOTT AVENUE

1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

JOB #:	2021:022
DATE:	6/29/2021
SCALE:	AS SHOWN
TITLE:	CD-2
SHEET:	12 OF 13

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

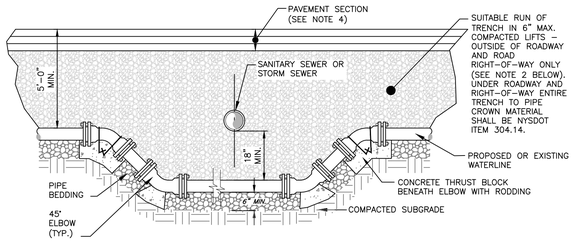


NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ELONGATED 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.

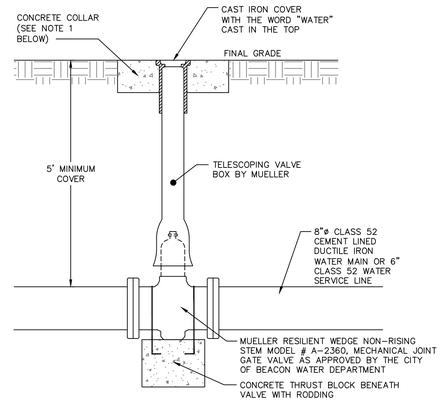
WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



NOTES:
1. WHEN THE ELEVATION OF THE SANITARY OR STORM SEWER CAN NOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER SERVICE LINE OR MAIN SHALL BE RELOCATED TO PROVIDE THIS REQUIRED SEPARATION OR RECONSTRUCTED WITH MECHANICAL JOINT PIPE FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATERMAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR AWAY FROM THE SEWER AS POSSIBLE.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

3. THE RELOCATED WATER MAIN/SERVICE LINE SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA, NYSDOH AND DCDOH STANDARDS.
4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE PAVEMENT RESTORATION DETAIL.
5. ALL REPLACED WATERMAIN SHALL BE 12"ø CLASS 52 DUCTILE IRON.

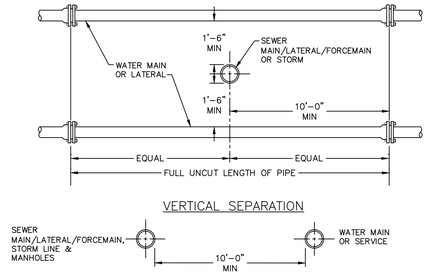
WATER LINE OFFSET DETAIL
NOT TO SCALE



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.

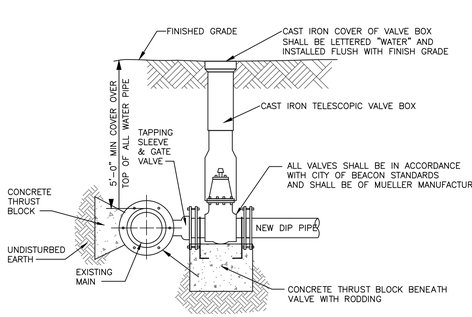
GATE VALVE DETAIL
NOT TO SCALE



NOTE:

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

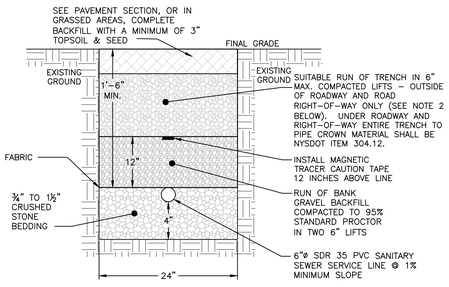
WATER LINE SEPARATION DETAIL
NOT TO SCALE



NOTES:

1. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2-INCH SQUARE-OPERATING NUT PAINTED RED.
2. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
3. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H-615, AND T-2630 RESPECTIVELY.

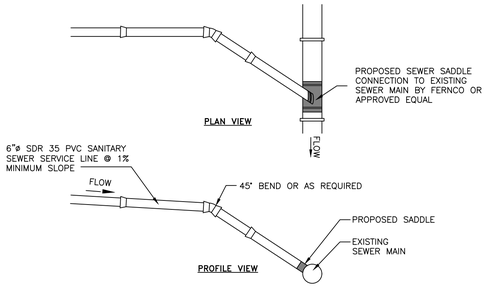
TAPPING SLEEVE DETAIL
NOT TO SCALE



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

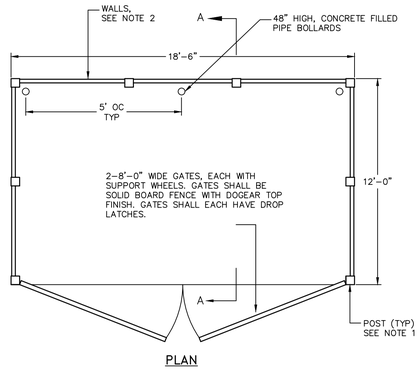
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

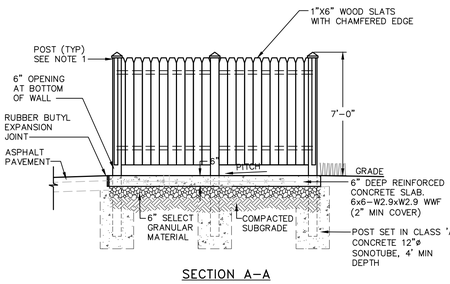
SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, 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. POSTS SHALL HAVE A DECORATIVE CAP, CONSISTENT WITH THE ARTS & CRAFTS STYLE, AS APPROVED BY OWNER. POST SPACING SHALL BE AS REQUIRED BY WALL CONSTRUCTION.

2. WALLS OF DUMPSTER ENCLOSURE SHALL BE A SOLID WOOD PRIVACY FENCING NATURAL STAIL OR PAINT TO COMPLEMENT BUILDING.

TRASH ENCLOSURE DETAILS
NOT TO SCALE

DRAWN BY: ESR				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	8/31/21	PER PLANNING BOARD COMMENTS	CMB				
2	11/30/21	PER PLANNING BOARD COMMENTS	MAB				
3	12/28/21	PER PLANNING BOARD COMMENTS	MAB				
4	1/25/22	PER PLANNING BOARD COMMENTS	MAB				
5	2/22/22	PER PLANNING BOARD COMMENTS	CMB				

STATE OF NEW YORK · MICHAEL A. BOENNER · 084466 · LICENSED PROFESSIONAL ENGINEER
SEAL

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

WATER & SEWER CONSTRUCTION DETAILS

1113 WOLCOTT AVENUE

1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

JOB #:	2021:022
DATE:	6/29/2021
SCALE:	AS SHOWN
TITLE:	CD-3
SHEET:	13 OF 13

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

LANC & TULLY
ENGINEERING AND SURVEYING, P.C.

John J. O'Rourke, P.E., Principal
David E. Higgins, P.E., Principal
John Queenan, P.E., Principal

Rodney C. Knowlton, L.S., Principal
Jerry A. Woods, L.S., Principal

John D. Russo, P.E., Principal
John Lanc, P.E., L.S.
Arthur R. Tully, P.E.

February 28, 2022

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

RE: 1113 Wolcott Avenue
Tax No. 5954-26-651901
Special Use & Site Plan
City of Beacon

Dear Mr. Gunn:

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

- Submission documents for project containing the following:
  - Correspondence/Project Narrative dated February 22, 2022, from Cuddy & Feder to Planning Board.
  - Response correspondence dated February 22, 2022, from Aryeh Siegel, Architect.
  - Response correspondence dated February 22, 2022, from Hudson Land Design.
  - Response correspondence dated February 21, 2022, from Colliers Engineering & Design.
  - Traffic & Parking Management Plan, dated February 21, 2022, as prepared by Colliers Engineering & Design.
  - Traffic & Parking Study for 1113 Wolcott Avenue, dated February 21, 2022, as prepared by Colliers Engineering & Design.
- Plans titled "1113 Wolcott Avenue", consisting of sheets 1 through 7 of 13, with the latest revision date of February 22, 2022, as prepared by Aryeh Siegel, Architect, along with sheets 8 thru 13 of 13, with the latest revision date of February 22, 2022, as prepared by Hudson Land Design.

The proposed project is located on Wolcott Avenue in the R1-40 Zone and Historic District & Landmark Overlay District (HDLO). The existing 2.28± acre parcel contains a church (Reformed Dutch Church of Fishkill Landing), parsonage building and a cemetery. The applicant is proposing to convert the church into a conference center with dining facilities, and to construct a 30-room hotel on the parcel, along with providing 32 on site spaces for parking as related to the hotel. Based on our review of the above documents and plans, we would like to offer the following comments:

General Comments:

1. The plans should call out what the surface material of the pedestrian path will be, and a construction detail shall be added to the plan set for the path.

2. Sheets 1 and 2 of the plan set should remove the outlines of the driveway on the south side of the parcel since it is being removed.

3. Construction details for the stairs and metal handrails along the pedestrian path should be added to the plans.

4. Construction details shall be added to the plans for the installation of traffic control signs, along with providing a table for the size of the signage.

5. A note shall be added to the plan that the pedestrian path shall be properly maintained and kept clear of snow and ice during the winter months.

Sheet 1 of 13 – Site Plan:

1. As previously noted, the site plan shall show the location of all light poles and lighting. The "Landscape and Lighting Plan" shows additional light poles that are not shown on the site plan. Although the applicant's consultant notes that all lights are shown, the lights poles (L1A) are not shown on the plan in the area of the parking lot located behind the hotel.

Sheet 2 of 13 – Full Site Plan:

1. Additional lighting shall be provided along the pedestrian path to Beekman Street. ***The applicant's consultant notes that this is being reviewed and will be part of a future submission.***

Sheet 8 of 13 – Grading & Utility Plan:

1. Plan shows an underground stormwater management structure to be constructed in the parking lot located to the east of the hotel. Based upon the construction details provided on Sheet 9, it appears that the proposed system will be an infiltration system. Soil testing will need to be conducted as part of the design of this system and the testing shall require witnessing by the City Engineer's office. The applicant's consultant shall contact the City Engineer's office to schedule the soil testing to allow for the witnessing of the required soil testing. ***Applicant's engineer notes that the soil testing will be coordinated with the City Engineer's office, weather permitting.***

2. The plan shall be updated to show the two light poles to be located on either side of the parking lot to the rear of the hotel.

3. The accessible parking signs and "No Parking" sign shall be shown and called out on the plan. It should be noted that the "No Parking" sign should not impede access along the accessible ramp.

Sheet 11 of 13 – Site and E&SC Details:

1. As the circular drive that was to be constructed of concrete pavers has been removed, the "Concrete Paver Details" should be removed from this sheet, unless concrete pavers are proposed elsewhere on the site.

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

Very truly,

LANC & TULLY, P.C.

John Russo, P.E.

cc: John Clarke, Planner
Jennifer Gray, Esq.
David Buckley, Building Inspector

John Clarke Planning and Design jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: March 3, 2022
Re: **1113 Wolcott Avenue Street Site Plan and Special Permit**

I have reviewed the February 22, 2022 cover letter from Cuddy+Feder, February 22, 2022 response letters from Aryeh Siegel and Hudson Land Design, February 21, 2022 response letter and Traffic and Parking Management Plan from Colliers Engineering and Design, and a 13-sheet Site Plan set, all dated February 22, 2022.

Proposal
The applicant is proposing to construct a 2½-story, 30-room hotel as an expansion to the existing parsonage and renovate the historic church as a conference center/event space and rear café. The 2.28-acre site is in the R1-40 zoning district, in the Historic District and Landmark Overlay (HDLO) zone, and within the Local Waterfront Revitalization Program (LWRP) boundary.

Comments and Recommendations
1. The Building Inspector has determined in a March 1, 2022 letter that the required parking for the three primary uses adds up to a total of 136 spaces. The Zoning Board of Appeals has been asked to provide SEQRA comments on the proposed parking requirements at its March 15 meeting in anticipation of a likely variance request.

2. Adequate parking is a specific Special Permit condition under Sections 223-24.7D and 223-18B. Parking for the varied uses remain a serious concern, including:

    a. The 32 proposed parking spaces barely cover the hotel use. If the hotel is full, there will be little or no parking available for non-hotel café customers during the day or for event space participants during scheduled times. The Traffic and Parking Study cites the Tompkins and Municipal Building public lots to the north, but those lots are 700 feet and over 1,000 feet away by actual walking distance. There is also no guarantee that these lots will have the same capacities in five years with the planned expansion of the Firehouse and redevelopment options for various public lots being discussed.

    b. It is difficult to assume that patrons will walk up the steep hill through the cemetery from Beekman Street and the Metro-North lots. The Site Plan will need additional details for the path through the cemetery, including night lighting and the five potential stair sections.

    c. The Traffic and Parking Study suggested a reduced event parking calculation with a 10% deduction for transit use and walking. Section 223-26C(6) allows the Planning Board to consider shared parking adjustments, such as for the overlapping café and event use, but there is no provision in the Code, other than a variance, to allow additional reductions for transportation alternatives. The Study assumed 2.75 occupants per vehicle for its event traffic generation calculation and yet the minimum parking requirement is only 1 space for every 4 occupants, so it seems that the parking standard already factors in a reduction for transportation alternatives. The Study also suggests another 60-person parking deduction, assuming that every hotel guest at two per room may attend large events.

d. Since ADA access cannot be conveniently handled by remote parking, two on-site ADA spaces are not sufficient for an event capacity up to 350. The project architect also agreed to reconsider the ADA switch-back ramp to the hotel.

3. For the Sheet 1 Site Plan:

   a. The new proposal shows a two-way main entrance and a one-way exit north of the hotel to facilitate deliveries and drop-offs and to avoid a jammed dead-end parking lot during peak demand. This would be managed as a one-way loop for large events. The Board should consider making this a permanent one-way system to avoid two vehicles exiting at the same time from close-by driveways and to reduce the size of the driveway in front of the historic church. A one-way entrance at the northern driveway would also allow safer drop-offs on the church side of the exit drive.

   b. The corners for the two driveways appear overly wide, considering that Wolcott Avenue has a center two-way turn lane with room to maneuver without encroaching on opposing traffic. The truck turning diagrams do not justify such large and angular aprons. Standard DOT designs are not always appropriate for historic properties. The existing Wolcott Avenue crosswalk and lane striping should also be included on the plans.

4. For sheets 4-6:

   a. The Landscape Plan will be updated for the next meeting. At least two canopy trees should be provided in front of the hotel next to the sidewalk to act as street trees for Wolcott Avenue, continuing the pattern of street trees in front of River Ridge and West End Lofts. The Cuddy+Feder cover letter agreed to these landscaping improvements, along with bike racks on the south side of the church.

   b. The applicant and Board should also consider historically compatible designs for the proposed parking lot and front lawn lights, using as examples the existing street lights along the front sidewalk.

   c. The café deck seating should be shown on the plans.

5. All exterior construction must meet the standards in Chapter 134, Historic Preservation, and will require a Certificate of Appropriateness. The Architectural Review Subcommittee has met twice on this proposal and has referred the final design back to the full Board. A detail should be included for the deck railing.

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
Frank Filiciotto, P.E., City Traffic Consultant
John Russo, P.E., City Engineer
Aryeh Siegel, Project Architect
Michael Bodendorf, P.E., Project Engineer

March 7, 2022

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

RE: Site Plan, Traffic and Parking Study Review #4 for **Proposed 30-Room Hotel, Restaurant and Conference Center Redevelopment**, 1113 Wolcott Avenue, City of Beacon, Dutchess County, New York; CM Project No. 121-295

Dear Chairperson Gunn:

Creighton Manning Engineering, LLP (CM) is in receipt of the following documents:

- 2-22-22 1113 Wolcott – Supplemental PB Submission Cover Letter, prepared by Cuddy+Feder, dated February 22, 2022
- Ex. A – Response to Comments Memo, prepared by Aryeh J. Siegel, dated February 22, 2022
- Ex. B – Response to Comments Memorandum, prepared by Hudson Land Design, dated February 22, 2022
- Ex. C – Response to Comments Memo, prepared by Colliers Engineering & Design CT PC, dated February 21, 2022
- Ex. D – Traffic & Parking Management Plan (DRAFT), prepared by Colliers Engineering & Design CT PC, dated February 21, 2022
- Ex. E – Traffic and Parking Study, prepared by Colliers Engineering & Design CT PC, dated February 21, 2022
- Plans prepared by Aryeh Siegel, Architect, and Hudson Land Design Professional Engineering, PC last revised February 22, 2022

The subject site is comprised of one lot, which is presently developed and occupied by the Reformed Church of Beacon. The general footprint of the existing buildings will remain. Since the previous review letter – Review #3, dated February 7, 2022 – the proposed site layout has changed, such that the loop driveway has been reconfigured to utilize the existing driveway on the north edge of the site. The north driveway will be egress-only and allow for clock-wise circulation through the site. The proposed number of off-street parking spaces has been increased from 31 to 32 inclusive of two ADA-accessible spaces. There is also a proposed pedestrian path passing through the existing cemetery connecting the subject site with Beekman Street.

Please find our most recent comments in bold. Please note that previous comments that have been addressed have been removed. Furthermore, comments from Review #1, Review #2 and Colliers' responses pertaining to those comments have been removed for clarity.

<u>Site Plan</u>
Review #1 Comments

1. On-site vehicular circulation should be clarified. We have the following questions:
   - <u>CM Review #3 Follow-Up Comment:</u> CM notes that these signs ["Do Not Enter" (R5-1) & "Stop" (R1-1)] are absent from the plans in the Submittal Package.
   - *Colliers' 2/21/2022 Response: "One-Way" and "Do Not Enter" signs have been added to the plans for the newly proposed northern exit-only driveway. The previously proposed southern one-way loop driveway has been eliminated from the plan.*

- **<u>CM Review #4 Follow-Up Comment:</u> The proposed signs on the plan are appropriate for the north driveway's configuration. CM continues to recommend that "Stop" (R1-1) signs be located at both of the proposed driveways. The driveway design, configuration, signing, and striping are subject to review and approval by the NYSDOT.**

- <u>CM Review #3 Follow-Up Comment:</u> The previous comment regarding vehicle encroachment into the opposing travel lane has not been addressed. The NYSDOT allows minor commercial driveways to have a maximum width of 30-ft. CM recommends that a driveway configuration that considers a wider driveway and a NYSDOT Type 4 driveway entrance be investigated in order to mitigate vehicle encroachment into opposing travel lanes when entering and exiting the site. Please elaborate on the frequency of deliveries and the typical times these deliveries will occur. Has the applicant identified a vendor for food deliveries? If so, can that vendor elaborate on the vehicle types used for deliveries?
- *Colliers' 2/21/2022 Response: Both the main driveway and the proposed north one-way exit-only driveway configurations are now shown to be consistent with the NYSDOT Type 4 driveway configuration. This provides additional area for vehicle maneuvers entering and exiting the site at both locations. Based on the revised turning maneuvers shown on Site Plans, which have been analyzed for a refuse truck, shuttle bus and single unit 30-ft box truck, there is not expected to be any significant encroachment of larger vehicles into opposing traffic lanes when entering or exiting the site.*

  The Applicant has not yet identified a vendor for food deliveries for the Café. However, based on operations for similar sized facilities, it is anticipated that the Café will receive 1-2 deliveries per day with the deliveries typically occurring between the hours of 8 AM and 12 PM.
- **<u>CM Review #4 Follow-Up Comment:</u> Upon review of the plans, the driveway openings at the roadway edge appear overly large. CM recommends that the applicant seek a contextually appropriate driveway design and width to maximize pedestrian safety. The driveway should be appropriate for the design vehicle, but potentially not as large as other commercial driveways that experience heavy vehicle traffic. CM notes that the northerly egress-only driveway could be reduced in width since it does not need to accommodate right-turn ingress movements. Ultimately, the driveway design, configuration, signing, and striping are subject to review and approval by the NYSDOT.**

- <u>CM Review #3 Follow-Up Comment:</u> As noted in the previous comment, CM recommends that an alternate driveway configuration be investigated in order to mitigate vehicle encroachment into opposing lanes. The plans included in the Submittal package do not indicate any landscaping or hardscape features to impede vehicles from straddling the edge travel in order to park.
- *Colliers' 2/21/2022 Response: The southern loop driveway previously proposed for drop-off operations for events has been eliminated. Drop-off/pick-up is now proposed to occur along the main driveway with vehicles ultimately circulating through the parking area behind the hotel and exiting the site at the northern driveway location. The main driveway will be curbed, which will eliminate the possibility of parking along the edges of the driveway. The draft Traffic & Parking Management Plan discusses further strategies for control of drop-off/pick-up operations and on-site traffic flow during events.*
- **<u>CM Review #4 Follow-Up Comment:</u> Please refer to comments herein under <u>DRAFT Traffic & Parking Management Plan.</u>**

- <u>CM Review #3 Follow-Up Comment:</u> Colliers did not provide a response to this comment. As noted in the previous comment, CM recommends that an alternate driveway configuration be investigated in order to mitigate vehicle encroachment into opposing lanes. CM continues to recommend that the Applicant agree to schedule garbage pickup during off-peak hours only.

