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

**May 10, 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.
2. Public Hearing for SEQRA review on application for Site Plan Approval and Subdivision (lot merger) Approval, Multi-Family Residential (62 units), 16 West Main Street, submitted by Farrell Building Company.
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 application for Subdivision Approval, 2-lot residential, 146 Verplanck Avenue, submitted by James Petty.
5. Continue review of application for Special Use Permit and Site Plan Approval, indoor and outdoor event space, 4 Hanna Lane, submitted by Jason Hughes.
6. Review application for Subdivision Approval, 2-lot residential, 46 Judson Street, submitted by 46 Judson Street LLC.

**Miscellaneous Business**

1. Zoning Board of Appeals - May meeting

**Architectural Review**

**City of Beacon Planning Board Agenda**
**05/10/2022**

**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.

**ATTACHMENTS**

Beacon Views Response to Board Comments.pdf

Beacon Views Concept Plan.pdf

Planner Comments Beacon Views 5.6.22.pdf

Traffic Comments Beacon Views_Review 4.pdf

Beacon Views Engineer Comments.pdf

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

April 26, 2022

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

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

Dear Chairman Gunn and Members of the Board:

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

- Concept Plan (CP-1), dated April 26, 2022.

In response to the comments provided in a letter from John Clarke Planning and Design, dated December 9, 2021, we offer the following responses:

1. As the Board may be aware, the 13-lot subdivision at 25 Townsend Street has been purchased, the map has been filed with the county by the new owners, and the performance bond has been posted. The applicant has recently met with the new owners of 25 Townsend Street, and they have expressed a desire to work with the applicant and any requirements of the city related to the existing right of way connecting the properties. The new owners have indicated that they intend to move forward with construction on the 13-lot subdivision within the coming months. This development would appear to resolve the access issue. The proposal would therefore remain that the Townsend Street connection would function as the primary access to the site, with the gated connection through the Highland Meadows easement to Hastings Drive functioning as the emergency access. A through road connection to Conklin Street would no longer have to be considered, though the walking path would remain for recreational purposes. This arrangement is presented on the enclosed Concept Plan.

2. The applicant continues to assert the rights indicated in the provided easement agreement. Any dispute the owner of the Highland Meadows property might have regarding the easement is a private matter to be resolved outside of site plan approval proceedings.

3. The applicant recently met with the Board's consultants, John Clarke and John Russo, PE, to discuss their, and the Board's, expressed desire for the applicant to provide more on-site wetland mitigation, and an alternative concept under consideration. This alternative concept is indicated in the Concept Plan enclosed herewith. This new configuration would forego three of the previously proposed dwelling units in the northeast of the site, would eliminate some of the previously proposed wetland disturbance, and would provide an additional area of wetland mitigation in that location. This revision, when combined with the previously proposed on-site mitigation in the southern edge of the property, would provide a 1:1 mitigation to wetland disturbance on-site. Additional off-site mitigation, or the purchase of wetland mitigation credits with a mitigation bank, assuming a cumulative 2:1 mitigation (1:1 on-site and 1:1 off-site) is required by the Army Corps of Engineers (AOCE) is also a possibility.

4. The enclosed Concept Plan contemplates a 1:1 wetland mitigation on-site, as requested.

5. A submission will be prepared for the AOCE once we have clear consensus on the provided Concept Plan and the wetland mitigation option shown thereon. Once submitted, it is anticipated that given the current pace of projects moving through approval with the AOCE that coverage under the required Nationwide Permit will be granted within 6 to 9 months. Pending Health Department approval and building permits, construction would be anticipated to begin at that time. It should be noted that the AOCE will not provide coverage under its Nationwide Permit without conditional site plan approval from the municipality.

In response to the comments provided in a letter from John Russo of Lanc & Tully Engineering and Surveying, P.C., dated December 10, 2021, we offer the following responses:

General Comments

1. These comments are noted. Please refer to responses above regarding the current proposal for on-site wetland mitigation. Additionally, it should be noted that assuming the AOCE requires a cumulative 2:1 mitigation ratio, the Van Buren property will be the first option for the additional mitigation.

2. This comment is acknowledged, and the Wetland Mitigation Report, Plan, and correspondence with the AOCE will be provided to the Board as they move forward.

3. The current proposal before the Board is to provide 1:1 mitigation on-site. As the AOCE approval process moves forward, if the previously proposed off-site mitigation at the Van Buren property proves to be required in addition to the 1:1 mitigation on-site, revised easement documents will be provide to the Board.

4. The applicant disputes this comment. While continuing to assert the rights indicated in the provided easement agreement, it is the applicant's position that any dispute the owner of the Highland Meadows property might have regarding the easement is a private matter to be resolved outside of site plan approval proceedings.

5. It is noted that the proposed water and sewer main extensions are required to be reviewed and approved by the Dutchess County Department of Health (DCDOH). The Planning Board and City Engineer's office will receive copies of all correspondence between this office and the DCDOH.

Preliminary Subdivision Plat:

1. The final plat will include bearings and distances for the proposed property lines.

2. Written descriptions of the road right of way will be provided with the final plat submission.

Details:

1. The hydrodynamic separator detail will be revised with our next technical submission.

The last time this project was before the Board a few key issues were identified. These included site access, wetlands mitigation, and concerns regarding the easement. With regard to SEQR, if, based on this latest concept, the imminent development of the 25 Townsend Street subdivision, and previously provided material, the Board feels that it has the information it needs to make a determination of significance, the applicant would request that the public hearing be closed. If the Board feels that it requires any additional information to make the determination, the applicant will be happy to provide it.

The applicant looks forward to discussing these new developments in the project with the Board at their May 10, 2022 meeting. Assuming these developments and revisions to the plan are found to be favorable, the applicant would seek to revise the site plan set and provide any outstanding information with our next submission.

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

Very truly yours,

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

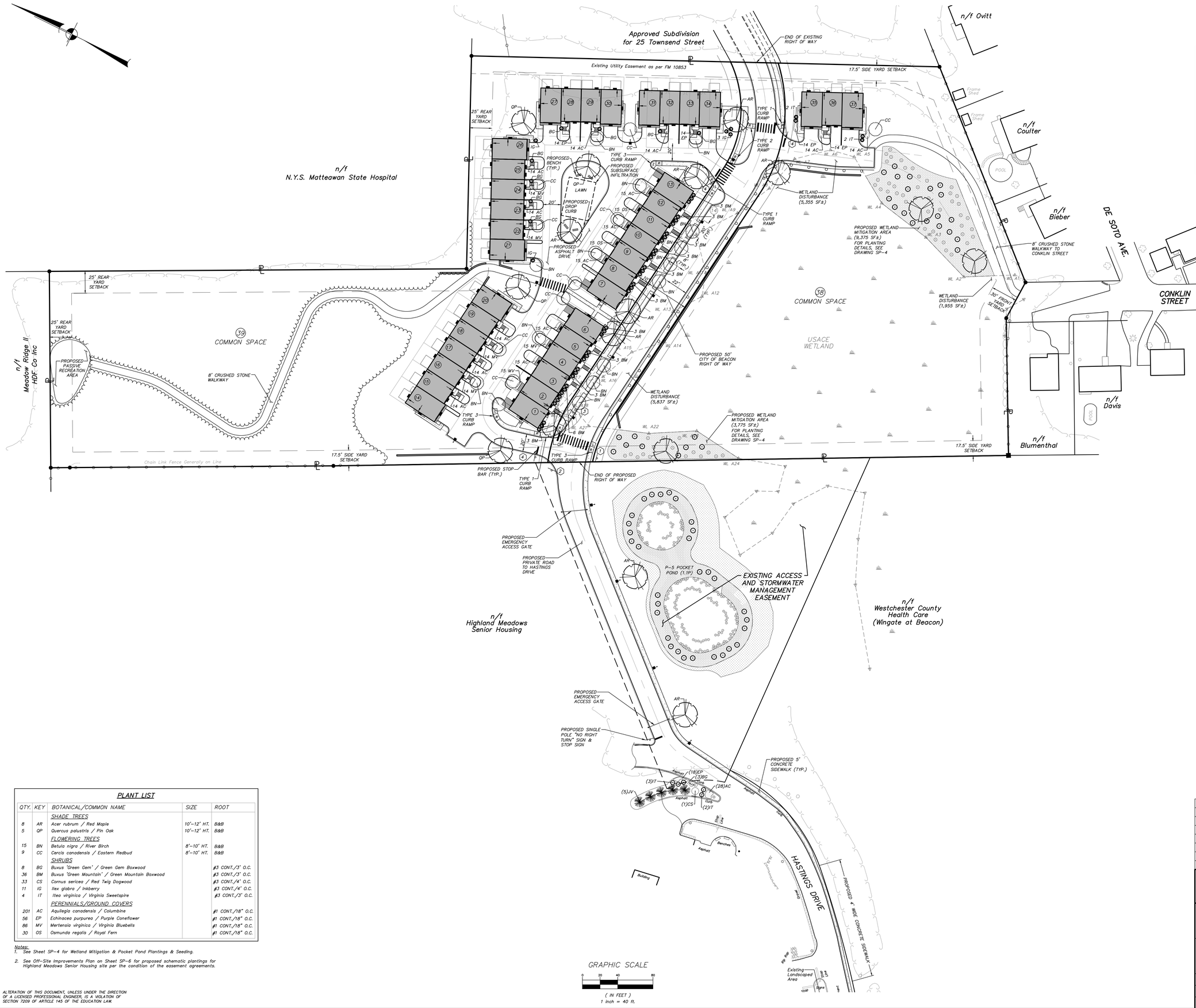
By: _____
Jeffrey J. Contelmo, PE
Senior Principal Engineer