- *Colliers' 2/21/2022 Response: See above response. The Applicant will agree to limit garbage pick-up to off-peak hours.*
- **CM Review #4 Follow-Up Comment: CM has no further comments.**

2. Please provide intersection and stopping sight distances for the existing driveway.
   - CM Review #3 Follow-Up Comment: CM notes that the even though the intersection sight distance is short by 4-ft, the driveway is not critically limited as the available intersection sight distance exceeds the recommended stopping sight distance.
   - *Colliers' 2/21/2022 Response: The southern driveway location is no longer proposed to be utilized. See Section III.F.5 of the revised Traffic Impact Study for discussion of sight distance at the northern exit-only driveway location.*
   - **CM Review #4 Follow-Up Comment: CM reviewed the sight distance table provided in the Traffic Impact Study. The available intersection and stopping sight distances meet or exceed the recommended AASHTO sight distance for the proposed movements. CM has no further comments.**

Traffic Impact & Parking Study
Review #1 Comments

3. CM reviewed the trip generation methodology:
   - CM Review #3 Follow-Up Comment: CM generally agrees with the statements above. However, to provide clarity on the number of site-generated trips and vehicle occupancy rates being applied, it would be beneficial for the applicant to provide an approximate breakdown of the number of attendees, vendors, and staff.
   - *Colliers' 2/21/2022 Response: The Applicant does not currently have any estimate of the breakdown of vendors and staff for events. This will also fluctuate based on the type of event.*
   - **CM Review #4 Follow-Up Comment: CM understands that the applicant does not have a definitive operations plan at this time. In order to provide the City with an understanding of how the site could realistically operate, CM recommends that a sensitivity analysis be performed that considers a typical/reasonable number of vendors and staff for an event; trip generation can then be recalculated based on a vehicle occupancy of 1.0 for the assumed number of vendors and staff. The sensitivity analysis should be performed to assess both traffic and parking impacts. Furthermore, CM recommends that the sensitivity analysis also consider a scenario where only 50% of the hotel rooms are occupied by the event attendees.**

   - CM Review #3 Follow-Up Comment: CM agrees with the 10% credit being taken for non-vehicular traffic. The level of service reports provided by Colliers indicate that the reduction in credit being taken results in minor increases in delay.
   - *Colliers' 2/21/2022 Response: The traffic analysis associated with the 10% credit provided in our January 24, 2022 letter has now been incorporated into the revised Traffic & Parking Study dated February 21, 2022.*
   - **CM Review #4 Follow-Up Comment: CM has no further comments.**

5. CM Review #3 Follow-Up Comment: Based on CM's understanding of Colliers' calculations, the 52 parking spaces required off-site was determined by:
   i. Using the City of Beacon Zoning Code, the event space requires 88 spaces and the hotel requires 31 spaces for a total of 119 spaces.
   ii. Colliers assumes that the parking requirements for the hotel can be omitted as 100% of the hotel will be occupied by event occupants. Thus, the required parking would be 89 spaces (88 for the 350 person event space and 1 for the hotel employee).

iii. Colliers then reduced the 89 spaces by the spaces provided on-site to arrive at the number of spaces required off-site, 58.
iv. Colliers then reduced the spaces required off-site by 10% to take credit for event occupants not arriving by personal car. Thus, they state that 52 spaces are required off-site.

- CM disagrees with the how Colliers considers the internal capture for the hotel use. Colliers' method assumes that one hotel room would be used by four event occupants and those four occupants would be arriving in one vehicle. Rather, CM proposes that the development requires 72 spaces off-site. Below is a detailed explanation on how that number was arrived upon:
    i. 10% of event occupants will arrive via non-vehicular modes. Therefore: 350 - (350*0.10) = 315 event occupants will arrive via personal vehicles.
    ii. 100% of the hotel rooms will be occupied by event occupants. Assuming two (2) event occupants per room there will be 255 event occupants arriving via personal vehicles.
    iii. Utilizing the City of Beacon Zoning Code for a Conference Center (1 space for each 4 seats), remaining 255 event occupants will require 64 parking spaces. Because the internal capture for hotel occupants was accounted for in ii., the 30 spaces intended for the hotel cannot be credited to the 64 parking spaces. Therefore, 64 spaces will need to be identified off-site.
- *Colliers' 2/21/2022 Response: Colliers agrees with the above assessment of the parking numbers prepared by CM. The revised Traffic & Parking Study has been updated to reflect these same calculations.*
- **CM Review #4 Follow-Up Comment: CM notes that the site now proposed 32 off-street parking spaces. Is this to accommodate two hotel employees?**

6. CM Review #3 Follow-Up Comment: Based on the off-site parking requirements calculated by CM, 64, the Tompkins lot would be 98% utilized. When the lot capacity is reduced by the anticipated 14+ spaces, the lot will be over capacity. In this case, the municipal lot could provide the necessary supply to meet the demand.

   CM notes that the Café/Restaurant/Bar will require 17 parking spaces. In conjunction with the hotel use, the site will require 48 parking spaces in a typical non-event scenario. In this scenario, 17 spaces will be sourced off-site. If sourced from the Tompkins lot, they would require 25% of its capacity. Based on the future condition, where the lot's capacity is reduced by 14+, they would require 30% of the lot's capacity.
   - *Colliers' 2/21/2022 Response: Comment noted. There is sufficient off-site public parking available in the vicinity of the site to accommodate the additional parking needs associated with the café use under typical conditions.*
   - **CM Review #4 Follow-Up Comment: The applicant is proposing to utilize available public parking supplies to satisfy the majority of its parking requirement. While this is an acceptable practice, it underscores the question of how long the public parking supply will be available and what would happen in the event a reduction in supply or an increase in demand from another source transpires. In order to mitigate this potential issue, the applicant should consider formulating a contingency plan—for example, with a nearby private entity able to provide a supply of off-street parking—and sharing the same with the Planning Board.**

Review #4 Comments:
DRAFT Traffic & Parking Management Plan

1. **CM recommends that the entrance sign be changed to read "NO EVENT PARKING, DROP-OFF/PICK-UP ONLY."**
2. **CM recommends that a third traffic attendant be posted at roadside between the Main Driveway and north driveway intersections. This attendant could help screen cars prior to entering the site. This attendant could also help create gaps to allow vehicles to exit the site thus mitigating the potential for internal gridlock.**
3. **Cones should be place along the parallel parking spaces on the north side of the hotel building.**
4. **CM recommends that signing be implemented at off-site locations. These off-site signs such as directional signs to potential parking lots like the Tompkins Lot and Municipal Plaza Lot. Additionally, signs should be located at the entrances to the neighboring residential developments indicating "NO EVENT PARKING, RESIDENTS ONLY."**

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
Associate

Starke W. Hipp, PE
Project Engineer

N:\Projects\2021\121-295 Beacon - 2021 Traffic Reviews\Working\Correspondence\1113 Wolcott Avenue\1113 Wolcott Avenue_Rev 4.docx

DRAFT 1/21/22

City of Beacon
Planning Board Subcommittee on Architectural Review
Recommendation and Report

Description: Proposed 2½-story, 30-room hotel as an expansion to the existing parsonage and the renovation of a historic church into a conference/event space and rear café.

Project Name: _____

Project Address: 1113 Wolcott Avenue

Date of Meeting(s) of ARB Subcommittee: January 19, 2022

Attendees: Jill Reynolds, Kevin Byrne, Len Warner, Dave Buckley, John Clarke

Aryeh Siegel, Project Architect

On the above-referenced dates, the Architectural Review Subcommittee reviewed the above-referenced project at which meeting the applicant and its representatives were provided an opportunity to be heard. The sole focus of the Committee was to review the architecture of the proposed building(s). The Committee reviewed the following plans and materials:

Site Plan, color renderings, and floor plans, dated December 28, 2021

The architectural designs for both the Church and proposed hotel were reviewed. The hotel comments are documented first and the church recommendations are toward the end of the second page.

The Architectural Review Committee offers the following specific comments, as applicable as indicted:

Proposed Hotel:

1) Doors and windows: The front door of the parsonage is proposed to be enlarged from a small single door to a double door with side and transom lights. The original parsonage windows will be reproduced and matched in kind in the rear addition. The window pattern in the addition was acceptable, although Kevin suggested some variation in the dormers to separate the original parsonage from the contemporary addition.

2) Roof: The roof angle of the addition is different than the parsonage roof, but not enough to cause a conflict. Roof materials were not discussed. The architect should list proposed materials on future elevations.

3) Projections, such as rooftop elevators, stairwells, balconies, beams, etc.: _____

4) North elevation: Not discussed, but proposed to have similar design as south side. Larger additions should incorporate significant breaks façade, generally at intervals no more than 35 feet, according to the Section 134-7 design standards.

5) South elevation: The stairway projection is an opportunity to provide and architecturally interesting accent, but it looks unfinished with a minimal window pattern and no roof covering at the doorway.

6) West elevation: No door shown to rear parking lot, although indicated on floor plan. Need to resolve how the substantial grade difference between front of building and rear will be handled with internal floor levels.

7) East elevation: It was noted that the existing building has a double window on the upper floor to the right, but the east elevation shows a triple window. The porch supports have also been changed from modern metal to traditional posts. The current siding should be partially removed to determine what the original siding looks like.

8) ~~XXXX~~: ADA access: The Architect should look at options to avoid a ramp to the front porch and eliminate the switchback ramp near the front of the building.

9) Color and material type: Subcommittee leans toward siding, rather than brick on the rear addition to eliminate an awkward transition between the two sections. The brick foundation level from the front building could be extended around the addition. The Architect should show proposed materials and color samples for future submissions.

In addition to the above specific comments, the Architectural Review Subcommittee offers the following general comments/recommendations:

Church Renovation:

The historic church will be restored, the brick repointed where required, and the roof repaired. New area lighting is not intended to be attached to the church. ADA access is provided at the front doors and will be included at the new café entrance and rear deck. The café entrance towards the rear of the church and parking lot will replace two existing windows with a new entrance door and frame matching the front doors. A wider sidewalk area here would be helpful.

The only other exterior change is the rear dining deck. The Subcommittee preferred one central new door from the café to the deck, rather than the two unbalanced doors shown on the elevations. A simplified glass door with an angled top was proposed, but the top should be more consistent with the pointed arch shapes on the church. A stone sound barrier wall over 22 feet tall was proposed for the south end of the deck. Kevin suggested consultation with a sound specialist. The subcommittee was not satisfied with using such a large stone element on a brick church. Other materials and shapes like a buttress should be considered. A wood balustrade was proposed for the deck. It was suggested that metal railings were more consistent with historic churches. The deck and any sound wall should also be shown on the side elevations.

This Report was reviewed and adopted by the Architectural Review Subcommittee by vote of _____ to _____ at its meeting on The Subcommittee will meet again for this application on February 11, 2022 at 10 am.

****NOTE: Adoption of this Report does not constitute architectural review approval for the Project. Architectural review approval must be obtained from the Planning Board. It is recommended that any approval resolution by the Planning Board reference the final elevations and any other relevant plans relied upon in the architectural review of the Project.**

City of Beacon Planning Board Agenda
03/08/2022

Title:

Continue review of applications for Site Plan Approval (revised since 2019) and Subdivision Approval, "Two Cross Street", 4 Cross Street/172 Main Street, three-story mixed-use building, submitted by Hudson Todd, LLC

ATTACHMENTS

Two Cross Sheet 9.pdf

Two Cross Sheet 10.pdf

Two Cross Sheet 11.pdf

Two Cross Sheet 12.pdf

Two Cross Sheet Cover Letter.docx

Two Cross Sheet ESC.pdf

Two Cross Sheet FEAF Revised 2022.pdf

Two Cross 2-GU.pdf

Two Cross 3-ESC.pdf

Two Cross Sheet 1.pdf

Two Cross Sheet 2.pdf

Two Cross Sheet 3.pdf

Two Cross Sheet 4.pdf

Two Cross Sheet 5.pdf

Two Cross Sheet 6.pdf

Two Cross Sheet 7.pdf

Two Cross Sheet 8.pdf

Planner Review Letter.pdf

Engineer Review Letter.pdf



View Looking East



Main Street View



View Looking West



Cross Street View

February 22, 2022

Chairman John Gunn
and Members of the Planning Board
City of Beacon Planning Board
1 Municipal Place
Beacon, NY 12508

Re: Hudson Todd—Two Cross Street Project—submission for March 2022 meeting

Dear Chairman Gunn and Members of the Planning Board,

Since last review of the project by the Planning Board in 2019, the project has evolved in response to comments from the City as well as changes in market conditions. We submit this letter and attached documents to further the pending Application for Site Plan Approval.

The proposal is now for a three-story mixed use building and remains congruent with the goals expressed in the Comprehensive Plan. Retail use will fill the first floor and the two upper floors will have equal numbers of affordable senior and market rate apartments. 172 Main St is fully integrated into the new building. 4 Cross will be replaced with new construction. The result will be a three-story building filled with shops and residences.

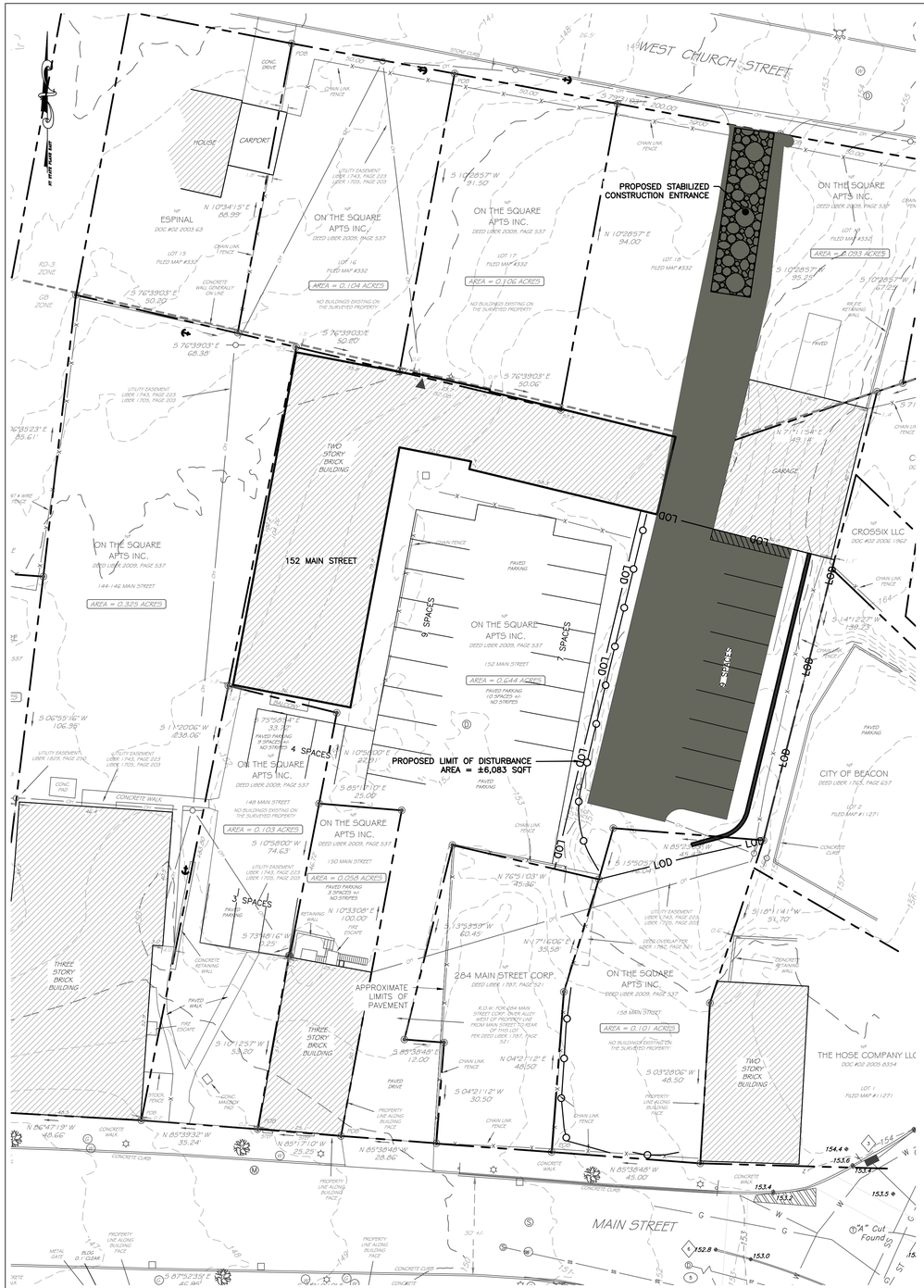
Updated plans for parking are shown on attached drawings. The project includes 19 parking spaces to reflect the anticipated parking demand associated with the mix of uses in the building, a partial reduction is proposed in the number of spaces to serve the affordable senior units and the ground floor retail. Detailed Off-Street Parking analysis is provided on Sheet A-3. Full landscape plans with lighting, plant selections and specifications will follow in subsequent submissions.

In addition, the GSF of this proposed 3-story building has been reduced substantially to 19,125 SF, well below the 25,000 SF threshold for a Type I SEQR classification.

We appreciate the Board's consideration of the submitted materials, and we look forward to discussion at the March meeting.