JJC/adt

Enclosures (all email only)

cc: Nathan Kahn
Greg Kamedulski
Richard Cantor, Esq.
Aryeh Siegel
Phil Grealy, P.E.

Insite File No. 19131.100




## GRAPHIC SCALE

0 20 40 80

( IN FEET )
1 inch = 40 ft.

## GENERAL NOTES:

1. Trash and recycling to be collected at each unit by a privately hired waste management contractor.

## RD-5 ZONE REQUIREMENTS:

| | Required/Permitted: | Provided: |
|---|---|---|
| Minimum Lot Area: | 5,000 SF | 374,518 SF± |
| Minimum Lot Width: | 50' | 440'± |
| Minimum Lot Depth: | 100' | 848'± |
| Minimum Yard Setbacks: | | |
| Front: | 30' | 30' |
| Minimum Side: | 17.5' | 35' |
| Total of 2: | 20' | 75' |
| Rear: | 25' | 25' |
| Minimum Distance Between Buildings on the Same Lot: | 30' | 20'* |
| Maximum Building Height: | 3 Stories or 35' | Less than 35' |
| Minimum Building Height: | 1 Story and 12' | More than 12' |
| Maximum Building Coverage | | |
| Multi-family: | 20% | 10.5% |
| Other uses: | 30% | 0% |
| Maximum No. of Dwelling Units per Building | 16 | 7 |

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

## PARKING REQUIREMENTS:

| | |
|---|---|
| 2 per Dwelling Unit + .25 Spaces per Bedroom | = 102 Total Spaces Required |
| Garage Spaces | = 74 Spaces Provided |
| Driveway Spaces | = 37 Spaces Provided |
| Visitor Spaces | = 14 Spaces Provided |
| | = 125 Total Spaces Provided |

## RECREATION AREAS SUMMARY

| | |
|---|---|
| Required SF @ 2,000 for First 20 Units | |
| Required 100 SF for Each Additional Unit | = 3,700 SF Required |
| Western Trail Passive Recreation Area | = 7,500 SF |
| Eastern Trail to Conklin Street Area | = 2,300 SF |
| | = 9,800 SF Provided |

## WETLANDS SUMMARY

**U.S.A.C.E. WETLAND PFOIE**

TOTAL PROPOSED DISTURBANCE = 13,150 SF±
PROPOSED ON-SITE MITIGATION AREA = 13,150 SF± (1:1 MITIGATION:DISTURBANCE)
*SEE WETLAND MITIGATION NOTES ON SP-4
**ADDITIONAL OFF-SITE WETLAND MITIGATION IS ALSO BEING CONSIDERED AND WILL BE DETERMINED BY ARMY CORPS OF ENGINEERS REQUIREMENTS

## LEGEND

- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING CHAIN LINK FENCE
- EXISTING EDGE OF PAVEMENT
- EXISTING WETLAND
- WL A23 / WL A24 — EXISTING WETLAND FLAG
- EXISTING TREE LINE
- (1) PROPOSED SIGN
- PROPOSED DOOR LOCATION
- (9) PROPOSED # OF STALLS TO BE STRIPED
- PROPOSED CONCRETE CURB
- PROPOSED EDGE OF SIDEWALK
- PROPOSED RETAINING WALL
- PROPOSED PAINTED STOPBAR
- PROPOSED CROSSWALK
- PROPOSED LANDSCAPING
- PROPOSED GUIDE RAIL
- PROPOSED POLE MOUNTED LIGHT
- PROPOSED BUILDING MOUNTED LIGHT

## SIGN DATA TABLE

| LOCATION NO. | TEXT | M.U.T.C.D. NUMBER | SIZE OF SIGN (s.f.) | DESCRIPTION |
|---|---|---|---|---|
| 1 | | R3-1 | 30" x 30" | White Background Black Arrow Red Symbol Black Border |
| 2 | NO OUTLET | | 12" x 18" | Red on White |
| 3 | RIGHT LANE MUST TURN RIGHT | R3-32C | 30" x 30" | Black on White |
| 4 | STOP | R1-1C | 30" x 30" | White on Red |

## PLANT LIST

| QTY. | KEY | BOTANICAL/COMMON NAME | SIZE | ROOT |
|---|---|---|---|---|
| | | SHADE TREES | | |
| 8 | AR | Acer rubrum / Red Maple | 10'-12' HT. | B&B |
| 5 | QP | Quercus palustris / Pin Oak | 10'-12' HT. | B&B |
| | | FLOWERING TREES | | |
| 15 | BN | Betula nigra / River Birch | 8'-10' HT. | B&B |
| 9 | CC | Cercis canadensis / Eastern Redbud | 8'-10' HT. | B&B |
| | | SHRUBS | | |
| 8 | BG | Buxus 'Green Gem' / Green Gem Boxwood | | #3 CONT./3' O.C. |
| 36 | BM | Buxus 'Green Mountain' / Green Mountain Boxwood | | #3 CONT./3' O.C. |
| 33 | CS | Cornus sericea / Red Twig Dogwood | | #3 CONT./4' O.C. |
| 11 | IG | Ilex glabra / Inkberry | | #3 CONT./4' O.C. |
| 4 | IT | Itea virginica / Virginia Sweetspire | | #3 CONT./3' O.C. |
| | | PERENNIALS/GROUND COVERS | | |
| 201 | AC | Aquilegia canadensis / Columbine | | #1 CONT./18" O.C. |
| 56 | EP | Echinacea purpurea / Purple Coneflower | | #1 CONT./18" O.C. |
| 86 | MV | Mertensia virginica / Virginia Bluebells | | #1 CONT./18" O.C. |
| 30 | OS | Osmunda regalis / Royal Fern | | #1 CONT./18" O.C. |

Notes:
1. See Sheet SP-4 for Wetland Mitigation & Pocket Pond Plantings & Seeding.
2. See Off-Site Improvements Plan on Sheet SP-6 for proposed schematic plantings for Highland Meadows Senior Housing site per the condition of the easement agreements.