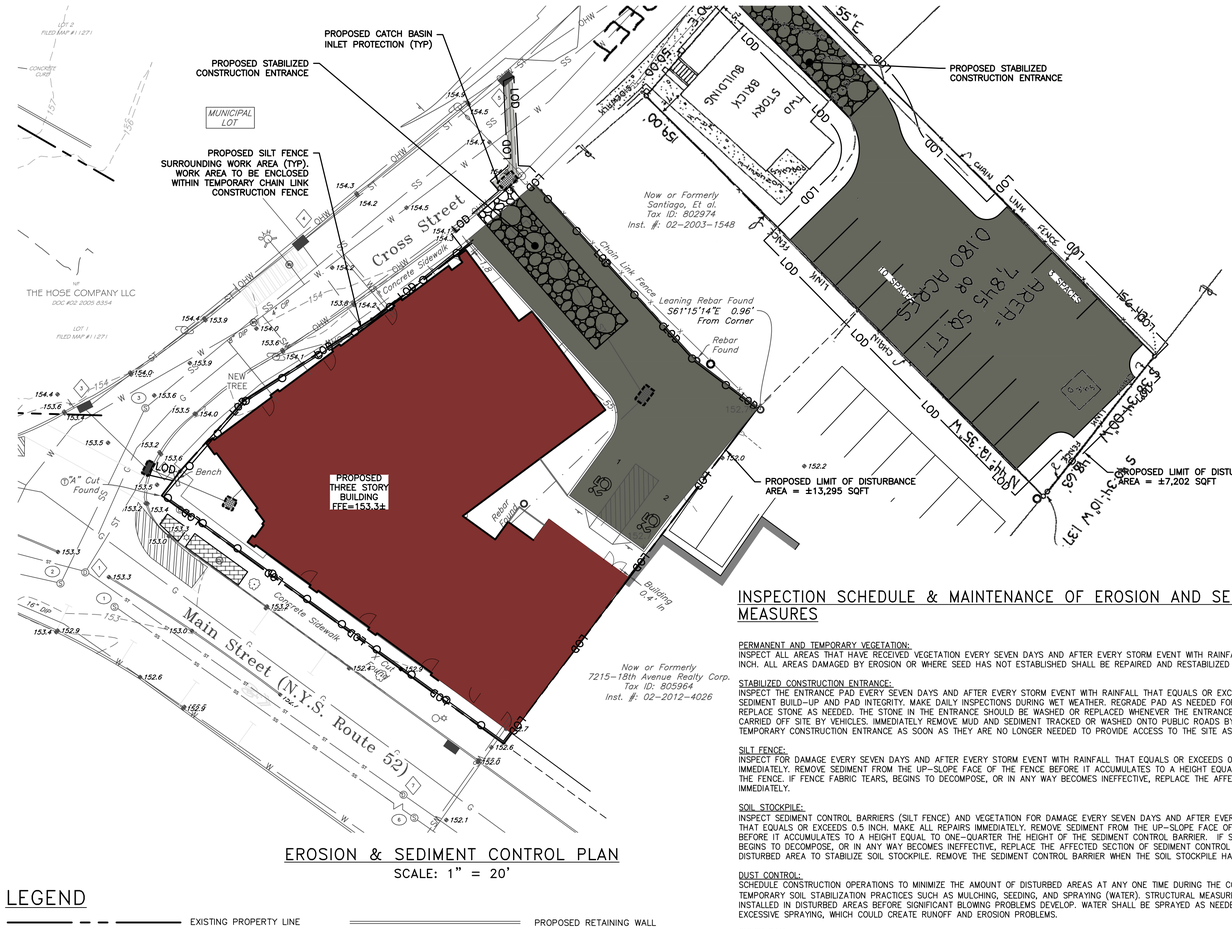
With thanks,

Joseph Donovan
Hudson Todd, LLC



OFFSITE PARKING EROSION & SEDIMENT CONTROL PLAN

SCALE: 1" = 20'



EROSION & SEDIMENT CONTROL PLAN

SCALE: 1" = 20'

LEGEND

- EXISTING PROPERTY LINE
- EXISTING ADJOINER LINE
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING SEWER MANHOLE
- EXISTING WATER VALVE
- EXISTING OVERHEAD WIRES
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- EXISTING FENCE
- PROPOSED CATCH BASIN WITH INLET PROTECTION
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SANITARY MANHOLE
- PROPOSED WATER SHUT-OFF VALVE
- PROPOSED CLEAN OUT
- PROPOSED SILT FENCE
- PROPOSED ROOF LEADER
- PROPOSED WET TAP
- PROPOSED RETAINING WALL
- PROPOSED CULVERT
- PROPOSED UNDERDRAIN
- PROPOSED ROOF LEADER PIPE
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED CLEANOUT
- PROPOSED SEWER SERVICE LINE
- PROPOSED WATER SUPPLY LINE
- RE-PAVED SURFACE
- PROPOSED NEW/RENOVATED BUILDING
- UTILITY CROSSING LOCATION
- PROPOSED ROOF LEADER LOCATION
- PROPOSED WATER SERVICE LINE
- PROPOSED WATER SHUT-OFF VALVE
- PROPOSED BUILDING ENTRANCE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

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

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

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

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

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

CHECK DAM:
INSPECT CHECK DAMS EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. IF SIGNIFICANT EROSION OCCURS BETWEEN STRUCTURES, A LINER OF STONE OR OTHER SUITABLE MATERIAL SHOULD BE INSTALLED IN THAT PORTION OF THE CHANNEL. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAM AS NEEDED TO ALLOW CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. REPLACE STONES AS NEEDED TO MAINTAIN THE DESIGN CROSS SECTION OF THE STRUCTURES. REMOVE CHECK DAMS AS PER APPROVAL OF THE PROJECT ENGINEER.

EROSION CONTROL BLANKET:
INSPECT THE BLANKET EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. REPLACE WIRE STAPLES AS REQUIRED. REPAIR AND RESEED WHERE CRACKS AND DAMAGED VEGETATION IS EVIDENT. WHEN DAMAGED BEYOND REPAIR OR NO LONGER FUNCTIONING, THE BLANKET SHALL BE REPLACED.

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.

SEDIMENT TRAP:
SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO THE ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF OF THE DESIGN DEPTH OF THE TRAP. SEDIMENT REMOVED FROM THE TRAP SHALL BE DEPOSITED IN A PROTECTED AREA IN SUCH A MANNER THAT IT WILL NOT ERODE.

CATCH BASINS:
ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. THE INLET PROTECTION SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.

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	2/21/22	REVISED BUILDING & LAYOUT	DGK				

Dig Safely. New York Call 811 before you dig
Dig Safely. New York 800-962-7962 www.digsafelynewyork.org
- Call Before You Dig
- Wait The Required Time
- Confirm Utility Response
- Respect the Marks
- Dig With Care

STATE OF NEW YORK DANIEL G. KOERNER 082718 LICENSED PROFESSIONAL ENGINEER

SEAL

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

EROSION & SEDIMENT CONTROL PLAN

TWO CROSS STREET

172 MAIN STREET; 2 & 4 CROSS STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-27-799966, 774986, 777974, 774997, 784996 & 808975

JOB #:	2019:036
DATE:	10/29/19
SCALE:	1"=20'
TITLE:	EC-1
SHEET:	3 OF 6

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

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Two Cross Street		
Project Location (describe, and attach a general location map): Intersection of Cross and Main Streets, Beacon, NY		
Brief Description of Proposed Action (include purpose or need): Two Cross Street combines 172 Main Street with new building construction sensitively designed on the currently vacant lot at the corner of Main and Cross Street to create a single mixed-use structure with retail uses on the first floor and residential uses on the second third floors (9 affordable senior, 9 market rate apartments). The project includes a landscaped area open to the public at the corner of Main and Cross Streets. parking to be provided on and off-site in locations shown on the plans.		
Name of Applicant/Sponsor: Hudson Todd, LLC	Telephone: 646-284-3118 E-Mail: jDonovan@HudsonTodd.com	
Address: 4 Cross Street		
City/PO: Beacon	State: NY	Zip Code: 12508
Project Contact (if not same as sponsor; give name and title/role): same	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor): same	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, or Village Board of Trustees ☑Yes ☑No		
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Site Plan Approval, ARB Certificate of Appropriateness	March 2022
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☐Yes ☑No		
e. County agencies ☑Yes ☐No	Dutchess County Department of Planning and Development	March 2022
f. Regional agencies ☐Yes ☑No		
g. State agencies ☐Yes ☑No		
h. Federal agencies ☐Yes ☑No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☑Yes ☐No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

Lower Main Street Historic District, Historic District and Landmark Overlay Zone.

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
CMS (Central Main Street), Lower Main Street Historic District; Historic District and Landmark Overlay Zone; Parking Overlay District (main parcels)
T (Transitional) (off-site parking at 10 Cross Street)

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Beacon School District

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

c. Which fire protection and emergency medical services serve the project site?
Beacon Fire Department and Beacon Volunteer Ambulance Corps

d. What parks serve the project site?
Waterfront Park, Memorial Park, South Ave. Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Mixed Use (1/3 Commercial, 2/3 Residential (50% frail elderly: NYState ESSHI, 50% market rate apts)

b. a. Total acreage of the site of the proposed action? 1.40 acres
b. Total acreage to be physically disturbed? 0.60 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 1.40 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: from 4 to 18 res'l 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: 18 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☑ Yes ☐ No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				18
At completion of all phases				18

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

If Yes,

i. Total number of structures 1

ii. Dimensions (in feet) of largest proposed structure: 38 height; 116 width; and 102 length

iii. Approximate extent of building space to be heated or cooled: 5,980 commercial 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? excavation for foundation and cellar

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): +/- 2000 CY
- Over what duration of time? 2 months

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

Seek nearby site that need fill for disposal

_____

i*v.* Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☑ No

If yes, describe. Not anticipated

_____

v. What is the total area to be dredged or excavated? 0.16 acres

vi. What is the maximum area to be worked at any one time? 0.40 acres

vii. What would be the maximum depth of excavation or dredging? 11 feet

viii. Will the excavation require blasting? ☐ Yes ☑ No

ix. Summarize site reclamation goals and plan: _____

resoration of site outside the building line for landscape planting, hardscape terraces and parking.

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☑ No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☑Yes ☐No

If Yes: (18 res units @ 110 gpd/br + 6,375 SF comm'l @ 0.1 gpd /sf plus 8 employees @ 15 gpd/employee)

i. Total anticipated water usage/demand per day: 2,738 gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☑Yes ☐No

If Yes:

- Name of district or service area: City of Beacon
- Does the existing public water supply have capacity to serve the proposal? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No
- Do existing lines serve the project site? ☑Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☑No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐Yes ☑No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑Yes ☐No

If Yes: (18 res units @ 110 gpd/br + 6,375 SF comm'l @ 0.1 gpd /sf plus 8 employees @ 15 gpd/employee)

i. Total anticipated liquid waste generation per day: 2,738 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

sanitary wastewater

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑Yes ☐No

If Yes:

- Name of wastewater treatment plant to be used: City of Beacon
- Name of district: City of Beacon
- Does the existing wastewater treatment plant have capacity to serve the project? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No

- Do existing sewer lines serve the project site? ☑ Yes ☐ No
- Will a line extension within an existing district be necessary to serve the project? ☐ Yes ☑ No

  If Yes:
  - Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐ Yes ☑ No

If Yes:
- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

_____

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

Water-saving fixtures, including high efficiency washing machines, shower heads, waterless urinals in public restrooms

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐ Yes ☑ No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

_____

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☐ Yes ☐ No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐ Yes ☐ No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐ Yes ☑ No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

_____

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

_____

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

_____

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐ Yes ☑ No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐ Yes ☐ No

ii. In addition to emissions as calculated in the application, the project will generate:
- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

_____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑Yes ☐No

If Yes:

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

very approximate 500,000 kwh

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

local utility

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☑No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7:00am - 5:00 pm
- Saturday: 7:00am - 4:00 pm
- Sunday: NA
- Holidays: NA

ii. During Operations:

- Monday - Friday: 7:00am - 11:00 pm (commercial)
- Saturday: +/-9:00am - 11:30 pm (comm'l)
- Sunday: TBD
- Holidays: TBD

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Construction related noises (running vehicles, excavation, backup signals, etc.) - same hours as noted in response to "l" above

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

Describe: Site is open

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Lighting at entrances, to be determined

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

Describe: Site is open

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities:

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☑ Yes ☐ No

If Yes:

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

- Construction: 9 tons per month (unit of time)
- Operation : 2 tons per month (unit of time)

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

- Construction: recycling, construction material purchase and use closely monitored to reduce unnecessary surplus
- Operation: recycling, composting

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

- Construction: on-site solid waste mangement , planned bulk material purchase to reduces solid waste and garbage
- Operation: solid waste management contract, local composting contract

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

_____

_____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

_____

_____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

_____

_____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

_____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

_____

_____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☑ Urban ☐ Industrial ☐ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)

☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

_____

_____

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.62	0.95	+0.33
• Forested	0	0	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0	0	0
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	0
• Wetlands (freshwater or tidal)	0	0	0
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: grassed areas _____	0.78	0.45	-0.33

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:

South Avenue Elementary School and Astor Head Start Center

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): 314069, B00130 as per DEC Mapper

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

314069 is No Further Action at this Time

B00130 is completed.

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? 12 feet

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

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

Ur Urban Land 77%	77 %
DxB Dutc.-Cardigan-Urban land	23 %
	%

d. What is the average depth to the water table on the project site? Average: >6.67 feet feet

e. Drainage status of project site soils:

☑	Well Drained:	100 % of site
☐	Moderately Well Drained:	% of site
☐	Poorly Drained	% of site

f. Approximate proportion of proposed action site with slopes:

☑	0-10%:	89 % of site
☑	10-15%:	4 % of site
☑	15% or greater:	7 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☐ Yes ☑ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☐ Yes ☑ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☐ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:

i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site:
typical northeast urban species

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation):
ii. Source(s) of description or evaluation:
iii. Extent of community/habitat:
- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐ No

If Yes:
i. Species and listing (endangered or threatened):
Atlantic Sturgeon, Shortnose Sturgeon, Indiana Bat

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:
i. Species and listing:

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No
If yes, give a brief description of how the proposed action may affect that use:

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No
If Yes, provide county plus district name/number:

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No
i. If Yes: acreage(s) on project site?
ii. Source(s) of soil rating(s):

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No
If Yes:
i. CEA name:
ii. Basis for designation:
iii. Designating agency and date:

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☑ Historic Building or District

ii. Name: Lower Main Street Historic District, Trinity Methodist Church

iii. Brief description of attributes on which listing is based:

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s):

ii. Basis for identification:

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: Hudson Highlands Scenic Area of State Significance

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Natural, Historical and Cultural Feature

iii. Distance between project and resource: 1 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation:

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Joseph H. Donovan for Hudson Todd, LLC Date 21 February 2022

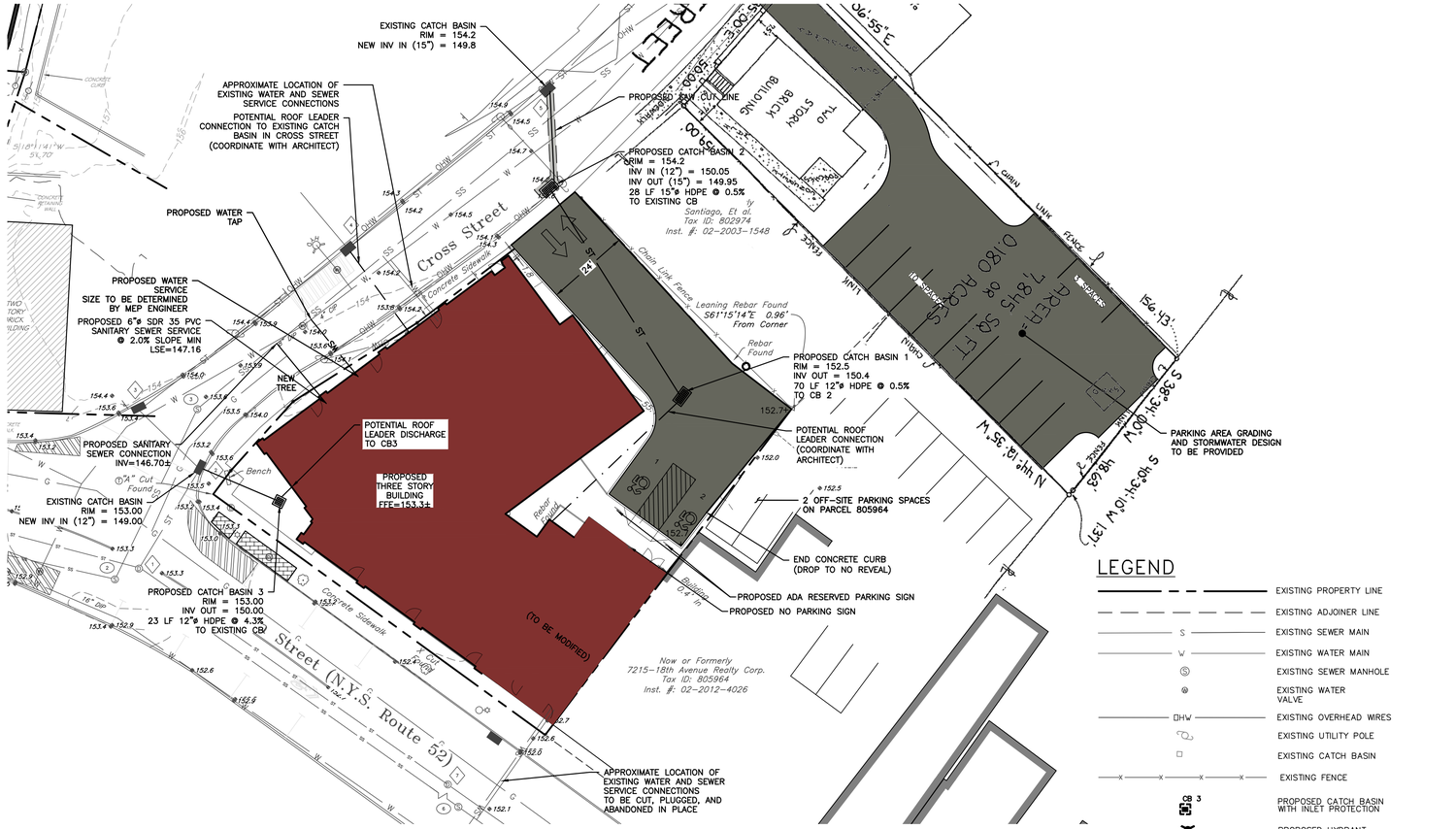
Signature Title

PRINT FORM



OFFSITE PARKING PLAN AT WEST CHURCH STREET

SCALE: 1" = 20'



GRADING AND UTILITY PLAN
W/ OFF-SITE PARKING AT 10 CROSS STREET

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Storm Sewer Information

	Top of Structure	Invert	Invert	Invert	Invert
0					
1	153.3'	144.6' 24" RCP	140.7' 36" RCP	140.5' 36" RCP	
2	153.0'	149.0' 15" RCP	148.9' 30" RCP		
3	153.4'	149.3' 15" RCP	149.3' 15" CPP		
4	154.2'	149.5' 15" CPP	149.5' 15" CPP		
5	154.3'	149.8' 15" CPP	149.7' 15" CPP		

Sanitary Sewer Information

	Top of Structure	Invert	Invert	Invert	Invert
0					
1	153.0'	144.1' 8" CIP			
2	153.1'	140.3' 12" ACP*	140.1' 12" ACP*		
3	153.6'	146.4' 12" ACP*	146.3' 12" VIP		
4	155.8'	148.7' 12" VIP	148.6' 12" VIP		
			*Pipe material from City of Beacon Sewer mapping.		

SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS, WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE AND DRAINAGE LINES.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL DRAINAGE, SANITARY SEWER, WATER AND GAS LINES AND STRUCTURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT.
3. THE PROPOSED BUILDING AND ADDITION SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES. AS SUCH, THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
4. THE WATER SERVICE LINE AND METER FOR EACH UNIT SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
5. THE NEW WATER SERVICE LINE TO THE NEW BUILDING SHALL BE 4"ø DIP, SUBJECT TO THE MEP ENGINEER'S CALCULATIONS AND VERIFICATION.
6. THE SEWER SERVICE LINE SHALL BE 6"ø SDR-35 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN (MINIMUM OF ¼" PER FOOT SHALL BE MAINTAINED).
7. STREET CLOSURE FOR WATER, SEWER AND GAS SERVICE CONNECTIONS AND DRIVEWAY CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS. A PLAN SHALL BE IN PLACE FOR MAINTENANCE AND PROTECTION OF TRAFFIC.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. MAIN STREET AND CROSS STREET SHALL BE KEPT CLEAN AND SWEPT DURING CONSTRUCTION.
9. SUMP PUMPS TO BE PROVIDED FOR FOOTING DRAINS, AS REQUIRED. THE TYPES OF PUMPS AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT. ALL SUMP PUMPS SHALL DISCHARGE TO DAYLIGHT, OR TO THE CITY OF BEACON DRAINAGE SYSTEM. SUMP PUMPS ARE NOT PERMITTED TO DISCHARGE TO THE CITY OF BEACON SANITARY SEWER SYSTEM.
10. THE BUILDING DEPARTMENT SHALL HAVE THE RIGHT TO INSPECT THE EXISTING BUILDING TO CONFIRM THAT THERE ARE NOT EXISTING STORMWATER CONNECTIONS TO THE CITY'S SANITARY SEWER SYSTEM PRIOR TO THE MAP BEING SIGNED. AN INFLOW & INFILTRATION (I&I) STUDY HAS BEEN CONDUCTED ON 172 MAIN STREET, AND 4 CROSS STREET. REFER TO I&I NOTES FOR MITIGATION PROCEDURES.