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 7 | 4-26-22 | REVISED CONCEPT FOR PLANNING BOARD SUBMISSION | JFR |
| 6 | 11-30-21 | REVISED PER PLANNING BOARD COMMENTS | EJP |
| 5 | 12-29-20 | REVISED PER PLANNING BOARD COMMENTS | JFR |
| 4 | 7-28-20 | REVISED PER PLANNING BOARD COMMENTS | JFR |
| 3 | 6-30-20 | REVISED PER PLANNING BOARD COMMENTS | JFR |
| 2 | 5-26-20 | REVISED PER PLANNING BOARD COMMENTS | JFR |
| 1 | 4-28-20 | RESUBMISSION TO PLANNING BOARD | JFR |

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

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

DRAWING:
CONCEPT PLAN

STATE OF NEW YORK — JEFFREY J. CONTI — 19331 — LICENSED PROFESSIONAL ENGINEER

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

DRAWING NO. CP-1 SHEET 1 / 1

**John Clarke Planning and Design** jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: May 6, 2022
Re: **Beacon Views Townhouses Site Plan and Subdivision**

I reviewed a response letter and Concept Plan by Insite Engineering, both dated April 26, 2022.

**Proposal**
The applicant is proposing to subdivide and develop an 8.6-acre site with 37 for-sale townhouse units. The parcel is in the RD-5 zoning district. The applicant is requesting a conservation subdivision under Section 223-12 J, which allows the Board to modify lot sizes, setbacks, building separations, streets, and other requirements in order to help preserve natural features in the site.

**Comments and Recommendations**
The applicant should be prepared to update the Board on the following access and wetlands issues:

1. The adjacent 25 Townsend Street subdivision has been purchased and the intention is to move forward with the Townsend Street connection as the primary access to Route 52. If any changes to the approved Townsend Street traffic circle are to be proposed, they will need an amendment application from the new owner.

2. The southerly Hastings Drive easement connection is proposed to be gated at both ends and used only for emergency access. The applicant maintains that any potential easement dispute is a private matter between the two property owners and outside the Planning Board process. How is the Board to be assured that the stormwater basins, sidewalk extension, and other off-site improvements shown on the plans will be implemented?

3. The newly proposed wetland mitigation concept is to provide a one-to-one constructed wetland replacement on this property by eliminating three townhouses on the eastern part of the parcel. The Army Corps of Engineers might require more than a one-to-one replacement, but that could be provided off-site at the previously proposed location in Beacon or through purchase of wetland mitigation credits. If this concept satisfies the Board's request that the size and function of the existing wetland on this site be maintained, it would allow the Army Corps permit application to proceed. The approval process may take 6 to 9 months after submittal.

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

John Clarke, Beacon Planning Consultant

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

May 10, 2022

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

RE: Site Plan and Traffic Review #4 for ***Beacon Views Townhomes*** **Proposed Residential Development**, Conklin Street, City of Beacon, Dutchess County, New York; CM Project No. 121-295

Dear Chairperson Gunn:

Creighton Manning Engineering, LLP (CM) has performed a review of the documents listed below in connection with the proposed residential townhome development located on Conklin Street in the City of Beacon, NY. The following documents prepared by INSITE Engineering, Surveying & Landscape Architecture, PC (INSITE) were reviewed:

- Concept Plan, revised April 26, 2022
- Response to Board Comments, dated April 26, 2022

CM has been conducted previous reviews for this project with the most recent being a review letter dated July 10, 2020, which pertained to the Letter from Greenplan. Prior letters included technical review of the Traffic Impact Study (TIS) prepared by Maser Consulting (now Colliers), last revised March 26, 2020. CM notes that the TIS prepared by Maser and reviewed in May 2020, considered a development with 40 townhome units. The proposed development shown in the Concept Plan depicts a development with 37 townhome units. There were no outstanding traffic comments at the time of our last review. The submitted site plan shows a reduction in units. We have no further comments.

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\Beacon Views\Beacon Views_Review 4.docx

# LANC & TULLY
## ENGINEERING AND SURVEYING, P.C.

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


May 4, 2022

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

RE: Beacon Views
City of Beacon
Special Use & Site Plan Application

Dear Mr. Gunn:

Our office has received the following in regard to the Beacon Views project, located adjacent to the 25 Townsend project and The Highland Meadows Senior Housing parcel:

- Correspondence from INSITE Engineering & Surveying, dated April 26, 2022.
- Plan titled "Beacon Views – Concept Plan", with the latest revision date of April 26, 2022, as prepared by INSITE Engineering and Surveying.

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

General Comments:

1. Although the applicant has provided responses to our previous comments in their recent correspondence, the comments noted in our December 10, 2021, correspondence remain outstanding until revised plans have been submitted for review.

2. The applicant has eliminated 3 units on the south side of the road (units 38 – 40) to allow for the construction of additional wetlands on site, now providing for a 1:1 wetland mitigation on the project site in order to address the Planning Boards request to maintain the wetlands on the site. The applicant has also stated that if the Army Corp of Engineers requires additional mitigation for the proposed disturbances to occur on site, they would look to purchase wetland mitigation credits within a mitigation bank or develop additional mitigation off site. The Planning Board should discuss with the applicant if they are acceptable to what has been proposed for mitigation at this time. If so, the applicant will need to revise all plans to show the currently proposed layout.

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**
**05/10/2022**

**Title:**

Public Hearing for SEQRA review on application for Site Plan Approval and Subdivision (lot merger) Approval, Multi-Family Residential (62 units), 16 West Main Street, submitted by Farrell Building Company.

**ATTACHMENTS**

16 W Main Sight Distance Plan.pdf

16 W Main Cover Letter.pdf

Planner Comments Beacon Commons 5.6.22.pdf

Traffic Comments Beacon Commons_Review 2.pdf

16 West Main Engineer Comments.pdf

## NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC SURVEY," PREPARED BY JMC PLANNING ENGINEERING LANDSCAPE ARCHITECURE & LAND SURVEYING, PLLC, DATED 09/20/2018, REVISED 09/23/2019.

2. THE STOPPING SIGHT DISTANCE HAS BEEN CALCULATED FOLLOWING THE PROCEDURE OUTLINED IN "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS 2018, 7TH EDITION" PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO).

3. STOPPING SIGHT DISTANCE CALCULATIONS

$$SSD = 1.47\ V\ t + \frac{V^2}{30[(a/32.2)\pm G]}$$

V = DESIGN SPEED, 30 MPH
t = BRAKE REACTION TIME, 2.5 S
a = DECELERATION RATE, 11.2 FT/S$^2$
G = MAJOR ROAD APPROACH GRADE, RISE/RUN, FT/FT

ONTO WEST MAIN STREET:

POSTED SPEED LIMIT = 25 MPH
DESIGN SPEED = 30 MPH

LEFT TURN (LOOKING RIGHT):

G = +0.043 FT/FT (UPGRADE)

SSD = 187 FT

RIGHT TURN (LOOKING LEFT):

G = −0.107 FT/FT (DOWNGRADE)

SSD = 235 FT

4. THE BANK STREET DRIVEWAY COULD NOT PROVIDE THE REQUIRED SIGHT DISTANCE DUE TO THE EXISTING ON-STREET PARKING, ROADWAY CURVATURE, EXISTING FENCE AND LANDSCAPING ON THE ADJACENT PROPERTY. THEREFORE, THE BANK STREET SITE DRIVEWAY IS PROPOSED AS AN ENTRANCE ONLY.

GRAPHIC SCALE

30 0 15 30 60 120

( IN FEET )
1 inch = 30 ft.

| No. | Revision | Date | By |
|---|---|---|---|
| 1. | REVISED PER CITY COMMENTS | 02/24/2020 | AH |
| 2. | REVISED PER CITY COMMENTS | 09/29/2020 | AH |
| 3. | REVISED PER CITY COMMENTS | 07/27/2021 | BMS |
| 4. | REVISED PER CITY COMMENTS | 03/25/2022 | BMS |
| 5. | REVISED PER CITY COMMENTS | 04/26/2022 | BMS |
| | | | |
| | | | |
| | *Previous Editions Obsolete* | | |

APPLICANT/OWNER:
FARRELL COMMUNITIES BEACON LLC
PO BOX 14
BRIDGEHAMPTON, NY 11932

ARCHITECT:
ARYEH SIEGEL ARCHITECT
84 MASON CIRCLE
BEACON, NY 12508

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

# SIGHT DISTANCE PLAN

BEACON COMMONS
16 WEST MAIN STREET
BEACON, NY 12508

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

STATE OF NEW YORK · STEPHEN SPIRA · 085983 · LICENSED PROFESSIONAL ENGINEER

| | | | |
|---|---|---|---|
| Drawn: | BMS | Approved: | SS |
| Scale: | 1" = 30' | | |
| Date: | 12/30/2019 | | |
| Project No: | 18119 | | |
| 18119-SITE | SIGHT | 1_ISD.scr | |

Drawing No:
C–801
(Sheet 16 of 26)

NOT FOR CONSTRUCTION

COPYRIGHT © 2020 by JMC. All Rights Reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of JMC PLANNING, ENGINEERING, LANDSCAPE ARCHITECTURE & LAND SURVEYING, PLLC, JMC SITE DEVELOPMENT CONSULTANTS, LLC, JOHN MEYER CONSULTING, INC. (JMC). Any reproduction or alteration to this document and/or its use without permission of JMC shall render such use unlawful.

April 26, 2022

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

Re: JMC Project 18119
Beacon Commons
16 West Main Street
City of Beacon, NY 12508

***Site Plan Approval***

Dear Chairman Gunn and Members of the Planning Board:

On behalf of Farrell Building Company, we are pleased to provide five (5) sets of JMC Drawing C-801 "Sight Distance Plan", revised 04/26/2022, for review and approval. We understand that memoranda were issued from John Clarke Planning and Design, dated 04/07/2022 and Lanc & Tully Engineering and Surveying, P.C., dated 04/08/2022. We are working on addressing the comments and at this point most are minor technical details, some of which will need to be confirmed prior to construction and involve site and roadway disturbance to do so. We respectfully request those types of comments be handled as conditions of approval. We would like to address the other minor technical comments and construction details after the public hearing so we can gather all comments and respond.

We feel the primary remaining comment pertains to the proposal to remove existing on-street parking spaces to provide sight distance at the West Main Street driveway. The sight distance analysis was revised to locate the exiting vehicle position closer to the edge of the travel lane which shows less impacts/removal of the existing on-street parking spaces while still providing adequate sight distance. This results in a net loss of 5 existing on-street parking spaces which are all along the site frontage. The previously submitted version resulted in a loss of 13 existing on-street parking spaces.

We trust that the enclosed plan is sufficient for the Planning Board's review and we look forward to discussing the project at the 05/10/2022 public hearing. In the interim, if you have questions or require additional information, please do not hesitate to contact our office at (914) 273-5225.

Sincerely,

JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC

Stephen Spina, PE
Senior Project Manager
cc: Mr. Steve Zagoren Mr. Aryeh Siegel
*p:\2018\18119\admin\ltrgunn 04-26-2022.docx*

**John Clarke Planning and Design** jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: May 6, 2022
Re: **Beacon Commons, 16 West Main Street, Site Plan and Merger of Three Lots**

I have reviewed a cover letter and revised Sight Distance Plan from JMC, both dated April 26, 2022. Since no other new documents were provided, I have repeated most of the previous comments from my memo to the Planning Board on April 7, 2022.

**Proposal**

The applicant is proposing to construct a 62-unit multifamily building on a 1.5-acre site in the Linkage and R1-7.5 districts and within the Local Waterfront Revitalization Program (LWRP) boundary.

**Comments and Recommendations**

1. Parking in the adjacent residential district will need a Special Permit from the City Council. The Planning Board should issue a recommendation to the Council.

2. For the Sheet 9 Lighting Plan:

    a. The fixture illustrations and a summary of the specifications should be shown on the plans, confirming the full cut-off, temperatures, and Color Rendering Index to comply with Section 223-14B. Four of the fixtures specified have a CRI of 70, outside the 80-100 range.

    b. For the underpass driveway, I suggest two canopy lights near both ends and crosswalks.

3. The revised Sight Distance Plan reduces the number of existing on-street parking spaces that will need to be removed for the new driveway. These lost spaces will be somewhat balanced by the addition of two new on-street spaces along Bank Street.

4. For the Sheets A-100 to A-200 Building Plans:

    a. Scaled elevations should be provided with building heights and floor-to-floor heights labeled, along with major rooftop features and a detail for the roof railings.

    b. Acceptable rooftop accessory structures are described in Section 223-41.21 D(5), including the need for a 15-foot setback from the front edge of the roof. The proposed storage room, bathroom, and kitchen do not meet the setback requirement.

    c. A complete roof plan should be provided with locations for mechanical equipment. The rooftop plantings should be generally described, and the applicant should consider green coverings for the rest of the roof.

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

John Clarke, Beacon Planning Consultant

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

May 10, 2022

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

RE: Site Plan and Traffic Review #2 for ***Beacon Commons*** **Proposed Residential Development**, 16 West Main Street, City of Beacon, Dutchess County, New York; CM Project No. 121-295

Dear Chairperson Gunn:

Creighton Manning Engineering, LLP (CM) has performed a review of the documents listed below in connection with the proposed residential apartment building development located at 16 West Main Street in the City of Beacon, NY. The following documents prepared by JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC (JMC) were reviewed:

- Site Plan (Sheet 4 of 26), revised March 25, 2022
- Garbage Truck Turning Plan (Sheets 10-11 of 26), revised March 25, 2022
- Fire Truck Turning Plan (Sheets 12-14 of 26), revised March 25, 2022
- Sight Distance Plan (Sheet 16 of 26), revised March 25, 2022
- Traffic Impact Study, revised March 8, 2022

Located in the (L) Linkage District, the proposed four-story, 62-unit apartment building will consist of 33-one bedroom units and 29-two bedroom units. 62 off-street parking spaces inclusive of three handicap spaces. The parking area will be accessed via one full-movement driveway on West Main Street providing ingress and egress and one ingress-only driveway on Bank Street. It should be noted that CM conducted its initial review of this project in October 2020 and circulated a comment letter dated October 12, 2020 (2020 Review Letter). CM is not in receipt of a response letter addressing the comments contained in the 2020 Review Letter.

We offer the following comments:

**Site Plan**

1. The proposed "Off-Street Parking Area" accessory use adheres to the CBC 223-41.21B.1(3). The 62 spaces provided complies with CBC 223-41.21F(2a). **– 2020 Review Letter Comment**
2. Exterior bicycle racks and internal bicycle storage facilities are recommended. **– 2020 Review Letter Comment**
3. This project is a Transit-Oriented Development (TOD). The applicant should demonstrate how future residents would access the train station on foot and by bicycle, and propose the necessary features to promote a safe and direct travel path. **– 2020 Review Letter Comment**
4. The internal intersection (right) created by the ingress-only driveway on Bank Street should be reexamined for additional traffic control. **– 2020 Review Letter Comment**
5. How will this project accommodate larger vehicles (i.e., single-unit box trucks and tractor trailers) commonly used by moving companies?