Dig Safely. New York
Call 811 before you dig
800-962-7962
www.digsafelynewyork.org
- Call Before You Dig
- Wait The Required Time
- Confirm Utility Response
- Respect the Marks
- Dig With Care

INFILTRATION AND INFLOW MITIGATION NOTES:

1. THE ROOF LEADERS WITHIN 172 MAIN STREET ARE TIED INTO BUILDING SEWER. IN ADDITION, THERE IS A SUMP PUMP WITHIN THE BASEMENT OF THE BUILDING WHICH IS ALSO TIED INTO THE SEWER SERVICE PIPE. NO ILLICIT CONNECTIONS WERE FOUND AT 4 CROSS STREET.
2. THE ROOF LEADER AND SUMP PUMP WITHIN 172 MAIN ST. SHALL BE DISCONNECTED FROM THE SANITARY SEWER LINE. NEW ROOFTOP DRAINAGE SHALL BE PER THIS PLAN. ANY NEW SUMP PUMP SHALL BE IN ACCORDANCE WITH SITE SPECIFIC NOTE 9 ON THIS PLAN.

INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES

CATCH BASINS AND PIPING:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED.

LEGEND

- EXISTING PROPERTY LINE
- EXISTING ADJOINER LINE
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING SEWER MANHOLE
- EXISTING WATER VALVE
- EXISTING OVERHEAD WIRES
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- EXISTING FENCE
- PROPOSED CATCH BASIN WITH INLET PROTECTION
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SANITARY MANHOLE
- PROPOSED WATER SHUT-OFF VALVE
- PROPOSED CLEAN OUT
- PROPOSED SILT FENCE
- PROPOSED ROOF LEADER
- PROPOSED WET TAP
- PROPOSED RETAINING WALL
- PROPOSED CULVERT
- PROPOSED UNDERDRAIN
- PROPOSED ROOF LEADER PIPE
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED CLEANOUT
- PROPOSED SEWER SERVICE LINE
- PROPOSED WATER SUPPLY LINE
- RE-PAVED SURFACE
- PROPOSED NEW/RENOVATED BUILDING
- UTILITY CROSSING LOCATION
- PROPOSED ROOF LEADER LOCATION
- PROPOSED WATER SERVICE LINE
- PROPOSED WATER SHUT-OFF VALVE
- PROPOSED BUILDING ENTRANCE

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	2/21/22	REVISED BUILDING & LAYOUT	DGK				

STATE OF NEW YORK — DANIEL G. ROGERS — 082716 — LICENSED PROFESSIONAL ENGINEER

SEAL

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

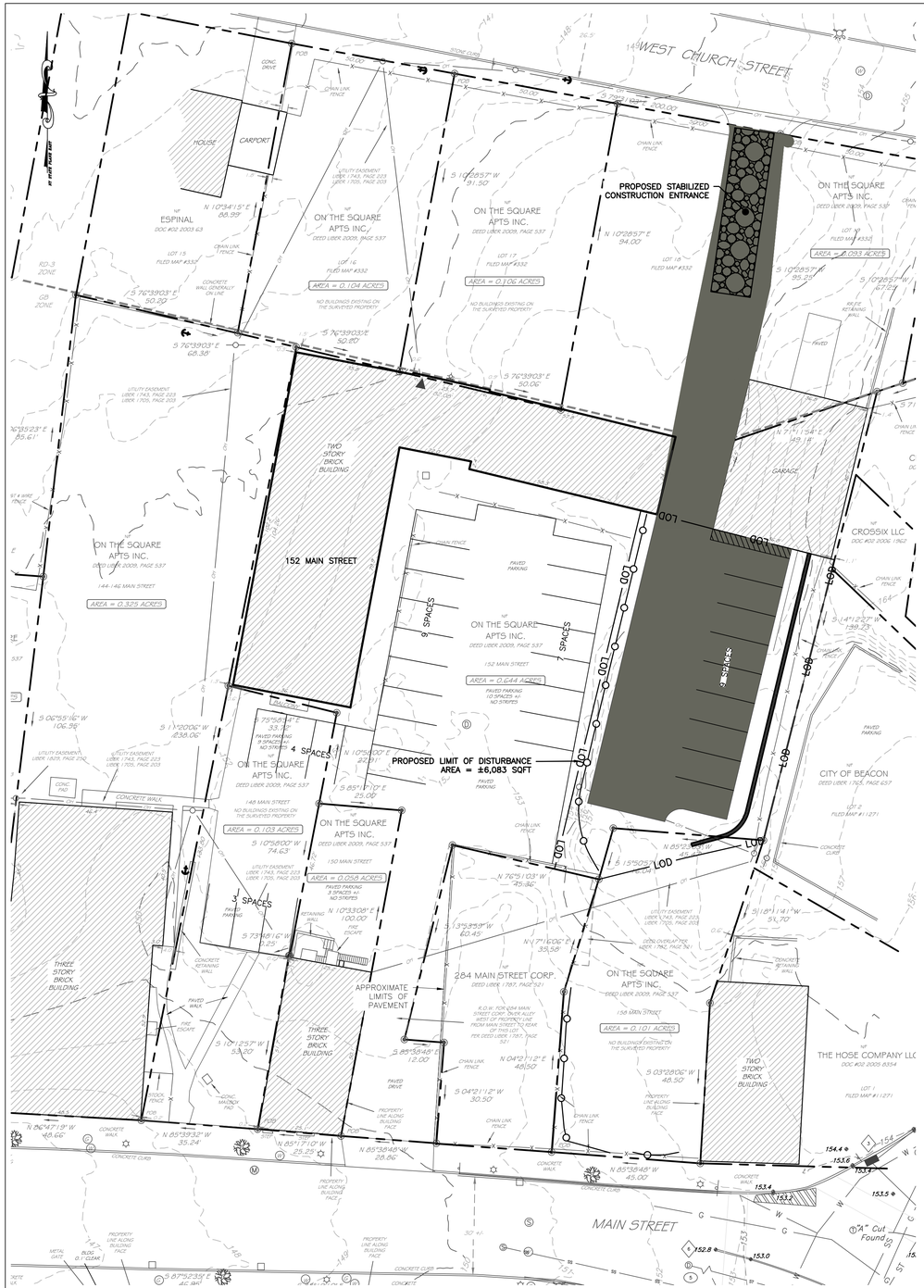
GRADING & UTILITY PLAN

TWO CROSS STREET

172 MAIN STREET; 2 & 4 CROSS STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-27-799966, 774986, 777974, 774997, 784996 & 808975

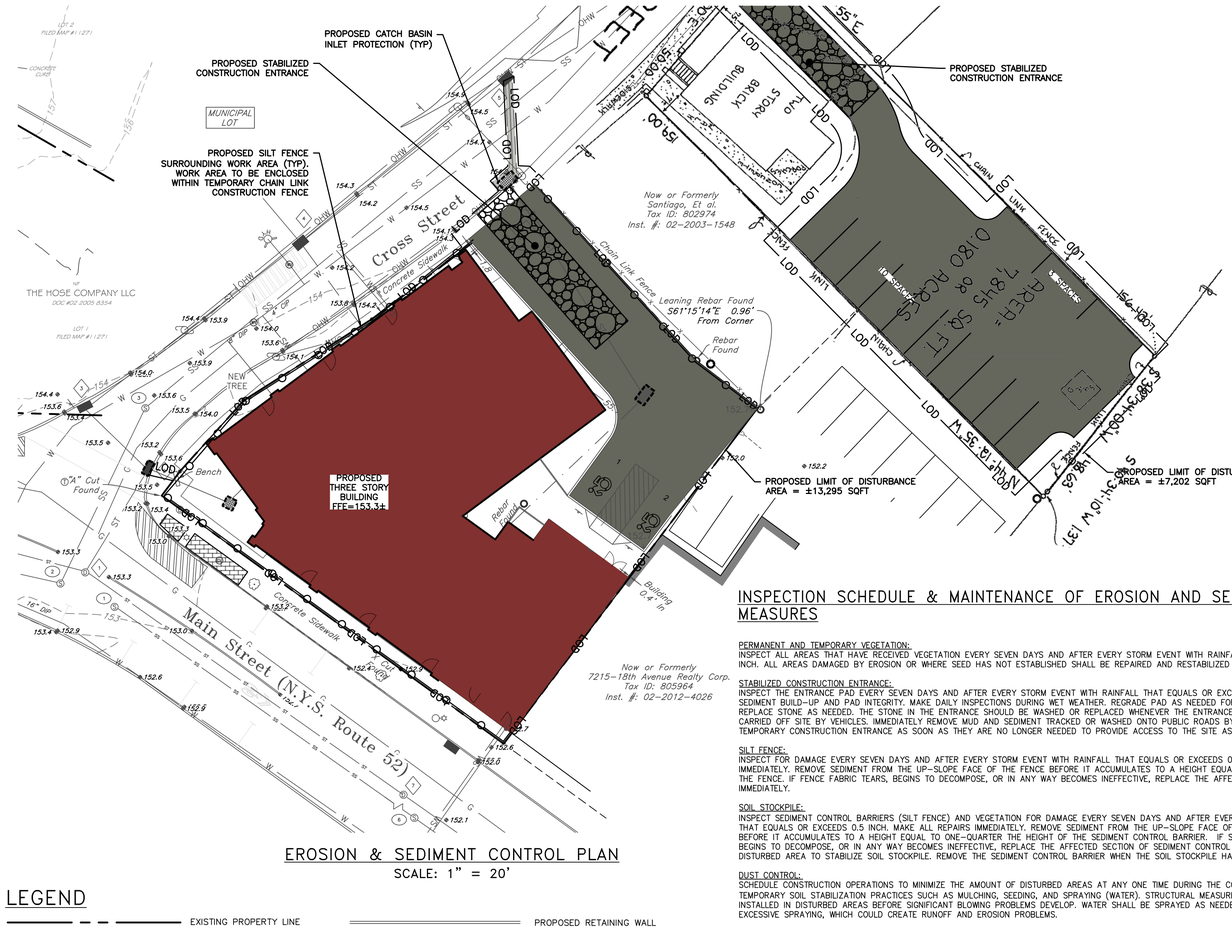
JOB #:	2019:036
DATE:	10/29/19
SCALE:	1"=20'
TITLE:	GU-1
SHEET:	2 OF 6

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



OFFSITE PARKING EROSION & SEDIMENT CONTROL PLAN

SCALE: 1" = 20'



EROSION & SEDIMENT CONTROL PLAN

SCALE: 1" = 20'

LEGEND

- EXISTING PROPERTY LINE
- EXISTING ADJOINER LINE
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING SEWER MANHOLE
- EXISTING WATER VALVE
- EXISTING OVERHEAD WIRES
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- EXISTING FENCE
- PROPOSED CATCH BASIN WITH INLET PROTECTION
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SANITARY MANHOLE
- PROPOSED WATER SHUT-OFF VALVE
- PROPOSED CLEAN OUT
- PROPOSED SILT FENCE
- PROPOSED ROOF LEADER
- PROPOSED WET TAP
- PROPOSED RETAINING WALL
- PROPOSED CULVERT
- PROPOSED UNDERDRAIN
- PROPOSED ROOF LEADER PIPE
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED CLEANOUT
- PROPOSED SEWER SERVICE LINE
- PROPOSED WATER SUPPLY LINE
- RE-PAVED SURFACE
- PROPOSED NEW/RENOVATED BUILDING
- UTILITY CROSSING LOCATION
- PROPOSED ROOF LEADER LOCATION
- PROPOSED WATER SERVICE LINE
- PROPOSED WATER SHUT-OFF VALVE
- PROPOSED BUILDING ENTRANCE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

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

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

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

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

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

CHECK DAM:
INSPECT CHECK DAMS EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. IF SIGNIFICANT EROSION OCCURS BETWEEN STRUCTURES, A LINER OF STONE OR OTHER SUITABLE MATERIAL SHOULD BE INSTALLED IN THAT PORTION OF THE CHANNEL. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAM AS NEEDED TO ALLOW CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. REPLACE STONES AS NEEDED TO MAINTAIN THE DESIGN CROSS SECTION OF THE STRUCTURES. REMOVE CHECK DAMS AS PER APPROVAL OF THE PROJECT ENGINEER.

EROSION CONTROL BLANKET:
INSPECT THE BLANKET EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. REPLACE WIRE STAPLES AS REQUIRED. REPAIR AND RESEED WHERE CRACKS AND DAMAGED VEGETATION IS EVIDENT. WHEN DAMAGED BEYOND REPAIR OR NO LONGER FUNCTIONING, THE BLANKET SHALL BE REPLACED.

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.

SEDIMENT TRAP:
SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO THE ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF OF THE DESIGN DEPTH OF THE TRAP. SEDIMENT REMOVED FROM THE TRAP SHALL BE DEPOSITED IN A PROTECTED AREA IN SUCH A MANNER THAT IT WILL NOT ERODE.

CATCH BASINS:
ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. THE INLET PROTECTION SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.

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	2/21/22	REVISED BUILDING & LAYOUT	DGK				

Dig Safely. New York Call 811 before you dig
Dig Safely. New York 800-962-7962 www.digsafelynewyork.org
☐ Call Before You Dig ☐ Wait The Required Time ☐ Confirm Utility Response ☐ Respect the Marks ☐ Dig With Care

STATE OF NEW YORK DANIEL G. KOERNER 082718 LICENSED PROFESSIONAL ENGINEER

SEAL

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

EROSION & SEDIMENT CONTROL PLAN

TWO CROSS STREET

172 MAIN STREET; 2 & 4 CROSS STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-27-799966, 774986, 777974, 774997, 784996 & 808975

JOB #:	2019:036
DATE:	10/29/19
SCALE:	1"=20'
TITLE:	EC-1
SHEET:	3 OF 6

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



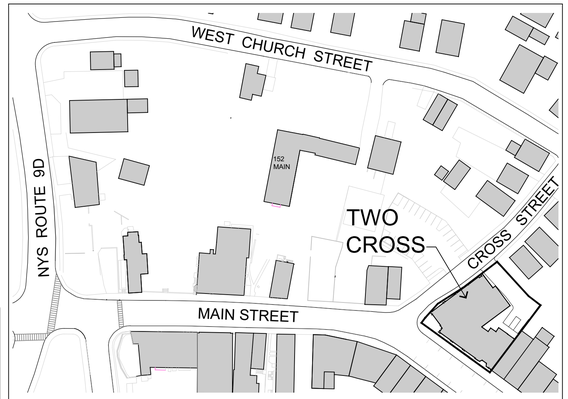
List of Exhibits

Architectural Drawings:

A1 Project Title Sheet
A2 Site Plans
A3 Zoning and Parking Summary
A4 Zoning: Area and Unit Counts
A5 Floor Plans: Ground Floor & Second Floor
A6 Floor Plans: Third Floor & Roof Plan
A7 Floor Plans: Cellar Floor Plan
A8 Elevations
A9 Rendering: Looking East
A10 Rendering: Main Street
A11 Rendering: Looking West
A12 Rendering: Cross Street

Civil Engineering Drawings:

XC-1 Existing Conditions and Removals Plan
GU-1 Grading & Utility Plan
EC-1 Erosion & Sediment Control Plan, ESC-1
CD-1 Construction Details 1
CD-2 Construction Details 2
CD-3 Construction Details 3



Location Map

Not to Scale

Owner

Hudson Todd, LLC
4 Cross Street
Beacon, NY 12508

Design Team

Architect of Record
Joseph E. Torhan Architect
19 Wildwood Drive
Poughkeepsie, NY 12603

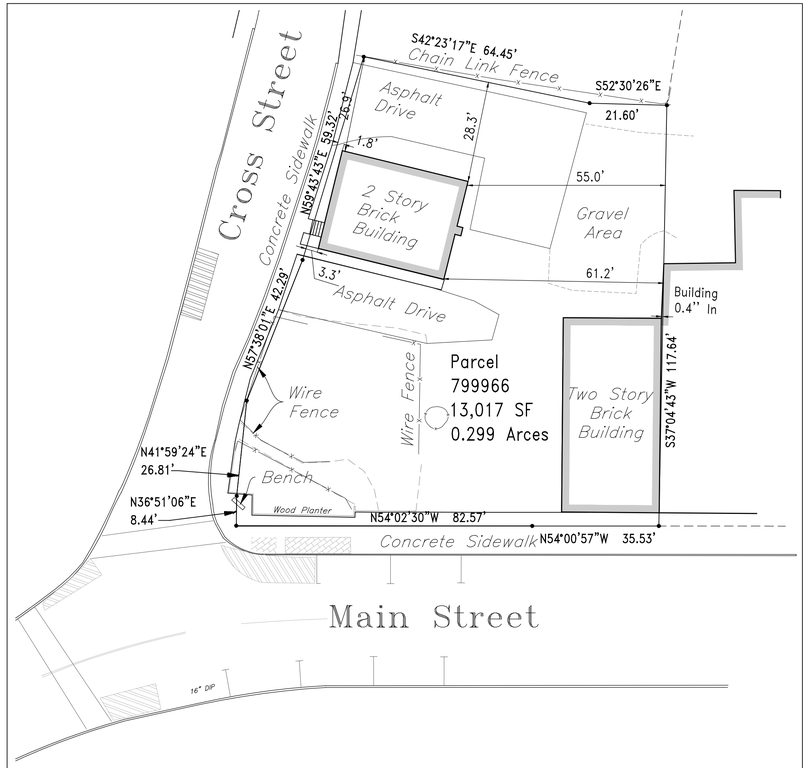
Design Consultant
Austin Harris Architect
27 Harvard Court
White Plains, NY 10605

Civil Engineer
Hudson Land Design
Professional Engineering, P.C.
174 Main Street
Beacon, NY 12503

Surveyor
TEC Land Surveying, P.C.
15C Tioronda Avenue
Beacon, NY 12503

Two Cross Street - Hudson Todd LLC

February 21, 2022 A1



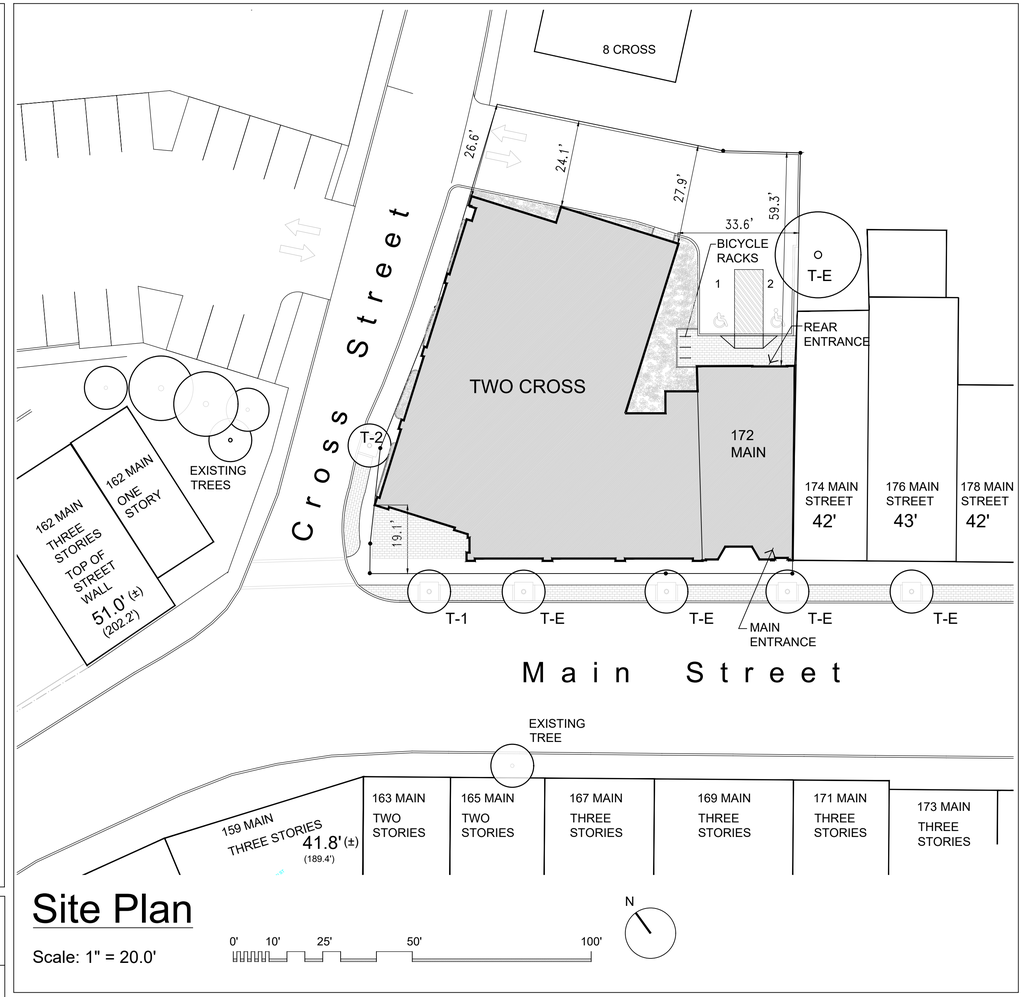
Existing Conditions Survey

Scale: 1" = 20.0'



Exterior Lighting Schedule

Exterior Lighting Program under development, additional information and details to be provided in next submission.