**Garbage Truck & Fire Truck Turning Plans**

1. As noted in the 2020 Review Letter, CM acknowledged that JMC submitted plans to the City of Beacon Fire Department and that no response has been received. Is a response from the Fire Department still forthcoming? CM recommends that sign-off from the Fire Department be made a condition of site plan approval.

2. As noted in the 2020 Review Letter, CM requested that the applicant confirm that 14 feet of vertical clearance underneath the bridge connector is adequate to accommodate all potential vehicles, including moving trucks, garbage trucks, and emergency response vehicles. CM notes that the clear height has been further reduced to 12'-8". Please confirm that this clear height is adequate for the movements shown on the submitted turning movement plans.

**Sight Distance Plan**

1. In order to achieve the required sight distance for a 35-mph design speed, the applicant is proposing to remove 12 on-street parking spaces from the north side of West Main Street. Two on-street parking spaces can be created by Bank Street as part of the project resulting in a net loss of 10 spaces.

**Traffic Impact Study**

1. JMC's Traffic Impact Study is based on traffic data collected in late February 2020. This is considered "pre-pandemic" and should be representative of typical traffic conditions. We note that the satisfactory level of service for eastbound Beekman Street at NY 9D suggests that the eastbound left-turn volume may have been underrepresented. Anecdotally, CM has witnessed PM peak-hour eastbound queues extending to the Beekman Street-West Main Street intersection suggesting that there are capacity constraints on this approach. The eastbound volumes should be verified and queue lengths (i.e., approach volumes) should be considered. Data from prior studies can be cited as necessary.
2. CM reviewed Table 1 and notes that the trip generation is based on the 10th Edition of ITE's *Trip Generation Manual.* In the fall of 2021, ITE published the 11th Edition which included updated data sets and additional data that provided trip generation for mid-rise multi-family development proximate to rail-transit (½-mile). CM notes that based on the 11th Edition data for the same use and number of units, the site-generated trips is less than those used in the study.
    a. 10th Edition
        i. Weekday AM – Entering: 6 | Exiting:16 | Total: 22
        ii. Weekday PM – Entering : 17 | Exiting: 11 | Total: 28
    b. 11th Edition
        i. Weekday AM – Entering: 11 | Exiting: 9 | Total: 20
        ii. Weekday PM – Entering : 8 | Exiting: 10 | Total: 18

    Based on this comparison, the study does not need to be revised as the trip generation used provides a more conservative analysis.
3. The Traffic Impact Study shows that the unsignalized intersection of NY 9D and Tompkins Avenue-Ralph Street will operate at Level of Service F in the No Build and Build conditions. The cumulative traffic associated with other development projects is responsible for this change in level of service; as traffic levels on NY 9D increase, the wait time for traffic on the side streets will increase. It is difficult to mitigate the level of service at an unsignalized intersection, and while JMC does not assign Beacon Commons traffic to Tompkins Avenue, the potential exists for future residents to use Tompkins Avenue as an alternative to Beekman Street. Therefore, we recommend that the safety features of this intersection (e.g., sight distance, condition of markings, and need for traffic control and/or warning signs) be evaluated. **– 2020 Review Letter Comment**

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\16 West Main (Beacon Commons)\Beacon Commons_Review 2.docx

# LANC & TULLY
## ENGINEERING AND SURVEYING, P.C.

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


April 29, 2022

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

RE: 16 West Main Street/Beacon Commons
City of Beacon
Tax Map No. 5954-25-616969

Dear Mr. Gunn:

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

- Response correspondence from JMC Consulting dated April 26, 2022.
- Plan titled "Site Distance Plan – Beacon Commons", last revised April 26, 2022, as prepared by JMC Consulting.

The applicant has revised the site distance plan to adjust the location of the operator of the vehicle leaving the site at a point 14.5 feet from the edge of the traveled way, where in the previous plan they showed the operator of the vehicle further back on the site. Whereas the previous plan required the elimination of parking stalls further up on West Main Street, the new plan now shows that only the spaces in front of the project site will need to be eliminated. Our office takes no exception to what is shown, but we also defer to the City's Traffic Consultant with regards to any additional comments that they may have on this plan or the previous submitted traffic study.

Based upon the limited submittal, all previous comments from our correspondence of April 8, 2022, are still outstanding. This completes our review at this time. Further comments may be forth coming based upon future submissions. If you have any questions, or require any additional information, please do not hesitate to contact our office.

Very truly,

LANC & TULLY, P.C.

John Russo, P.E.

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

**City of Beacon Planning Board Agenda**
**05/10/2022**

**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 - Supplemental Planning Board Submission Cover Letter.pdf

Exhibit A - Response to Comments Memorandum prepared by Aryeh J. Siegel Architect dated April 26, 2022.pdf

Exhibit B - Response to Comments Memorandum prepared by Hudson Land Design Professional Engineering, P.C. dated April 26, 2022.pdf

Exhibit C - Response to Comments Memorandum prepared by Colliers Engineering & Design, P.C. dated April 25, 2022.pdf

Exhibit D - Traffic & Parking Management Plan prepared by Colliers Engineering & Design P.C., dated April 25, 2022.pdf

Sheet 1_Site Plan_Planning Board Submission 7_220222.pdf

Sheet 2_Full Site Plan_Planning Board Submission 7_220222.pdf

Sheet 3_Existing Conditions and Demoltion Plan_Planning Board Submission 7_220222.pdf

Sheet 4_Landscape and Lighting Plan_Planning Board Submission 7_220222.pdf

Sheet 5_Floor Plans_Hotel_Planning Board Submission 7_220222.pdf

Sheet 6_Floor Plans_Church_Planning Board Submission 7_220222.pdf

Sheet 7_Elevations_Church_Planning Board Submission 7_220222.pdf

Sheet 8 - 1113 Wolcott Ave-GRADING & UTILITY.pdf

Sheet 9 - 1113 Wolcott Ave-E&SC PLAN.pdf

Sheet 10 - 1113 Wolcott Ave-VEHICLE TRACKING PLAN.pdf

Sheet 11 - 1113 Wolcott Ave-SITE DETAILS.pdf

Sheet 12 - 1113 Wolcott Ave-STORMWATER DETAILS.pdf

Sheet 13 - 1113 Wolcott Ave-WATER & SEWER DETAILS.pdf

Sheet 14 - 1113 Wolcott Ave-E&SC DETAILS.pdf

Planner Comments 1113 Wolcott Av 5.6.22.pdf

Traffic Comments 1113 Wolcott Avenue_Rev 5.pdf

Engineer Comments 1113 Wolcott.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

April 26, 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").

At this time, we are requesting to appear to provide a status update to the Planning Board. Since last appearing before the Planning Board on March 8, 2022, the Applicant appeared before the Zoning Board of Appeals ("ZBA") as an Involved Agency in the coordinated State Environmental Quality Review Act ("SEQRA") environmental review of the Project at the ZBA's March 15th and April 19th meeting Agendas. Additionally, the Applicant received initial feedback from the New York State Department of Transportation ("NYS DOT"). In response to the NYS DOT's comments, the Applicant is now proposing to limit the northerly driveway to use during events and for emergency access and deliveries only, as detailed further below.

This letter and its enclosures also further respond to the comments raised by the Board at its March 8th meeting and to the comments contained in the memoranda prepared by the City's Engineering Consultant, Lanc & Tully, dated February 28, 2022 (the "Engineering Comments Memorandum"); the City's Planning Consultant, John Clarke Planning and Design, dated March 3, 2022 (the "Planning Comments Memorandum"); and the City's Traffic Consultant, Creighton Manning, dated March 7, 2022 (the "Traffic Comments Memorandum").

**THE REVISED SITE PLAN & UPDATED SITE CIRCULATION:**

The Applicant has revised the Site Plan to gate the northerly driveway and to limit its use to events

and for emergency access and deliveries.[1] The circulation flow of the main driveway remains two-way, with the northern driveway acting as egress only. Of note, the driveway configurations have been modified to reduce the driveway openings to the greatest extent practicable while still being able to accommodate the anticipated largest vehicles accessing the site. As recommend by the City's Traffic Consultant, Creighton Manning, the northerly exit-only driveway opening width has been significantly reduced by limiting the northern radius since this driveway will not need to accommodate right-turn entering vehicles. As is discussed more fully herein, these updated site operational details are now incorporated into the Applicant's traffic and parking consultant, Colliers Engineering & Design's ("Colliers") Response to Comments Memorandum and revised Traffic and Parking Management Plan (the "Parking Management Plan"). *See* **Exhibits C & D**.

In support of this Application and consistent with the pattern of street trees in front of adjacent properties, two (2) additional canopy trees and low landscaping have also been added in front of the hotel.[2] Both the trail and stair configuration and lighting provided therein have been further refined. The path lights and parking lot light pole specifications have been revised to a more traditional, historical compatible light design, while the path connecting the Premises through to Beekman Street has been updated to reflect a five (5) foot wide walkway consisting of compacted gravel and, in places where existing grades are too steep for a walking path, a generic steel staircase with metal handrail detail has been added.[3]

**RESPONSE TO NYS DOT COMMENTS AND THE REVISED TRAFFIC & PARKING MANAGEMENT PLAN:**

As noted above, based on the NYS DOT's comments contained in its April 7, 2022 letter to the Applicant, the Applicant now proposes to gate the northerly exit only driveway during typical operations. This driveway will be managed by the Applicant to only be utilized for emergency access and deliveries and during events. During events the gate will be opened, and the onsite circulation will be managed by on-site staff to enforce a one-way clockwise circulation with all vehicles entering at the southerly driveway and exiting at the northerly driveway. As identified in the revised Traffic & Parking Management Plan, which is enclosed as **Exhibit D**, temporary one-way signage will be provided at the main driveway during events to further indicate the one-way

[1] Note: The Board may recall that the Applicant's prior submission eliminated the proposed loop drive in front of the church and replaced it with the reestablishment of the existing northern driveway to the Premises to develop a one-way exit only driveway connecting to the proposed parking area behind the hotel building.

[2] Note: The landscaping schedule and specifications will be revised in a subsequent submission to reflect these updates.

[3] Note: The staircase will be subject to final design by the stair manufacturer once selected.

nature of the driveway.

In an effort to prevent any event attendees from crossing Route 9D – except at the designated crosswalks – and to mitigate traffic along Route 9D, a third on-site attendant is now proposed to be posted at the entrance during events to direct traffic entering the site for drop-off/pick-up. If additional attendants are required onsite to ensure efficient traffic flow, the Applicant will provide them as needed.[4] Further, the Applicant will agree to post temporary signage indicating "No Event Parking, Residents Only" at the driveways to the River Ridge and West End Lofts developments if agreed to by those neighboring developments. In addition, if acceptable to the City, temporary "Event Parking" signs will also be posted at the Municipal Plaza and Tompkins Lots to direct patrons to these lots. These signs are now included in the revised Traffic & Parking Management Plan with an indication that they are subject to approval by the City of Beacon and the neighboring residential developments.

We would also note that, in an abundance of caution, and in an effort to mitigate any and all potential traffic impacts, the Applicant is proposing monitoring of the event conditions within a 6-12 month period after initial occupancy of the event space to ensure the Traffic & Parking Management Plan is achieving its goals and also agreeing to incorporate further refinements at that time if necessary. This monitoring will be worked into the Project approvals with the City of Beacon. *See* **Exhibit D**.

**TRAFFIC & PARKING SENSITIVITY ANALYSIS:**

In order to provide this Board with an understanding of how the site could realistically operate and as recommended by the City's Traffic Consultant, the Applicant's traffic consultant, Colliers Engineering, has prepared the enclosed Traffic & Parking Sensitivity Analysis to further assess potential traffic and parking effects of the Project. *See* **Exhibit C**. The Sensitivity Analysis focuses on the traffic and parking impacts of planned maximum attendance events, totaling 350 persons for limited events, to be held within the Church building. As part of this Analysis, the traffic and parking demand for employees and for the planned off-site parking locations is further accounted for within the traffic volume and parking demand projections for the Project.

As is further detailed therein, the results of the traffic analyses are generally consistent with the analysis results provided in the Traffic & Parking Study, which concluded that the Project is not

[4] Note: The driveway provides approximately 160-170 feet of stacking distance between the drop-off/pick-up location and Route 9D, which can accommodate 7-8 passenger car vehicles in a single queue before backing onto Route 9D. It is not anticipated that a queue exceeding this storage distance will occur, but in the event that the storage distance is exceeded, there is sufficient width in the entry driveway to form two queues if necessary.

anticipated to have a significant impact on traffic conditions in the vicinity of the Project site. Further, using the Sensitivity Analysis assumptions and accounting for the thirty-two (32) parking spaces provided on-site, the total required off-site parking spaces to accommodate these events is seventy-eight (78) parking spaces, which parking is sufficiently accounted for by the public parking in the vicinity of the site, including the Tompkins Lot, the Municipal Plaza Lot and Beekman Street on-street metered parking. Moreover, to further supplement this parking, the Applicant is currently finalizing an agreement with the Riverview Funeral Home located at 2 Beekman Street to utilize forty-six (46) parking spaces during the on-site events. *See* **Exhibit C**.

**REFERRAL TO THE ZONING BOARD OF APPEALS:**

As this Board is 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 was reviewed by the Building Inspector, this Board as Lead Agency in the coordinated SEQRA environmental review of the Project referred the Project to the 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.

Subsequently, the Building Inspector issued a determination regarding the required off-street parking for the *current* proposal for a hotel and accessory conference center/event space with a maximum of 350 people at occasional larger weekend events. That determination indicated that notwithstanding the 1964 parking exception that could be applied to the Premises and proposed uses *if* the parking requirement for the proposal only required eighty-six (86) parking spaces (i.e., 25% more than the sixty-nine (69) spaces required for the Church use in 1964), the present proposal with occasional events of 350 people requires one hundred thirty-six (136) spaces, and thus a parking variance for one hundred four (104) spaces (the total number of spaces not provided on-site) is required.

As noted above, the Applicant has since appeared before the ZBA at its March 15th and April 19th meeting Agenda, and will be returning to the ZBA at its May 17th meeting Agenda to address comments from the Board and in further support that the Project as proposed does not have any potentially significant environmental impacts.

**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 April 26, 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 April 26, 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 April 25, 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 April 26, 2022, numbered and titled as follows:

- Sheet 1 of 14 Site Plan;
- Sheet 2 of 14 Full Site Plan;
- Sheet 3 of 14 Existing Conditions & Demolition Plan;
- Sheet 4 of 14 Landscape Plan & Planting Schedule;
- Sheet 5 of 14 Hotel Building Plans & Elevations;
- Sheet 6 of 14 Conference Center Plans;
- Sheet 7 of 14 Conference Center Elevations;
- Sheet 8 of 14 Grading & Utility Plans;[5]
- Sheet 9 of 14 Erosion and Sediment Control Plan;[6]
- Sheet 10 of 14 Vehicle Tracking Plan;
- Sheet 11 of 14 Site Details;
- Sheet 12 of 14 Stormwater Details;
- Sheet 13 of 14 Water & Sewer Details; and
- Sheet 14 of 14 Erosion and Sediment Control Details.

[5] Note: HLD continues to monitor the weather in order to arrange soil testing with the Planning Board's Engineering Consultant, Lanc & Tully.

[6] Note: The light pole/bollard locations have been added to Sheets 8 & 9.