Site Plan

Scale: 1" = 20.0'

Plant Schedule

TE ..... Existing tree to remain.

T1 ..... New tree, Native species TBD

Plant Program under development, additional information and details to be provided in next submission.

Bulk Compliance Table

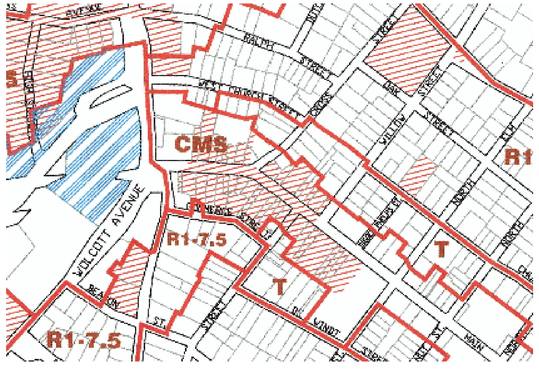
The site of the project is now a single parcel, resulting from the consolidation of the three lots previously known as 4 Cross Street, Main Street, and 172 Main Street. The Applicant has named the proposed project "Two Cross Street". The project is located in the CMS District. Some of the parking is located in the R1-5 District.

Zoning District	Minimum Lot Size, see footnote (1)								Minimum Yard								Minimum Frontage		Max. Building Height				Min. Landscape Area		Pedestrian Clearway	
	Area (sf)		Lot Area/ Dwelling Unit (sf)		Width (feet)		Depth (feet)		Front (feet)		Side (feet)		Total of 2 Sides (feet)		Rear (feet)				Feet above grade		Stories					
	Req'd.	Prop.	Req'd.	Prop.	Req'd.	Prop.	Req'd.	Prop.	Req'd.	Proposed	Req'd.	Prop.	Req'd.	Prop.	Req'd.	Prop.	Required	Proposed	Perm.	Prop.	Perm.	Prop.	Required	Proposed	Req'd.	Prop.
CMS - Central Main Street					None	NA	75	117.6	0' Min. 10' Max	.85' min.(at Cross St.) pre-existing 31' max.(at Main St.) See footnote (1)	0 Min.	0			20' Min.	55	100% (Main Street)	100% (Main Street)	38	38	3	3	5% (If landscaped area is accessible to public)	10.3%	8'	11.95' See footnote (8)

Abbreviations: (Perm.) Permitted (Prop.) Proposed (Req'd.) Required (exist.) Existing

Bulk Compliance Table Footnotes:

1. Plaza: This project provides a plaza at the central public corner, with seating and landscaping open to the public. As per § 223-41.18 E (1):
   Front setback: minimum zero, maximum 10 feet, except that the larger maximum may be allowed if the area in front of the building has no parking spaces and is landscaped and used in a manner that enhances street life by such a means as pocket parks or plazas, fountains, outdoor dining and public art.



Partial Zoning Map

N

Not to Scale

Zoning Summary

CMS

Historic District and Landmark Overlay

172 Main St. and Main St. corner.

Parking Overlay

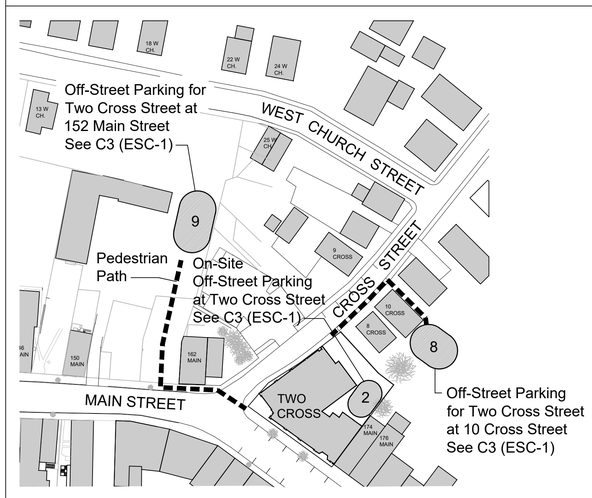
Entire lot.

Square Footage

Street Level	8,064 GSF
Second Floor	8,143 GSF
Third Floor	8,143 GSF
Total	24,350 GSF

Refer to Sheet A4 for area calculations by use.

Off-Street Parking



Parking Key Plan

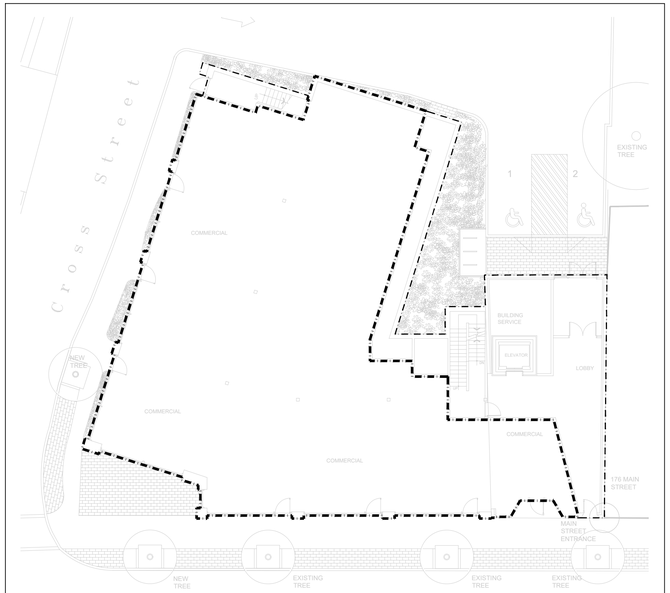
Not to Scale

Off-Street Parking Tabulation

Use	Code Reference	Size	Required Spaces	Proposed Spaces
Senior Citizen	2 spaces for each 3 dwelling units. Per Article III General Regulations § 223-26 F.	9 Dwelling Units	2 / 3 x 9 = 6	3*
Residetial	1 space per unit. Per Article IVD (CMS) § 223-41.18 G (2) (a).	9 Units	1 x 9 = 9	9
Retail	2 spaces per 1000 square feet of floor area. Per Article IVD (CMS) § 223-41.18 G (2) (c).	5,980 SF	2 x 6.14 = 12	7**
Total Off-Street Parking			13	19

* Per § 223-41.18 G (3) (a), the long term leasee, Hudson River Housing, has projected total operational parking needs of 2 spaces which will be more than met by the on-site parking.

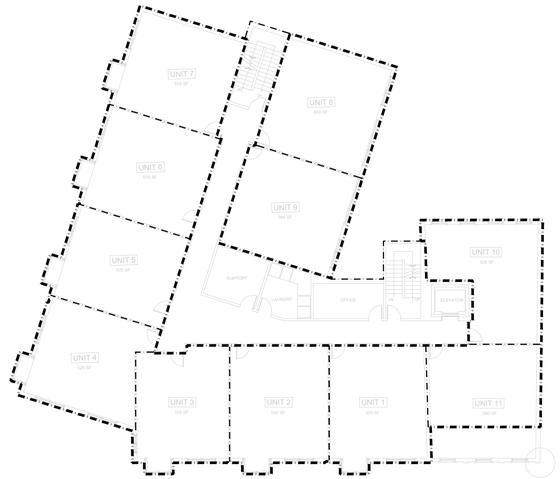
** Per § 223-41.18 G (3) (a), (b) & (c), the complementary schedule mix of uses within the building results in a naturally compatible shared parking. Hours of peak parking demand for retail (weekends), market-rate residence (overnight) and senior residence management (M-F mid-day) AND the location of project site at western edge of CMS (proximity to MNR) AND public parking nearby (18 spaces directly adjacent on Cross Street lot and 19 spaces at Main and Cliff lot) AND bicycle parking provided on-site to encourage a reduction of vehicle traffic demand.



Ground Level Plan

8,064 Gross Square Feet

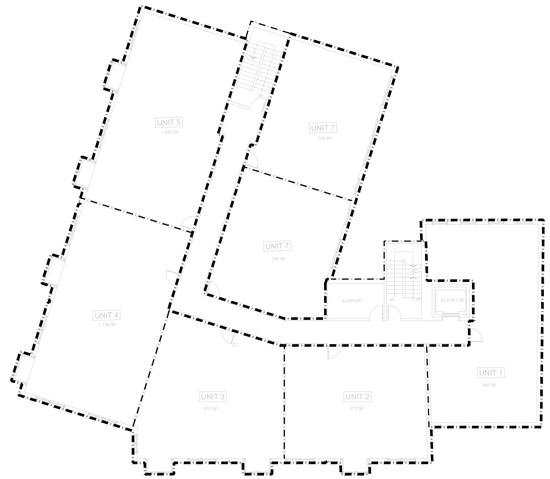
5,980 Square Feet of Floor Area



Second Floor Plan

8,143 Gross Square Feet

9 Senior Citizen Units



Third Floor Plan

8,143 Gross Square Feet

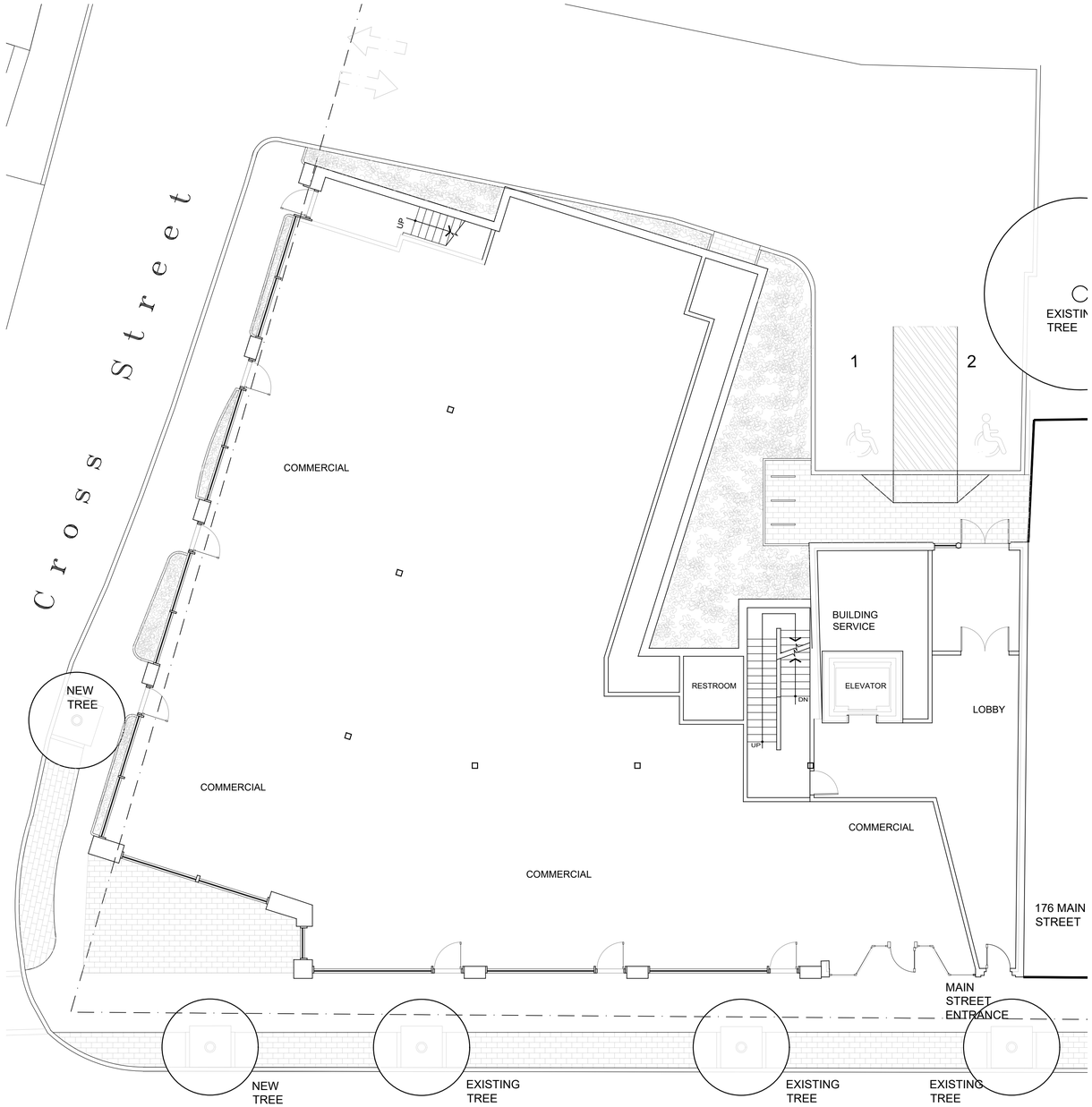
9 Residential Units

0' 10' 20' 30' 50' N

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

Two Cross Street - Hudson Todd LLC

February 21, 2022 A4



Ground Level Floor Plan

Flexible Commercial Space



Scale: 1/8" = 1'-0"

0' 10' 20' 25' 40'

N

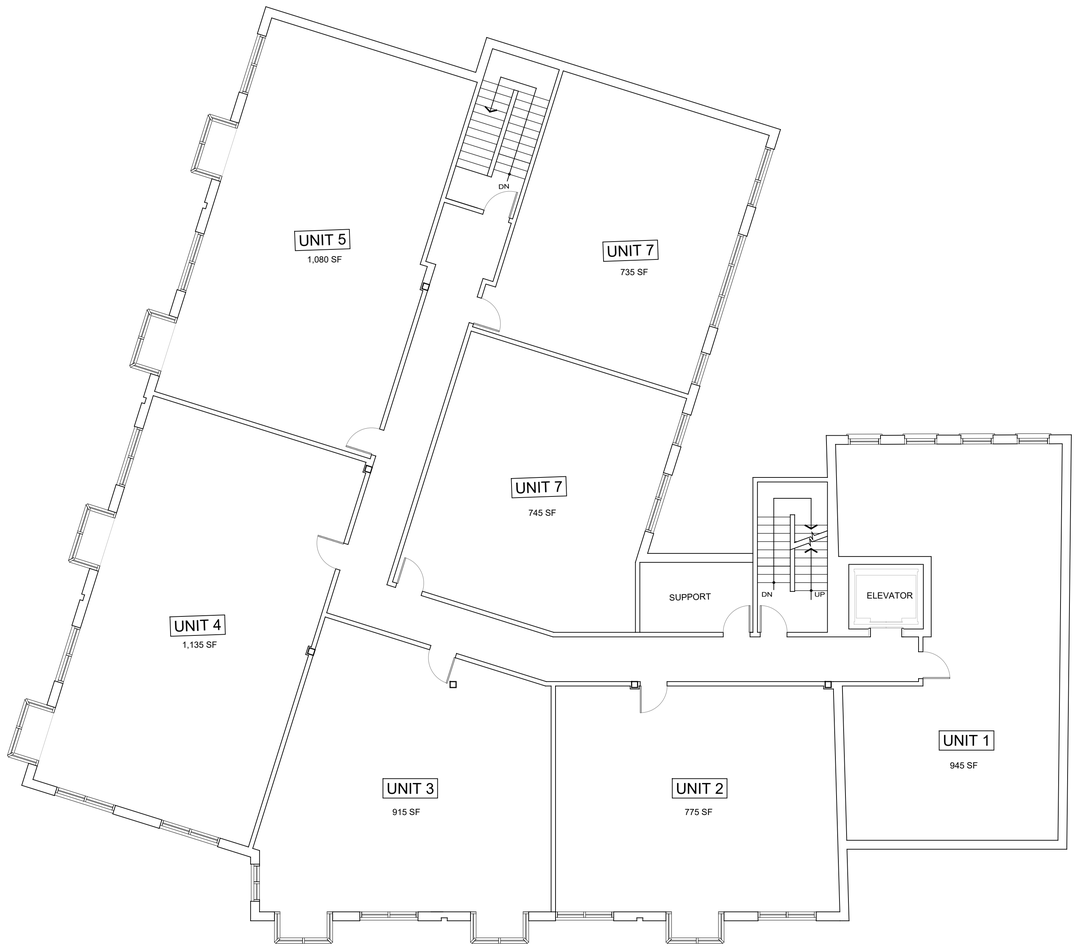
Second Floor Plan

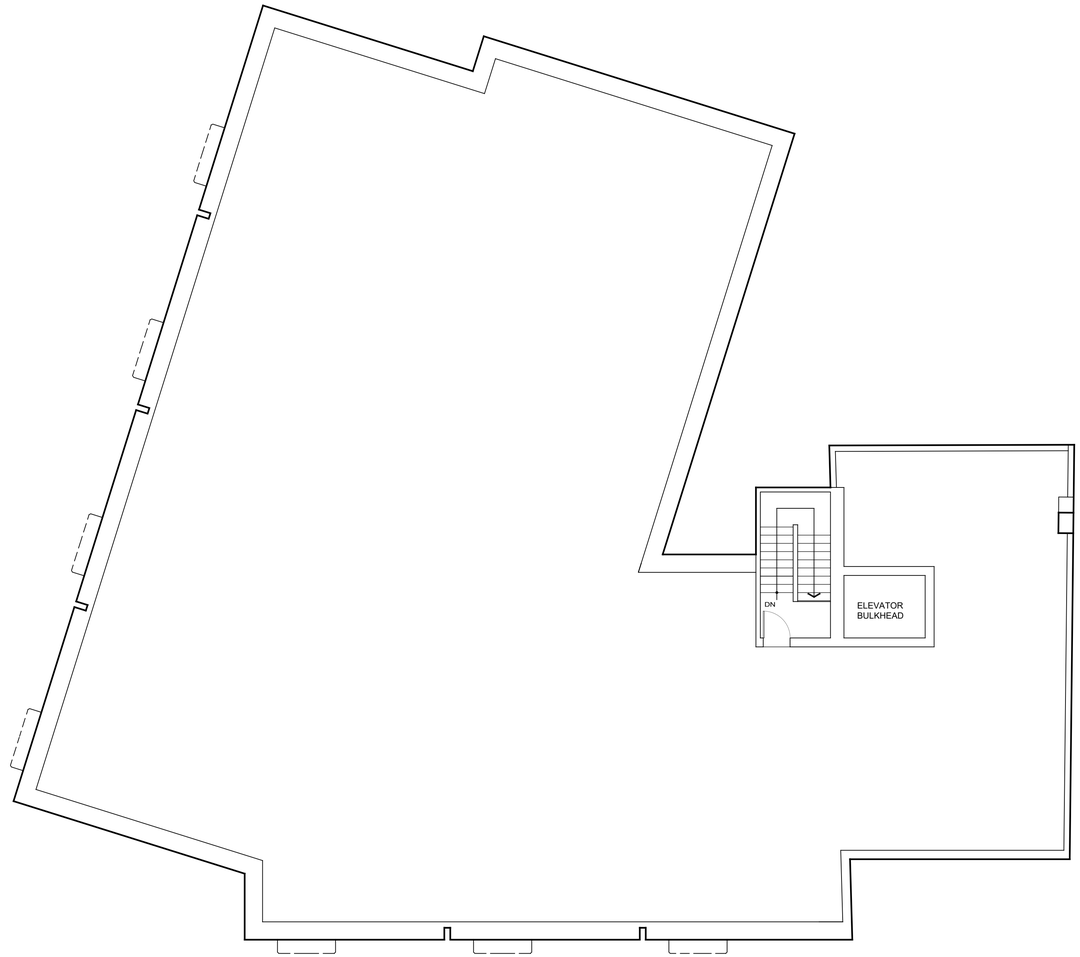
Affordable and Supportive Residences for Elderly