**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 April 26, 2022, providing responses to the Planning Comments Memorandum;

**Exhibit B**: Response to Comments Memorandum prepared by Hudson Land Design Professional Engineering, P.C. dated April 26, 2022, providing responses to the Engineering Comments Memorandum;

**Exhibit C**: Response to Comments Memorandum prepared by Colliers Engineering & Design, P.C., dated April 25, 2022, providing responses to the Traffic Comments Memorandum and enclosing the DOT Response Letter and Traffic and Parking Sensitivity Analysis; and

**Exhibit D:** Revised Traffic and Parking Management Plan prepared by Colliers Engineering & Design P.C., dated April 25, 2022.

We look forward to appearing at the Planning Board's May 10th regular meeting to continue the review of the Project and to continue the environmental review process.

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*

April 26, 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 March 3. 2022. Please refer to Hudson Land Design's response letter regarding Lanc & Tully's letter dated February 28, 2022.

**John Clarke Planning and Design Comment Responses:**

1. Comment acknowledged. Discussion of parking will continue with the Planning Board. The Applicant appeared before the Zoning Board of Appeals to review the project with regard to SEQRA.

2. Comment acknowledged.

    a The Applicant is reviewing parking solutions to present to the Planning Board. 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.

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

3. For Sheet 1
    a Comment acknowledged. The Applicant will continue review of the driveway system with the Planning Board.

    b The aprons for the driveways have been revised to reduce the width at the entrances.

4. For Sheet 4-6
    a Canopy street trees and additional low landscaping have been added in front of the hotel. The landscaping schedule and specifications for the 2 new street trees will be revised for the next submission.

    b Path light specifications have been revised to show a more traditional light. Additionally, the parking lot light pole specification has been revised to a more traditional light.

5. Comment acknowldedged. An enlarged elevation has been provided for the deck railing.

**Lanc & Tully Comment Responses:**

**Sheet 1 – Site Plan**
1. The lighting is shown on the site plan

**Sheet 2 – Full Site Plan**
1. Lighting along the pedestrian path to Beekman Street has been added.

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*

April 26, 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 28, 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 March 3, 2022 comment letter.

**Lanc & Tully February 28, 2022 Comment Letter**

General Comments

1. The plans now call out the trail to be 5 feet wide with compacted gravel. A detail has been added to Sheet 11 of the plan set. Please note that an additional detail sheet was added for the additional required construction details bringing the total sheet count to 14.
2. Aryeh Siegel has responded to this comment under separate cover. The driveway outline has bene removed from Sheets 1 & 2.
3. A generic steel staircase with metal handrail detail has been added to the Sheet 11 of the revised plan set. The staircase will be subject to final design by the stair manufacturer once selected.
4. Traffic control signage with sizing has been added to the plan view on Sheet 8, and details have been added to sheet 11 of the revised plan set.
5. A note requiring maintenance of the pedestrian trail has been added to the plan set.

Sheet 1 of 13 – Full Site Plan

1. 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. The light pole/bollard locations have also been added to Sheets 8 & 9.

Sheet 8 of 13 – Grading & Utility Plan

1. The soil testing will be coordinated with Lanc & Tully's (L&T) office as soon as possible and weather permitting. We will continue to monitor the weather in the next week and set up a date with L&T.
2. The two light poles as well as trail bollard lights are now shown on the plan.
3. The accessible signage and "no parking" signs are shown on the plan set. The "no parking" sign has been moved out of the access path.

Sheet 11 of 13 – Site and Erosion & Sediment Control Details

1. The concrete paver detail has been removed from the plans.

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)

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

Colliers
Engineering
& Design

April 25, 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 have reviewed the most recent comments received from Creighton Manning's (CM) letter dated March 7, 2022. The following provides detailed responses to each of these items. It should also be noted that comments were received by the Applicant from NYSDOT on April 7, 2022. These comments are attached for the Boards information along with a separate response letter addressing the specific NYSDOT comments.

As part of the NYSDOT comments it is important to note that NYSDOT has indicated their preference to not have two exit driveways to NYS Route 9D due to potential safety concerns. In order to address this, it is now proposed for the northerly exit only driveway to be gated and only be used during events and for emergency access and deliveries during typical operations.

## Site Plan

1. On-site vehicular circulation should be clarified. We have the following questions:

- CM Review #4 Follow-Up Comment: 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.

  ***Response:*** ***Stop signs and Stop bars are now proposed at both the main driveway exit lane and the northerly exit driveway location.***

- CM Review #4 Follow-Up Comment: 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.

Colliers Engineering & Design

***Response:*** ***The driveway configurations have been modified to reduce the driveway openings to the greatest exit practicable while still being able to accommodate the anticipated largest vehicles accessing the site. The northerly exit only driveway opening width has been significantly reduced, as suggested, by limiting the northern radius since this driveway will not need to accommodate right turn entering vehicles.***

2. Please provide intersection and stopping sight distances for the existing driveway.

- 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.

***Response:*** ***No further response required***

## Traffic Impact & Parking Study

3. CM reviewed the trip generation methodology:

- 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.

***Response:*** ***See attached Traffic & Parking Sensitivity Analysis Technical Appendix.***

- 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.

- CM Review #4 Follow-Up Comment: CM has no further comments.

***Response:*** ***No further response required***

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.

- 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?

*Response:* ***There is no specific designation for this additional off-street parking space, but if necessary, it could be designated as an employee only space to accommodate café employees. Note the Applicant maintains that the Hotel will only have one employee on-site at any time.***

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 Engineering & Design

- 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.

  *Response:* ***The Applicant is in the process of finalizing an agreement with the nearby Riverview Funeral Home located at 2 Beekman Street, near the Wolcott Avenue/Beekman Street intersection, which will allow for the use of 46 parking spaces during the on-site events. This will reduce the total need for the use of offsite public parking from 88 spaces to 42 spaces. The details of this agreement at being finalized and will be provided to the Board upon completion.***

## Draft Traffic & Parking Management Plan

1. CM recommends that the entrance sign be changed to read "NO EVENT PARKING, DROP-OFF/PICK-UP ONLY."

   *Response:* ***The temporary entrance signage wording has been adjusted as suggested.***

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.

   *Response:* ***Posting of a third traffic attendant roadside along Route 9D would seem to cause potential for queuing of vehicles along Route 9D which would be a concern of the NYSDOT. If additional attendants are required onsite to ensure efficient traffic flow, the Applicant will provide them as needed.***

3. Cones should be place along the parallel parking spaces on the north side of the hotel building.

   *Response:* ***Cones have been added to the parallel parking spaces on the north side of hotel building.***

Colliers Engineering & Design

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."

   ***Response:*** ***The Applicant will agree to post temporary signage indicating "No Event Parking, Residents Only" at the driveways to the River Ridge and West End Lofts developments if agreed to by those neighboring developments. In addition, if acceptable to the City, temporary "Event Parking" signs will also be posted at the Municipal Plaza and Tompkins Lots to direct patrons to these lots. These signs are now included in the Traffic & Parking Management Plan with an indication that they are subject to approval by the City of Beacon and the neighboring residential developments.***

Sincerely,

Colliers Engineering & Design CT, P.C.

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

R:\Projects\2021\21004333A\Correspondence\OUT\220425RGD_CM 3.7.2022 Comment Response.docx

Colliers Engineering & Design

# Technical Appendix

## NYSDOT Letter April 7, 2022

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

KATHY HOCHUL
Governor

MARIE THERESE DOMINGUEZ
Commissioner

LANCE MacMILLAN, P.E.
Regional Director

April 7, 2022

Richard D'Andrea. P.E., PTOE
Colliers Engineering & Design
400 Columbus Avenue Suite 180E
Valhalla, New York 10595

**Re: NYSDOT SEQRA# 21-214**
**1113 Wolcott Avenue**
**City of Beacon**
**Dutchess County**

Dear Mr. D'Andrea,

The New York State Department of Transportation (NYSDOT) has reviewed the submitted plans dated June 29, 2021 and Traffic & Parking Study dated February 21, 2022 for the 1113 Wolcott Avenue project on Route 9D located in the City of Beacon. Below we offer the following comments:

1. Having two exits onto Route 9D poses for a safety concern. NYSDOT recommends either designing for a "circular" driving pattern, where the southern driveway will be an entrance only and the northern driveway will be an exit only or eliminating the exit only altogether. Please look at possible designs where this could work.