Two Cross Street - Hudson Todd LLC

February 21, 2022

A5





Third Floor Plan

Roof Plan

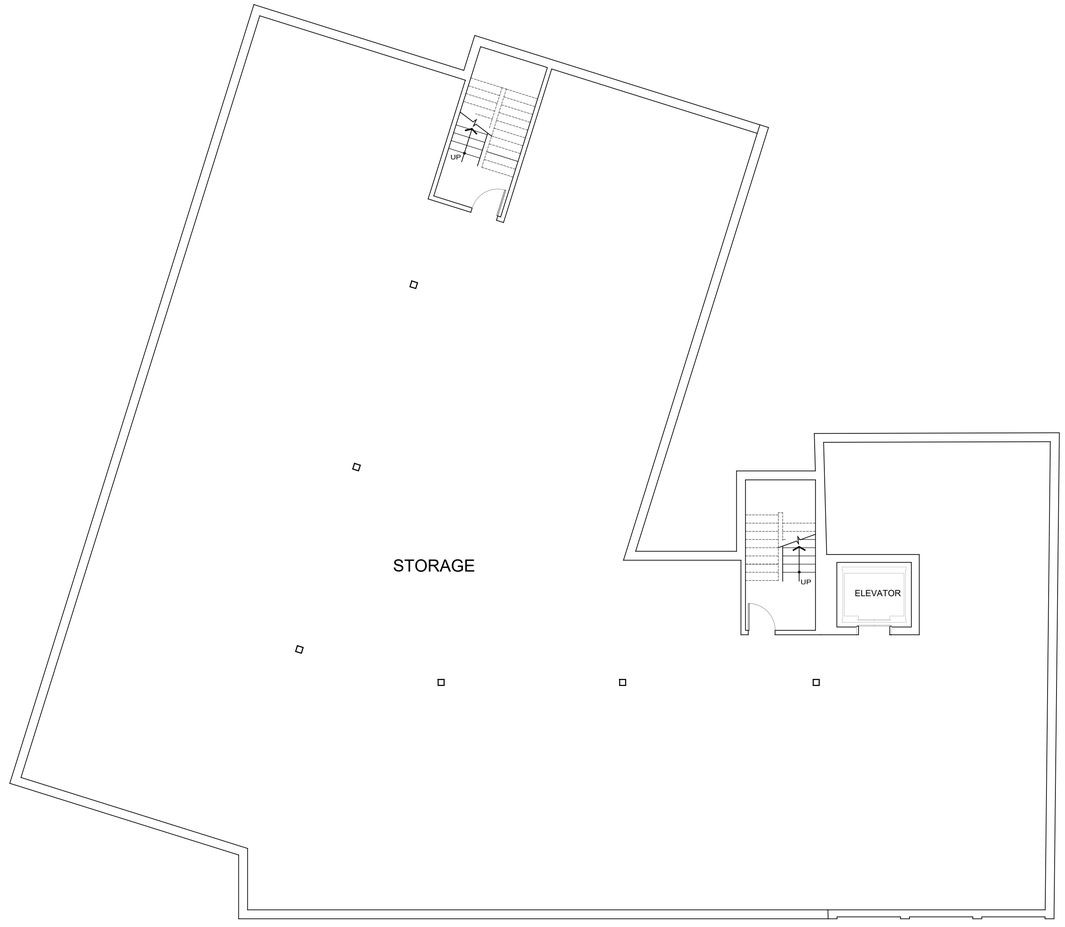
Scale: $\frac{1}{8}$" = 1'-0"

0' 10' 20' 25' 40'

N

Two Cross Street - Hudson Todd LLC

February 21, 2022 A6



Cellar Floor Plan

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

0' 10' 20' 25' 40'

N



Cross Street Elevation



Main Street Elevation

Cornice Lines and Facade No Taller Than Neighboring 19th C Buildings

Scale:1" = 10.0'

0' 10' 20' 25' 40'

Two Cross Street - Hudson Todd LLC

February 21, 2022 A8

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

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: March 3, 2022
Re: **2 Cross Street, Site Plan**

I have reviewed a February 22, 2022 cover letter from Hudson Todd LLC, February 21, 2022 Full EAF Part 1, 12-sheet set of Architectural Drawings and sheets 1-3 of a 6-sheet set of Civil Engineering Drawings, all dated February 21, 2022

Proposal

The applicant is proposing to construct a 3-story mixed-use building with 5,980 square feet of ground-floor commercial and 18 apartments, incorporating an existing historic building into the design. The parcel is in the Central Main Street (CMS) district. The Main Street frontage is also in the Historic District and Landmark Overlay (HDLO) zone, but not the brick building on Cross Street, which is proposed to be demolished.

Comments and Recommendations

1. Future submissions will need a full landscaping plan, lighting plan with fixture specifications consistent with Section 223-14B, trash disposal methods, and elevations with materials and colors noted. The plans should also be submitted at full size that can be measured with a scale.

2. For Sheet A3:

    a. In the Bulk Compliance Table, the top narrative should state that some of the parking is in the Transitional (T) district. The proposed rear setback should also be shown as 24.1 feet.

    b. The required parking total should be listed as 27 spaces. The Board will need to consider the requested parking modifications based on the conditions in 223-41.18G(3). The applicant should submit a more specific parking count justification for the nine senior affordable apartments.

3. For the Sheet A6 Roof Plan, the applicant should consider a green roof and/or solar panels.

4. Modifications for the historically significant 172 Main Street should be more explicit, including any changes to the façade, the dimension for the 3rd-floor stepback, and if the existing floor heights in 172 Main Street will match the new building. Any exterior alterations and additions need to be consistent with the design criteria in the Historic Preservation chapter, Section 134-7.

5. When appropriate, the Board should refer the building design to the Architectural Review Subcommittee. This HDLO property requires an additional certificate of appropriateness approval.

6. The Sheet XC-1 Location Map and Project Information table include parcels that do not appear to be part of the currently proposed project.

7. For Sheet GU-1:

    a. The rear driveway behind the proposed building could be reduced to at most 20 feet wide, so that a planting strip with trees and privacy fence could be included along the property line of the adjacent house.

    b. The main parking lot for 152 Main Street should remain connected to the rear West Church Street driveway, so that all the existing parking does not have to exit onto Main Street. The plans should show the size and species of any existing trees that are proposed to be removed.

    c. The 10 Cross Street building is listed in Parcel Access as apartments. Please include the number of existing units to be factored into the parking calculations and show the size and species of any existing trees that are proposed to be removed. The Board could also consider new fencing for this parcel.

8. The EAF should include the EAF Mapper Summary Report.

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

John Clarke, Beacon Planning Consultant

c: Dave Buckley, Building Inspector
Jennifer L. Gray, Esq., City Attorney
Arthur R. Tully, P.E., City Engineer
John Russo, P.E., City Engineer
Joseph Torhan, Project Architect
Joseph Donovan, Hudson Todd LLC

LANC & TULLY
ENGINEERING AND SURVEYING, P.C.

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

March 3, 2022

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

RE: Two Cross Street – Hudson Todd
City of Beacon
Special Use & Site Plan Application

Dear Mr. Gunn:

My office has received the following in regard to the Two Cross Street – Hudson Todd LLC project:

- Correspondence from Hudson Todd, LLC., dated February 22, 2022, describing proposed project.
- Full Environmental Assessment Form dated February 21, 2022.
- Architectural Drawings, Sheets A1 through A12, dated February 21, 2022, as prepared by Joseph Torhan, Architect.
- Plans titled "Two Cross Street – Hudson Todd LLC", with the latest revision date of February 21, 2022, and consisting of Sheets 1 through 3 of 6, as prepared by Hudson Land Design.

It should be noted that since this project is in conceptual form at present, are comments are general in nature. Based on our review of the above materials, we would like to offer the following comments:

General Comments:

1. The applicant's consultant has conducted an Inflow & Infiltration study of the existing site and buildings. Based upon the study it was found that the roof leader drains to the sanitary sewer along with a sump pump in the basement. Elimination of these interconnections will remove 2,076 gallons of stormwater from the sanitary system during a 1-year storm event, up to 6,963 gallons of stormwater during a 100-year storm event. We would recommend that these interconnections be removed sooner than later. ***Notes have been included on Sheet 2 of 6 of the engineering drawings as to how the previously discovered inflow and infiltration (I&I) will be remediated.***

2. As the off-site parking is proposed to occur on properties owned by others, it is recommended that documentation be provided to the Planning Board to show that you have the ability to construct these parking areas on the other parcels. As the off-site parking is proposed to occur on parcels owned by others, the Planning Board Attorney should weigh in as to whether the owners of these other parcels would also be included as applicants for the project.
3. The narrative provided in the "Brief Description" on Page 1 of the SEQRA document should be expanded upon to note the total number of bedrooms being proposed.
4. The response to question D.2.iii. of the SEQRA document notes that the applicant will seek out a nearby site that needs to fill material to allow for disposal of excavated material from the project site. The applicant should be aware that if excavated material from the site is to be used a fill material on a site in the city, a Filling and Grading permit may be required from the building department for the site where material is be dumped.
5. A breakdown for determination of the water usage listed in D.2.c.i. of the SEQRA document shall be provided.
6. The plan sheets should be number in sequential order such a 1 of X, with "X" representing the number of plans in the set, similar to what is shown on the Hudson Land Design plans found within the plan set.
7. The Location Map on Sheet A1 should also call out the off-site parking lot areas to be constructed as part of the project.
8. A formal site plan, at full sheet size, should be provided for the project site, along with each of the off-site parking locations.
9. Sheet A2 include a title for "Partial Zoning Map", but the mapping is not shown. The Sheet shall be updated to show this partial map, or the title removed from the sheet.
10. The Off-Street Parking Tabulation table shall be updated to reflect the total required spaces required as 27, not 13 as currently presented.
11. Per §223-41.18 G(3), information shall be submitted by the applicant to demonstrate the requested reduction in parking required. Although the parking table notes that there is available parking in the Cross Street parking lot, based upon a recent parking study conducted for the 1113 Wolcott Avenue project, parking at this location was shown not to be viable as the parking lot is always full. The Planning Board may wish to consider having the applicant prepare a parking study for the proposed project.
12. Although accessible parking is being provided at the rear of the proposed building, based upon Sheet A5, there does not appear to be a means of access from the accessible parking area to the commercial area. Consideration should be given as to how those parked in the accessible parking stalls would gain access to the commercial area.

13. The "Offsite Parking Plan" on Sheet 2 of 6 from Hudson Land Design should be revised to include the following:
    a. Sight distance for all entrances/exits from the proposed parking areas.
    b. How drainage will be handled at each of the three (3) parking locations.
    c. Any proposed grading to be conducted on the site and at each parking location.
    d. Any cross-easements that exist and/or are proposed.
14. With regards to the parking on the north-east side of Cross Street on the "On the Square Apts. Inc." parcel and on the 10 Cross Street parcel, what legal instruments will be used to ensure that these parcels cannot be sold in the future, thereby impacting the proposed parking for this site?
15. The previous plans showed that a walkway would be constructed from the proposed parking area to be located on the "On the Square Apts." parcel out to Main Street. The current plans do not show this walkway. How are those that park in this parking lot expected to walk to the project site? It is roughly 675± feet to walk from this parking area to the site if people must walk out the access drive to West Church, whereas it is only 175± feet if a walkway out to Main Street is constructed.
16. With regards to the "Grading and Utility" plan on Sheet 2 of 6 prepared by Hudson Land Design we offer the following:
    a. Are the existing utilities (water, sewer, etc.) that serve the existing buildings to remain or be removed?
    b. The roof leader drain line proposed to run across Cross Street from the west side of the building be re-directed to the basins on the same side of the street as the building.
    c. The plan notes that no curbing is to be provided at the end of the on-site parking lot to allow for access to 174-178 Main Street. The applicant should explain this further. Do easement(s) exist, or will they be created, to allow for vehicles to cross the project parcel to access the parking areas behind 174-178?
    d. The two parking spaces located on the neighboring parcel at the end of the parking lot should be clearly shown on the plan.
17. As previously noted, we would recommend that a pre and post drainage analysis be prepared for the project to show if more or less stormwater runoff is proposed to be generated by the proposed project, based upon various storm events. Given the amount of impervious area being created, the applicant should give consideration to handling some of the stormwater directly on each of the areas to be developed.
18. A site lighting plans shall be provided for the project. *The applicant notes that a lighting plan will be provided in a future submission.*

19. The plan shall show all proposed signage, include signage for the ADA parking. *The applicant notes that as the plans are advanced, additional signage information will be provided.*

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 Agenda
03/08/2022

Title:

Zoning Board of Appeals - March meeting

ATTACHMENTS

March Agenda.pdf

CITY OF BEACON
ONE MUNICIPAL PLAZA - SUITE 1
BEACON, NEW YORK 12508

Phone (845) 838-5002 Fax (845) 838-5026

The Zoning Board of Appeals will meet on **Tuesday, March 15, 2022** in the Municipal Center courtroom, located at One Municipal Plaza, Beacon, New York. A training work session will take place at 7:00 PM and the regular meeting and public hearings will begin immediately thereafter, but not later than 7:30 PM.

1. Continue review and hold public hearing on application submitted by Rajan Kumar, 1 Iris Circle, Tax Grid No. 30-5954-43-822637-00, R1-7.5 Zoning District, for relief from Section 223-17(D) to construct a two-story addition with an 8.6 ft. side yard setback *(20 ft. required)*

2. Review and hold public hearing on application submitted by Jonathan Miller, 64 Beacon Street, Tax Grid No. 30-5954-35-815855-00, R1-5 Zoning District, for relief from Section 223-10(B)(1) to extend a non-conforming use by creating a 552 sq. ft. home occupation/artist studio in an existing attached garage.

3. Application submitted by Michael Isabell, 866 Wolcott Avenue, Tax Grid No. 30-6054-45-071581-00, R1-10 Zoning District, to construct an accessory structure (2 car garage) which requires relief from the following:
    1) Section 223-17(E) for a 6.7 ft. rear yard setback *(15 ft. required)*
    2) Section 223-17(E) for a 968 sq. ft. accessory structure *(383 sq. ft. maximum permitted)*
    3) Section 223-17(E) to allow 1,017 sq. ft of cumulative lot coverage *(960 sq. ft. maximum cumulative lot coverage permitted)*

Miscellaneous Business

1. 1113 Wolcott Avenue – SEQRA review

City of Beacon Planning Board Agenda
03/08/2022

Title:

Consider request for one 90-day extension of Subdivision Approval, 32 North Street, submitted by MLM Property Management, LLC

ATTACHMENTS

32 North Cedar Street Request for Extension.pdf

HUDSON LAND DESIGN

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

February 22, 2022

Chairman John Gunn & Members of the City of Beacon Planning Board
1 Municipal Center
Beacon, NY 12508

Re: 32 North Cedar Street: Subdivision
Tax ID: 5954-28-978920 (±0.33 Acres)
City of Beacon, New York

Dear Chairman Gunn & Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) respectfully requests one 90-day extension of approval for the aforementioned project. Please recall that the Planning Board granted conditional preliminary and final subdivision approval on September 14, 2021. Per condition 8 of the resolution, conditional approval is valid for 180 days, or through March 13, 2022. The requested 90-day period would extend the conditional approval through June 11, 2022. Kindly place this item on the next planning board agenda for consideration of this request. The extension is requested as counsel for the applicant and the City are still working out the details of the drainage easement.

Should you have any questions or require additional information, please feel free to call my direct line at 845-765-8955.

Sincerely,

Daniel G. Koehler, P.E
Principal

cc: MLM Property Management, LLC (via email)
Brendan Johnson, L.S., Project Surveyor (via email)
Michael A. Bodendorf, P.E. (HLD File)

City of Beacon Planning Board Agenda
03/08/2022

Title:

Certificate of Appropriateness - 473 Main Street; signage

ATTACHMENTS

473 Main Street Application.pdf

473 Main Street Elevation.JPG

473 Main Street Sign.JPG

473 Main Street Sign 2.PDF

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: February 22, 2022

Project Address: 473 Main Street, Suite 4, Beacon, NY 12508

Project Architect/Engineer: Superior Signs, Hopewell Junction, NY
Chris Palazzo
845-227-5928

Owner/Builder: 473 Main Street Beacon LLC

Contact Phone No.: 845-831-1318

Approval Requested: ✓ Certificate of Appropriateness _____ New Single Family House

Color/Materials:

~~Siding~~ Sign: Internally illominated sign representing 3 businesses: Berg + Moss Architects Wanderlux Passion - The Adult Dance Studio

Roofing: _____

Windows: Color: _____

Trim: _____

Garage Door: _____

Stone/Brick: _____

Calli Rothberg
Signature of Owner
Passion - The Adult Dance Studio

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)

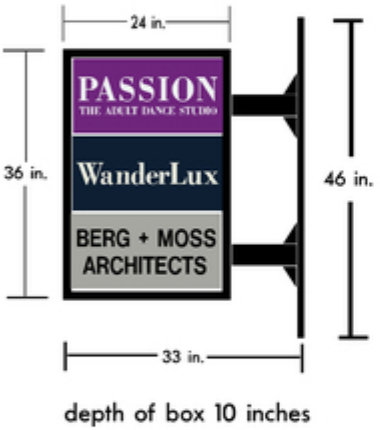
Plan Approved _____
(Date)

Subject to the following:

_____

_____

FEE: $100.00

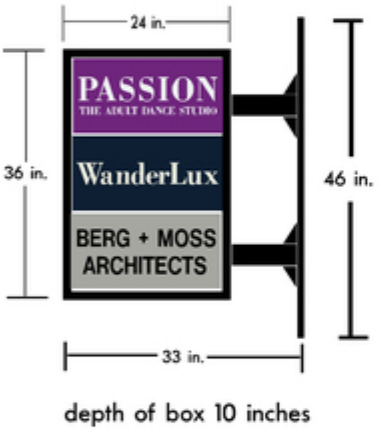


depth of box 10 inches



10.5 ft. to sign bottom

393

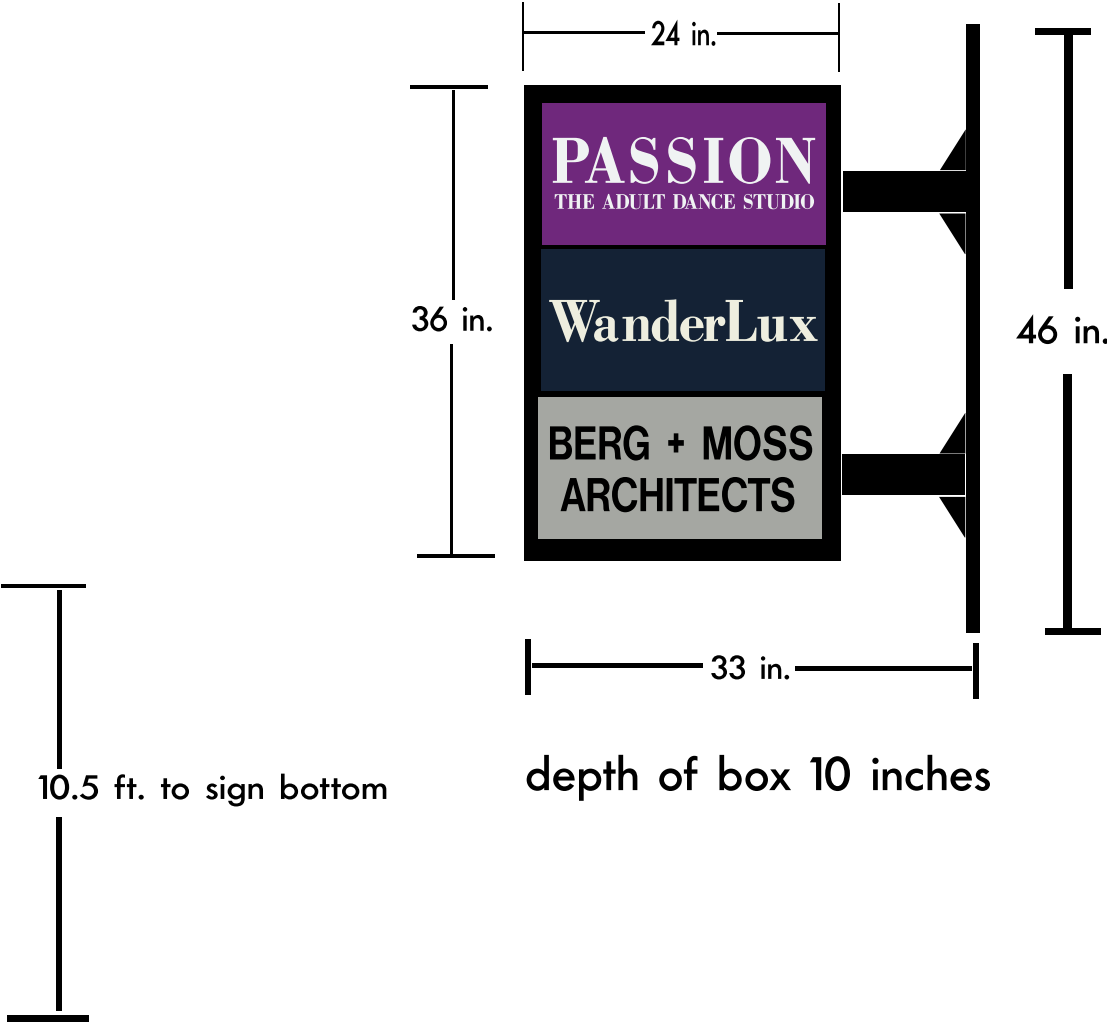


depth of box 10 inches



10.5 ft. to sign bottom

394


24 in.
36 in.
PASSION
THE ADULT DANCE STUDIO
WanderLux
BERG + MOSS
ARCHITECTS
46 in.
33 in.
10.5 ft. to sign bottom
depth of box 10 inches

City of Beacon Planning Board Agenda
03/08/2022

Title:

416-420 Main Street; Sign for Central Green Space

ATTACHMENTS

416-420 Main Street - Cover Letter.pdf

416-420 Main Street Exhibit A - Planning Board Approval Resolution.pdf

416-420 Main Street Sheet 3 Landscape and Lighting Plan.pdf

CUDDY +FEDER LLP

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

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

March 1, 2022

VIA E-MAIL
AND HAND DELIVERY
Hon. John Gunn
And Members of the Planning Board
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: Central Public Green Space Sign Discussion
Application for Special Use Permit, Subdivision (Lot Line Change) & Site Plan Approvals
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 are writing to request to appear at the Planning Board's March 8th meeting for the limited purpose of reviewing the Applicant's proposed "welcome" signage for the Central Public Green Space.

Since the Applicant last appeared before you in connection with the approvals for the Project, the Applicant has been working diligently to satisfy the conditions of the Planning Board's Preliminary & Final Subdivision Plat, Site Plan and Certificate of Appropriateness Approval Resolution (the "Approval Resolution") related to the Project.[1] Indeed, the Applicant's general contractor, Weber Projects, LLC, filed the Building Permit Application for the proposed mixed-use building on February 28, 2022, and the Applicant is eager to proceed to construction of the Project.[2]

However, as the Board is aware, Condition C.2 (page 6) of the Approval Resolution provides that prior to the issuance of a Building Permit, "[t]he Applicant shall return to the Planning Board for final approval of the signage for the Central Public Green Space." Accordingly, the Applicant's Architect, Aryeh Siegel, prepared the attached updated Site Plan, which was previously submitted to the Planning Board's Engineering and Planning consultants on January 10, 2022. As is more fully detailed on the enclosed site plan, the Applicant proposes to install two (2) entrance signs

[1] A copy of the Approval Resolution adopted May 11, 2021, and dated May 13, 2021 is attached to this letter as **Exhibit A**.
[2] A copy of the Building Permit Application and its enclosures is on file with the Building Department.

located at the north and south entrances to the Central Public Green Space, respectively. As is also noted on the updated Site Plan, the proposed custom corten steel welcome signs will include the following text: "WELCOME – open to the public dawn to dusk". *See* enclosed Site Plan sheet and signage details.

For the ease of the Board's review in connection with this request, we note that general condition D.7 of the Approval Resolution provides in relevant part that "... the sign shall say 'welcome', shall state that the park is open dawn till dusk and shall state that the park is open to the public." The Applicant respectfully submits that the proposed signage complies with the requirements in the Approval Resolution.[3]

In support of this request, please find enclosed five (5) copies of the Approval Resolution (**Exhibit A**), as well as five (5) copies of the updated Site Plan, Sheet 3 of 11, entitled "Landscaping & Lighting Plan", prepared by Aryeh Siegel, Architect, dated September 9, 2020, last revised January 10, 2022.[4]

We respectfully request that the Planning Board calendar this matter for the Planning Board's March 8th regular meeting Agenda in order to review the proposed "welcome" signage for the Central Public Green Space. In the meantime, should the Planning 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.
John Clarke Planning and Design
Lanc & Tully Engineering and Surveying, P.C.
Aryeh J. Seigel Architect

[3] Note: The Applicant will also request that the Board consider modifying Condition D.7 to allow the signage to be made of custom corten steel instead of wood signage, which the Applicant respectfully submits is an upgrade to the signage and is more consistent with the design aesthetic.

[4] Note: In connection with the check set plan review for the final site plans, the Applicant's Architect will be submitting a response to the Planning Board's February 2022 comment memoranda. These forthcoming updates do not impact or change the proposed signage as shown on the enclosed Site Plan.

RESOLUTION

PLANNING BOARD
BEACON, NEW YORK

PRELIMINARY & FINAL SUBDIVISION PLAT
SITE PLAN AND CERTIFICATE OF APPOPRIATENESS APPROVALS FOR
416-420 MAIN STREET

PARCEL ID NOS: 6054-29-056780 & 6054-29-056774

WHEREAS, the Beacon Planning Board received an application for approval of a Special Use Permit, Preliminary and Final Subdivision Plat, Site Plan and Certificate of Appropriateness from 416 Main Street Beacon, LLC & 420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC (the "Applicant") to construct an 11,715 square foot, four (4) story, mixed-use building fronting on Main Street, comprised of 4,295 square feet of ground-floor retail space, as well as 6,635 square feet of commercial office space on the second and third floors, containing one (1) apartment unit on the stepped back fourth floor and to construct a 1,017 square foot live/work building (the "Proposed Action") on property located at 416-420 Main Street in the Central Main Street (CMS) District, the Transition (T) District and the Historic District Landmark Overlay (HDLO) Zone, said premises being known and designated on the tax map of the City of Beacon as **6054-29-056780** and **6054-29-056774** (the "Property"); and

WHEREAS, the entire Property is located in the HDLO Zone, and the proposed 11,715 square foot mixed-use building is proposed for the area of the Property located in the Central Main Street (CMS) District and the proposed 1,017 square foot live/work building is proposed for the area of the Property located in the Transition (T) District; and

WHEREAS, the applicant seeks to consolidate the parcels to create one 0.245 parcel as shown on the Subdivision Plat referenced below; and

WHEREAS, the City Council is the approval authority for the Special Use Permit to allow a fourth story on a CMS parcel located in the HDLO Zone pursuant to City of Beacon Code § 223-41.18.E(7); 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 Proposed Action includes a request for a Certificate of Appropriateness from the Planning Board pursuant to the criteria set forth in § 134-7 of the City of Beacon Code; 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 - 416 Main Street," prepared Hudson Land Design Professional Engineering, P.C. and Tom Cerchiara, PLS, last revised March 30, 2021; and

WHEREAS, the Site Plan is shown the following drawings, generally entitled "Site Plan Application-416-420 Main Street," prepared by Aryeh Siegal Architect, Hudson Land Design Professional Engineering P.C. and Maser Engineering, last revised April 27, 2021:

Sheet	Title
1 of 11	*Site Plan*
2 of 11	*Existing Conditions & Demolition Plan*
3 of 11	*Landscape Plan & Planting Schedule*
4 of 11	*Building Plans*
5 of 11	*Building Elevations & Renderings*
6 of 11	*Grading & Utility Plan*
7 of 11	*Erosion and Sediment Control Plan*
8 of 11	*Utility Profiles*
9 of 11	*Construction Details*
10 of 11	*Construction Details*
11 of 11	*Signing & Striping Plan*; and

WHEREAS, the Proposed Action is an Unlisted Action, pursuant to the New York State Environmental Quality Review Act; and

WHEREAS, on August 11, 2020, the Planning Board, as Lead Agency, opened a public hearing to consider comments regarding any environmental impacts associated with the Proposed Action and continued the hearing to September 9, 2020, and October 14, 2020, at which time the (SEQRA) public hearing was closed; and

WHEREAS, after taking a "hard look" at each of the relevant areas of environmental concern through review of the Environmental Assessment Form and all associated materials prepared in connection with the Proposed Action, the Planning Board adopted a Negative Declaration on October 14, 2020; and

WHEREAS, the Planning Board issued a report to the City Council dated October 15, 2020, in support of the Special Permit; and

WHEREAS, the Proposed Action originally included 1,046 square feet of Central Public Green Space; in response to comments from the City Council, the Applicant revised the Proposed Action to include a Central Public Green Space area of approximately 2,315 square feet; and

WHEREAS, on March 1, 2021, the City Council approved the Special Use Permit application by 416 Main Street Beacon, LLC & 420 Main Street, LLC, D/B/A 420 Main St. Beacon, LLC to construct a stepped back fourth story on an 11,715 square foot mixed-use

building fronting on Main Street with 2,315 square feet of Central Public Green Space, on property located at 416-420 Main Street in the CMS District, T District and HDLO Zone after finding that the Proposed Action complies with the City of Beacon Code §§ 223-18.B, 223-41.18.E(7) and 134-7; and

WHEREAS, on March 9, 2021 the Planning Board opened a duly noticed public hearing on the application for Subdivision and Site Plan approvals concerning the Proposed Action and continued the public hearing to April 13, 2021 and May 11, 2021, at which time all those interested were given an opportunity to be heard and the public hearing was closed on May 11, 2021; and

WHEREAS, due to public health and safety concerns related to the current COVID-19 pandemic, all public meetings and hearings on this application were duly noticed 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 City of Beacon Code requires the Applicant to install three (3) on-site parking spaces for the proposed residential use and 20 parking spaces for the proposed commercial use, therefore a total of 23 on-site parking spaces are required for the site: and

WHEREAS, the Applicant proposed to provide two (2) parking spaces for the proposed residential uses and requests a waiver of the remaining 21 on-site parking spaces required; and

WHEREAS, City of Beacon Code § 223-41.18.G(3) authorizes the Planning Board to modify the minimum quantity of required on-site parking spaces where there is sufficient public parking available within 800 feet of the site and within the CMS District to meet foreseeable parking needs of the proposed use and surrounding uses for the duration of the proposed use; and

WHEREAS, the following public parking lots are located within 800 feet of the Property:

- Churchill Street Parking Lot
- Van Nydeck Avenue Parking Lot (Behind Brothers Restaurant)
- Van Nydeck Avenue Parking Lot (Behind Fire House)
- Henry Street Parking Lot; 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 finds pursuant to the City of Beacon Code § 134-7 that the proposed mixed-use building at the corner of Main Street and Schenk Avenue has been designed to be consistent with the

character of the surrounding neighborhood, including the Beacon Hotel, and the properties located in the HDLO, and will be consistent with the historic character of the surrounding area and compatible with the design standards of the Historic District Landmark Overlay Zone and accordingly, the Planning Board hereby grants a Certificate of Appropriates for the Proposed Action, as shown on the application materials referenced above.

BE IT FURTHER 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-416 Main Street," prepared Hudson Land Design Professional Engineering, P.C. and Tom Cerchiara, PLS, last revised March 30, 2021.

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-416 Main Street," prepared Hudson Land Design Professional Engineering, P.C. and Tom Cerchiara, PLS, last revised March 30, 2021, subject to the conditions and modifications set forth herein.

BE IT FURTHER RESOLVED, that the pursuant to City of Beacon Code § 223-41.18.G(3), the Planning Board finds that there is sufficient public parking available within 800 feet of the site in the CMS District to meet foreseeable parking needs of the proposed use and surrounding uses for the duration of the proposed use and accordingly, hereby waives the requirement to provide an additional 21 on-site parking spaces.

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, Hudson Land Design Professional Engineering P.C. and Maser Engineering, last revised April 27, 2021, 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 7, 2021, 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 6, 2021, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Planner, except Comment No. 1.b of the City Planner's letter.

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.

6. The Applicant shall submit a performance guaranty in a form satisfactory to the City Attorney in an amount of $119,430.00 as determined by the cost estimates submitted by the Applicant's engineer and reviewed by the City Engineer to secure the performance of all public improvements.

7. The Applicant shall return to the Planning Board for approval of a Certificate of Appropriateness for the live/work building.

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 7, 2021, 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 6, 2021, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Planner.

5. A note shall be added to the plans to state:

All landscaping shown on the Site Plan, including any plantings located within the City right-of-way, shall be maintained in a vigorous growing condition for the duration of the use and shall be trimmed so as to not interfere with pedestrian use of the sidewalk. All plants not so maintained shall be replaced with new plants of comparable size and quality at the beginning of the next immediately following growing season in compliance with the Site Plan, at the sole cost and expense of the property owner. In the event the sidewalk adjacent to the Central Public Green Space is widened by the City and the plantings within the City right-of-way are removed, the property owner shall replace such plantings on the owner's property to the maximum extent practicable without impeding the primary public use of the Central Public Green Space, as determined by the City Building Inspector.

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. Prior to the issuance of a Building Permit, the following conditions shall be fulfilled:

1. Pursuant to the City Code § 195-16.E, the Applicant shall establish an escrow with the City of Beacon for the inspection of the public improvements in the amount of $7,166.00 which is the equivalent of 6% of the amount of the required performance guaranty.

2. The Applicant shall return to the Planning Board for final approval of the signage for the Central Public Green Space.

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

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 Central Public Green Space which consists of approximately 20% of the overall lot area is an adequate size and in an appropriate location to satisfy the requirement for providing recreation/parkland pursuant to Section 223-25.H of the City Code. Therefore, the Applicant shall not be required to pay a

Recreation Fee for the two (2) new dwelling units as prescribed under Section 223-25.H(4) of the City Code.

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. The Applicant shall construct at least 2,315 feet of Central Public Green Space to serve the residents of and visitors to the City of Beacon.

6. The Central Public Green Space, as shown on the Site Plan, shall be open from dawn until dusk, seven (7) days a week.

7. The Applicant shall install a wooden sign, as shown on the Site Plan, to notify the public that it has access to that Central Public Green Space. As proposed by the Applicant, the sign shall say "welcome", shall state that the park is open dawn till dusk and shall state the park is open to the public. Such signage shall not overhang the sidewalk. No sooner than one year after the Central Public Green Space is first opened to the public, the Applicant may submit written request to the Planning Board to modify the signage to omit language stating the area is open to the public, but regardless of the signage the Central Public Green Space shall remain open to the public and be used primarily for public purposes pursuant to the City Council's Special Permit Resolution dated March 1, 2021.

8. The Applicant shall not install dedicated seating for exclusive use by businesses in the Central Public Green Space. The Applicant may only install seating for the exclusive use of the tenant businesses in the areas of the Property designated on the site plan as Main Street Building Private Area.

9. The Applicant may install sculptures in the Central Public Green Space, which sculptures may be updated from time to time.

10. Condition 10 of the Resolution adopted by the City Council on March 1, 2021 granting a Special Use Permit for the construction of a partial fourth floor on the proposed building states that the Central Public Green Space shall be used primarily for public purposes. The City Council directed the Planning Board to consider when access to the Central Public Green Space can be restricted and used solely by the private tenants of the Property. Accordingly, the

tenants in the live/work building and the mixed-use building may exclusively utilize the Central Public Green Space on a limited basis, such as for events, after providing at least ten (10) days written notice to the City of Beacon Building Inspector and City Administrator.- Upon receipt of such notice, the City of Beacon Building Inspector may, at his or her discretion, deem such exclusive use of the Central Public Green Space to be in violation of the requirement that it shall be used primarily for public purposes based on the frequency of such events, in which case the Building Inspector may invoke Condition 17 of the City Council's Special Permit Resolution.

11. 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.

12. The approvals granted by this resolution do not supersede the authority of any other entity.

13. This approval is conditioned upon compliance with all of the mitigation measures specified in the Applicant's Environmental Assessment Form and the Negative Declaration granted pursuant thereto. The Applicant shall be responsible for the funding and/or implementation of all such identified mitigation measures. Where the terms of this Resolution may be inconsistent with the EAF, the terms of this Resolution shall be controlling.

14. 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.

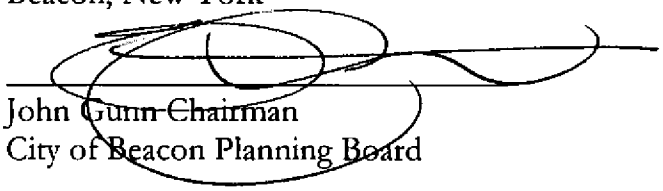
15. Once the Final Subdivision Plat has been endorsed by the Planning Board Chairman, said plat must be filed in the Dutchess County Clerk's Office within sixty-two (62) days. After said filing, two (2) copies of the Final Plat certified by Dutchess County shall be submitted to the Planning Board Secretary. 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.

16. The Site Plan Approval granted herein shall expire in the event the Applicant does not submit a bona fide building permit application to the Building Department within one year of the adoption date of this Resolution, provided however, that the Planning Board may extend such time period from time to time for good cause shown upon written request from the Applicant.

17. 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 11, 2021
Beacon, New York



John Gunn Chairman
City of Beacon Planning Board

MAY 13th, 2021
Date

Motion by Ms. Reynolds, seconded by Mr. Byrne:

Kevin Byrne	Voting: AYE	Leonard Warner	.YE
J.C. Calderon	Voting: AYE	J. Randall Willian	.XCUSED
Karen Quiana	Voting: AYE	John Gunn, Chai	.YE
Jill Reynolds	Voting: AYE		

Received in the Office of the
City Clerk
May 13, 2021



RELIANCE FOUNDRY
STAINLESS STEEL CIRCULAR
BIKE RACK #R-8224-EM-SS.

BIKE RACK TO BE ANCHORED
INTO CONCRETE SIDEWALK
WITH ¾" ANCHORS AS
SPECIFIED BY
MANUFACTURER

Metal Bike Rack

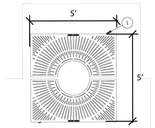
Scale: NTS



CUSTOM BUILT TRASH
RECEPTACLE. WOOD SIMILAR TO
SCULPTURAL SEATING.
REMOVABLE METAL TRASH
CONTAINER

Trash Receptacle

Scale: NTS



RELIANCE FOUNDRY MODEL
R-8811 (OR APPROVED EQUAL)
SQUARE CAST IRON TREE
GRATE. ADA COMPLIANT.
COLOR: BLACK

Tree Grate

Scale: NTS



CUSTOM BUILT WOOD BENCH.
MATERIAL SIMILAR TO
SCULPTURAL SEATING

Bench

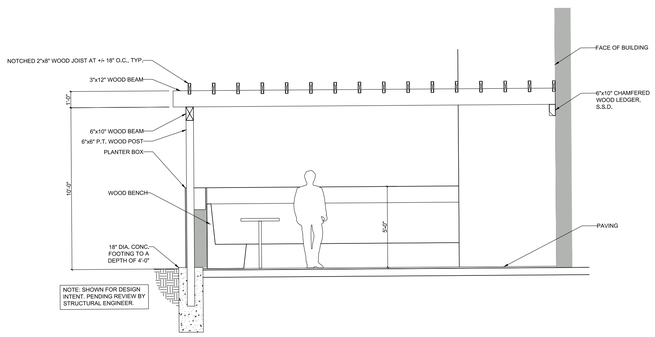
Scale: NTS

WALL MOUNTED HOUSE LIGHT (L2)
BARNLIGHT ELECTRIC WALL MOUNTED FIXTURE.
MODEL "WESCO GOOSENECK", 100W, COLOR: DARK
GREEN METAL SHADE, OR APPROVED EQUAL.
MOUNTING HEIGHT = 7 FEET.

NOTE THAT THE MANUFACTURER DOES NOT PROVIDE
FOOTCANDLE DIAGRAMS FOR THIS FIXTURE. THE
FIXTURE IS SHADED AND DOES NOT EMIT GLARE

LIGHTING NOTES:
ALL EXTERIOR LIGHTING ON THE SITE SHALL CONFORM TO BEACON ZONING CODE SECTION 223-14B:
EXTERIOR LIGHTING. ALL EXTERIOR LIGHTING ACCESSORY TO A RESIDENTIAL, INDUSTRIAL, MULTIFAMILY OR NONRESIDENTIAL USE, INCLUDING THE LIGHTING OF SIGNS, SHALL BE SUBJECT TO THE FOLLOWING STANDARDS:
[AMENDED 12-9-2019 BY L.L. NO. 11-2019]

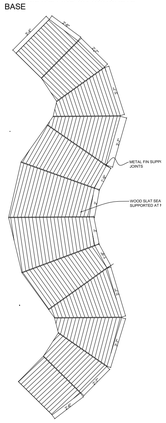
(1) THE TYPE, LOCATION, AND SHADING OF SUCH LIGHTING SHALL PREVENT THE SPILLOVER OF LIGHT ONTO ANY ADJACENT RESIDENTIAL OR MULTIFAMILY PROPERTY OR DIRECT GLARE ONTO ANY PUBLIC SIDEWALK OR STREET.
(2) SUCH LIGHTING SHALL USE FULL CUTOFF FIXTURES THAT DO NOT EMIT LIGHT ABOVE THE HORIZONTAL PLANE INTO THE NIGHT SKY, EXCEPT FOR LIGHTING FOR SHORT-TERM EVENTS OR HOLIDAYS, FLAGPOLE LIGHTING, DECORATIVE LIGHT SOURCES UNDER 600 LUMENS, PUBLIC PARKS AND OTHER PUBLIC SPECIALTY LIGHTING, AS DETERMINED BY THE BUILDING INSPECTOR.
(3) HOURS OF LIGHTING AND FIXTURE HEIGHT, TYPE, DESIGN, INTENSITY, AND COLOR TEMPERATURE MAY BE DETERMINED BY THE PLANNING BOARD IN ACTING ON ANY SITE DEVELOPMENT PLAN UPON CONSIDERATION OF THE FOLLOWING CONSIDERATIONS:
(a) LIGHTING FIXTURES IN PEDESTRIAN AREAS SHOULD BE A MAXIMUM OF 15 FEET IN HEIGHT AND PARKING LOT LIGHTING FIXTURES SHOULD BE A MAXIMUM OF 20 FEET.
(b) PEDESTRIAN AND PARKING LOT AREAS SHOULD AVERAGE APPROXIMATELY ONE FOOTCANDLE; ONLY HIGH SECURITY AREAS MAY REQUIRE LIGHTING IN THE TWO TO FIVE FOOTCANDLE RANGE, WHILE OVER FIVE FOOTCANDLES IS USUALLY A WASTE OF ENERGY AND A SOURCE OF GLARE.
(c) COLOR TEMPERATURES SHOULD BE IN THE RANGE OF 2,400 TO 4,000 KELVIN DEGREES.
(d) THE COLOR RENDERING INDEX SHOULD BE IN THE RANGE OF 80 TO 100.
(e) ADAPTIVE CONTROLS, SUCH AS DIMMERS, TIMERS, AND MOTION SENSOR SHUT-OFF LIGHTING, SHOULD BE USED WHENEVER APPROPRIATE.



Trellis Details

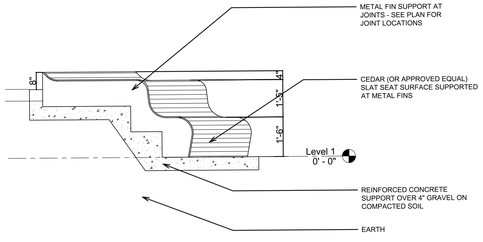
Scale: NTS

CUSTOM MADE WOOD BENCH
WITH METAL FINS ON CONCRETE
BASE



Sculptural Seating Plan

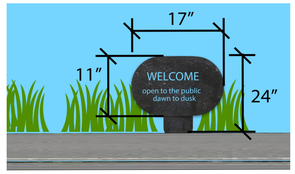
Scale: NTS



Sculptural Seating Section

Scale: NTS

CUSTOM MADE CORTEN STEEL
WELCOME SIGN WITH CUT OUT
LETTERS



Welcome Sign

Scale: NTS

DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

STAKE TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE DESIGNER.

WRAP TREE TRUNKS ONLY UPON THE APPROVAL OF THE LANDSCAPE DESIGNER.

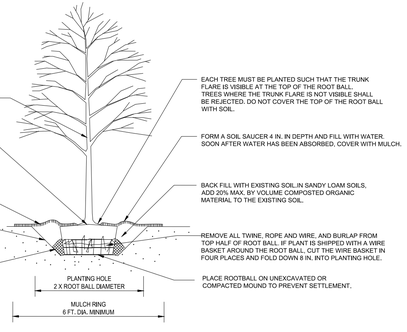
MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH AT THE SITE.

TREE SHALL BEAR SAME RELATION TO GRADE AS IT BORE TO IT'S PREVIOUSLY EXISTING GRADE. PLANT TREE 2-3" IN ABOVE DESIRED GRADE TO ALLOW FOR SOME SETTLING.

2 IN. MULCH. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. MAINTAIN THE MULCH WEED-FREE FOR A MINIMUM OF THREE YEARS AFTER PLANTING.

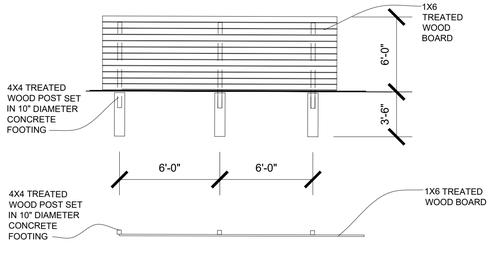
1:1 SLOPE ON SIDES OF PLANTING HOLE

TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOT BALL DOES NOT SHIFT.



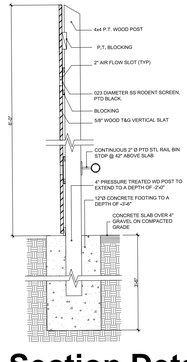
Tree Planting Detail

Scale: NTS



Horizontal Fence Detail

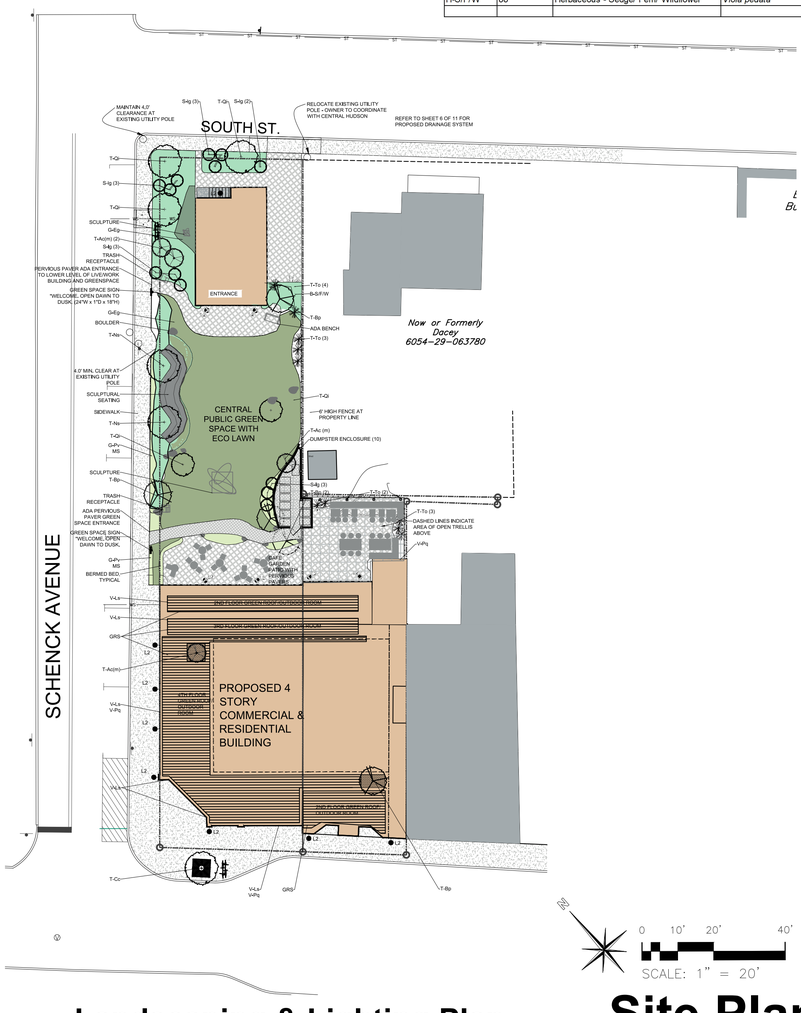
Scale: NTS



Fence Section Detail

Scale: NTS

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	06/24/20	CITY COUNCIL PRESENTATION	AJS
2	06/30/20	REVISED PER PLANNING BOARD COMMENTS	AJS
3	07/28/20	REVISED PER PLANNING BOARD COMMENTS	AJS
4	08/25/20	NO CHANGE	AJS
5	09/09/20	SUPPLEMENTAL LANDSCAPE INFORMATION	AJS
6	09/28/20	REVISED PER PLANNING BOARD COMMENTS	AJS
7	01/06/21	NO CHANGE	AJS
8	01/28/21	NO CHANGE	AJS
9	03/30/21	REVISED PER PLANNING BOARD COMMENTS	AJS
10	04/27/21	REVISED PER PLANNING BOARD COMMENTS	AJS
11	07/27/21	NO CHANGE	AJS
12	08/31/21	NO CHANGE	AJS
13	01/10/22	FOR FINAL REVIEW	AJS



Landscaping & Lighting Plan

Scale: 1" = 20'

PLANTING SCHEDULE

Symbol	Quantity	Type	Botanical Name	Common Name	Size	Planting Time
T-Ac (m)	4	Tree	*Amelanchier canadensis*	Serviceberry	7-8'	Spring or Fall
T-Bp	5	Tree	*Betula populifolia*	Grey Birch(B&B)	8'	Spring or Fall
T-Cc	1	Tree	*Cercis canadensis*	Redbud(B&B)	8'	Spring or Fall
T-To	12	Tree	*Thuja occidentalis*	Arborvitae "Emerald Green"	6-7'	Spring or Fall
T-Qi	5	Tree	*Quercus ilicifolia*	Scrub Oak(BnB)	7'	Spring or Fall
T-Ns	2	Tree	*Nyssa sylvatica*	Black Gum	7'	Spring or Fall
S-Ig	14	Shrub	*Ilex glabra*	Inkberry	3 gal	Spring or Fall
V-Ls	7	Vine	*Lonicera sempervirens*	Coral Honeysuckle(overflowing)	1 gal	Spring or Fall
V-Pq	5	Vine	*Parthenocissus quinquefolia*	Virginia Creeper(overflowing)	1 gal	Spring or Fall
G-EG	15 lbs	Grass	*Festuca varieties*	Eco Grass	Seed	Spring or Fall
G-Pv	75	Grass	*Panicum virgatum*	Switch Grass	Plugs	Spring or Summer
H-MS	12	Herbaceous - Meadow Species	*Allium cernuum*	Nodding Onion	Plugs	Spring or Summer
H-MS	7	Herbaceous - Meadow Species	*Amsonia tabernaemontana*	Eastern Bluestar	Plugs	Spring or Summer
H-MS	5	Herbaceous - Meadow Species	*Asclepias tuberosa*	Butterfly Weed	Plugs	Spring or Summer
H-MS	3	Herbaceous - Meadow Species	*Baptisia australis*	Blue Wild Indigo	Plugs	Spring or Summer
H-MS	9	Herbaceous - Meadow Species	*Callirhoe involucrata*	Purple Poppy Mallow	Plugs	Spring or Summer
H-MS	12	Herbaceous - Meadow Species	*Coreopsis lanceolata*	Lance-leaf Coreopsis	Plugs	Spring or Summer
H-MS	12	Herbaceous - Meadow Species	*Echinacea purpurea*	Purple Coneflower	Plugs	Spring or Summer
H-MS	21	Herbaceous - Meadow Species	*Fragaria virginiana*	Wild Strawberry	Plugs	Spring or Summer
H-MS	9	Herbaceous - Meadow Species	*Liatris spicata*	Dense blazing star	Plugs	Spring or Summer
H-MS	5	Herbaceous - Meadow Species	*Penstemon digitalis*	Foxglove Beardtongue	Plugs	Spring or Summer
H-MS	4	Herbaceous - Meadow Species	*Penstemon hirsutus*	Hairy Beardtongue	Plugs	Spring or Summer
H-MS	12	Herbaceous - Meadow Species	*Rudbeckia hirta*	Black-eyed Susan	Plugs	Spring or Summer
H-MS	21	Herbaceous - Meadow Species	*Sisyrinchium angustifolium*	Stout Blue-eyed Grass	Plugs	Spring or Summer
H-MS	12	Herbaceous - Meadow Species	*Solidago caesia*	Blue-stemmed Goldenrod	Plugs	Spring or Summer
H-MS	11	Herbaceous - Meadow Species	*Symphyotrichum oolentangiense*	Sky Blue Aster	Plugs	Spring or Summer
H-MS	7	Herbaceous - Meadow Species	*Tradescantia ohiensis*	Ohio Spiderwort	Plugs	Spring or Summer
H-MS	19	Herbaceous - Meadow Species	*Viola pedata*	Bird's Foot Violet	Plugs	Spring or Summer
H-S/F/W	210	Herbaceous - Sedge/ Fern/ Wildflower	*Carex appalachica*	Appalachian Sedge	Plugs	Spring, Summer or Fall
H-S/F/W	60	Herbaceous - Sedge/ Fern/ Wildflower	*Dryopteris marginalis*	Marginal Wood Fern	Plugs	Spring, Summer or Fall
H-S/F/W	44	Herbaceous - Sedge/ Fern/ Wildflower	*Eurybia divaricata*	White Wood Aster	Plugs	Spring, Summer or Fall
H-S/F/W	88	Herbaceous - Sedge/ Fern/ Wildflower	*Fragaria virginiana*	Wild Strawberry	Plugs	Spring, Summer or Fall
H-S/F/W	44	Herbaceous - Sedge/ Fern/ Wildflower	*Geranium maculatum*	Wild Geranium	Plugs	Spring, Summer or Fall
H-S/F/W	60	Herbaceous - Sedge/ Fern/ Wildflower	*Polystichum acrostichoides*	Christmas Fern	Plugs	Spring, Summer or Fall
H-S/F/W	88	Herbaceous - Sedge/ Fern/ Wildflower	*Viola pedata*	Bird's Foot Violet	Plugs	Spring, Summer or Fall

PLANTING and LANDSCAPE NOTES

1. Contractors shall enter and exit site through pre-approved routes only.
2. No non-native plant species shall be introduced onto the site. All species shall be indigenous to the northeast region of North America.
3. If a straight specie is specified, no cultivars will be accepted without prior approval of designer.
4. No plants will be accepted that display mechanical injury, disease or specie irregularities.
5. Soil shall be prepped by removing all construction debris, loose roots and stones larger than 3".
6. All plants must be labeled when delivered to site.
7. Areas to be planted shall be marked and labeled by designer.
8. All plant locations and orientations in the field require approval from designer and owner prior to installation.
9. Test tree-pit for drainage before planting. Do not plant tree in pit if water is still evident after one hour. Contact site engineer or landscape designer if this condition is encountered.
10. All tree-planting to be coordinated with as-built utilities. Trees to be located minimum of 5' from active lines.
11. All trees shall be ball and burlap unless otherwise specified on Plant List.
12. Each new tree hole tree shall be twice the width of the rootball.
13. Burlap, wire, cords, ties and any wrapping materials must be removed from all rootballs before backfilling.
14. Plant all plants so top of rootball is slightly above surrounding soil(small and large plants)
15. No planting shall be done in muddy, rainy or frozen conditions.
16. All plants calling for "Overflowing" in the notes shall not be accepted by designer if plants are thin.
17. If planting is delayed for more than 3 hours after delivery, set plants in shade. Protect from weather and mechanical damage. Keep roots moist and cover with mulch.
18. Contractors shall leave site neat and orderly during course of project, and store materials and equipment in owner-approved locations away from all trees and plants. Store all unplanted plant material away from damaging sun.
19. If site conditions conflict with intended design, contractor shall alert Owner and designer.
20. No substitutions are to be made without the written or verbal consent of landscape designer and owner.
21. Create a size-specific water-well around each plant, 3' from center of tree, and mulch from the outside. Do not mulch crown.
22. Water thoroughly after planting each plant. Water schedule to be determined.
23. Spray for deer if planted in fall. Sometimes bucks mark their territory with their antlers.
24. Keep planting areas weed-free until plant is established.
25. Eco Lawn seeding shall be implemented by contractor familiar with this specie mix and with the process, and approved by designer. This is not the same as casting contractor grass seed.
26. Pervious/Permeable Pavers and associated grass seeding shall be installed by contractor with experience in this process. This process requires establishment maintenance, in order to succeed.
27. Bermed areas shall be built with designer directing construction.
28. Street tree and surrounding tree-pit shall be installed by contractor experienced with these materials and approved by designer.
29. All plants require regular watering for the first two seasons in order to succeed.
30. See separate Green Roof Notes.

Site Plan Application

Sheet 3 of 11 - Landscaping & Lighting Plan

Owner:
416 Main Street Beacon, LLC and 420 Main St. Beacon, LLC
C/O Cuddy & Feder LLP
445 Hamilton Avenue
White Plains, NY 10601

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

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

Surveyor:
TEC Surveying
831 Route 52, Suite 2C
Fishkill, New York 12524

Landscape Design:
Landscape Restorations
P.O. Box 286
Beacon, New York

416-420 Main Street
Beacon, New York
Scale: 1" = 20'
September 9, 2020