2. There is concern for when large events occur, people will be crossing Route 9D not at the designated crosswalks and there could be potential accidents with pedestrian and cars making turns. Please try to refigure a drop off location so cars can make a turn around.

3. Please provide us with how you plan on mitigating the traffic backup on Route 9D during events so that it does not adversely affect normal traffic.

4. For off street parking, have the owners of the parking lots been in contact and have given a written agreement that they would allow the parking during the 350 persons event?

5. A Perm 32 – Highway Work Permit Application for Utility Work will be required for the proposed sewer and water connections.

6. Please provide a drainage study verifying that all drainage will be staying on site and not entering the NYSDOT drainage system.

7. Please include sign details on the plans meeting all MUTCD requirements.

8. Please include the existing pavement striping on the vehicle maneuvering plan.

9. Please include a Work Zone Traffic Control Plan.

10. Please clarify the limits at which the sidewalk is being replaced.

11. Please update your pavement restoration details to reflect the information below:

    1 ½" Top Course Item 402.1261013
    2 ½" Binder Course Item 402.256903
    8" Base Course Item 402.376903 (2 4" lifts)
    12" Subbase Course Item 304.11000008

12. Please include a stop bar and stop sign at all exits onto Route 9D meeting NYSDOT standards and specifications.

Please let me know if you have any questions on any of the above items or if I can be of any assistance.

Very truly yours,

Cassandra Bibbo

**Cassandra Bibbo, EIT**
Permit Engineer, Residency 8-3

**New York State Department of Transportation, Hudson Valley**
106 Ludingtonville Road, Holmes, NY 12531
(845) 878-6363 | Cassandra.Bibbo@dot.ny.gov | www.dot.ny.gov

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

Colliers Engineering & Design

# Techinical Appendix

## NYSDOT Comment Response Letter

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

Colliers
Engineering
& Design

April 25, 2022

Ms. Cassandra Bibbo, EIT
Permit Engineer, Residency 8-3
New York State Department of Transportation
106 Lundingtonville Road
Holmes, NY 12531

SEQRA # 21-214 - 1113 Wolcott Avenue
City of Beacon, Dutchess County, New York
Colliers Engineering & Design Project No. 21004333A

Dear Ms. Bibbo:

The following items are in response to comments in your letter dated April 7, 2022, regarding the 1113 Wolcott Avenue project in the City of Beacon, Dutchess County, New York. The items are numbered according to your review comments for ease of review.

1. Having two exits onto Route 9D poses for a safety concern. NYSDOT recommends either designing for a "circular" driving pattern, where the southern driveway will be an entrance only and the northern driveway will be an exit only or eliminating the exit only altogether. Please look at possible designs where this could work.

   ***Response:*** ***The Project now proposes to gate the northerly exit only driveway during typical operations. This driveway will be managed by the Project to only be utilized for emergency access and during events. During events the gate will be opened, and the onsite circulation will be managed by on-site staff to enforce a one-way clockwise circulation with all vehicles entering at the southerly driveway and exiting at the northerly driveway. As identified in the revised Traffic & Parking Management plan, which is attached, temporary one-way signage will be provided at the Main Entry driveway during events to further indicate the one-way nature of the driveway.***

2. There is concern for when large events occur, people will be crossing Route 9D not at the designated crosswalks and there could be potential accidents with pedestrian and cars making turns. Please try to refigure a drop off location so cars can make a tum around.

   ***Response:*** ***The on-site circulation is setup for drop-off/pick-up operations to occur on-site. As now specified in the Traffic & Parking Management plan a 3rd on-site attendant is now proposed to be posted at the entrance during events to direct traffic entering the site for drop-off/pick-up. Furthermore, the information to be disseminated regarding available parking in the vicinity of Site is intended to reduce the need for drop-off/pick-up on the Site. The primary parking locations identified for the events a located north and south of the site along Route 9D at the Tompkins Lot, the City of Beacon Municipal***

Colliers Engineering & Design

*Plaza Lot and as discussed further below the Riverview Funeral Home. Only the Tompkins lot is located on the opposite side of Route 9D from the project site. The most logical location for pedestrians to cross Route 9D to the Site from this lot is at the existing RRFB Crosswalk located at the north end of the Site.*

3. Please provide us with how you plan on mitigating the traffic backup on Route 9D during events so that it does not adversely affect normal traffic.

   *Response: As note previously, and identified in the Traffic & Parking Management Plan, a 3rd on-site attendant is now proposed to be posted at the entrance during events to direct traffic entering the site for drop-off/pick-up. Furthermore, the driveway provides approximately 160-170 ft. of stacking distance between the drop-off/pick-up location and Route 9D which can accommodate 7-8 passenger car vehicles in a single queue before backing onto Route 9D. It is not anticipated that a queue exceeding this storage distance will occur, but in the event that the storage distance Is exceeded, there is sufficient width in the entry driveway to form two queues if necessary.*

   *It should also be noted that the Traffic & Parking Management plan now includes a provision for monitoring of the event conditions within a 6-12 month period after initial occupancy of the event space to ensure there the Traffic & Parking Management Plan is achieving this goals and to incorporate further refinements at that time if necessary. This monitoring will be worked into the Project approvals with the City of Beacon.*

4. For off street parking, have the owners of the parking lots been in contact and have given a written agreement that they would allow the parking during the 350 persons event?

   *Response: Each of the parking lots identified in the Traffic & Parking Study for use during on-site events are public parking areas owned and operated by the City of Beacon. The City of Beacon Metro-North Train Station parking lot, which is publicly available metered parking, has a potential parking area.*

   *In addition to those locations identified in the Traffic & Parking Study, the Applicant is also working on finalizing an agreement with the nearby Riverview Funeral Home located at 2 Beekman Street, near the Wolcott Avenue/Beekman Street intersection, which will allow for the use of 46 parking spaces during the on-site events.*

Colliers Engineering & Design

5. A Perm 32 - Highway Work Permit Application for Utility Work will be required for the proposed sewer and water connections.

   *Response: Comment noted. A PERM 32 Permit Application will be included with the overall Highway Work Permit Application. It is noted that a Use & Occupancy Permit will also be required for these utility connections with the NYSDOT Right-of-Way. An application for the U&O Permit will also be provided to the Department.*

6. Please provide a drainage study verifying that all drainage will be staying on site and not entering the NYSDOT drainage system.

   *Response: A drainage study is currently be prepared by the Site Engineer, Hudson Land Design, and will be provided to the Department for review once complete.*

7. Please include sign details on the plans meeting all MUTCD requirements.

   *Response: Sign details including MUTCD Sign Numbers, Sign Sizes and locations in accordance with the MUTCD have been added to the Site Plans, which are enclosed.*

8. Please include the existing pavement striping on the vehicle maneuvering plan.

   *Response: Existing pavement striping along NYS Route 9D has been added to the vehicle maneuvering plans.*

9. Please include a Work Zone Traffic Control Plan.

   *Response: Work Zone Traffic Control Plans for the proposed driveway, sidewalk and utility installations work within the NYSDOT will be provided as part of the Highway Work Permit Application, to be submitted at a later date.*

10. Please clarify the limits at which the sidewalk is being replaced.

    *Response: The limits of sidewalk replacement have been clarified on the Plans.*

11. Please update your pavement restoration details to reflect the information below:
    ½" Top Course Item 402.1261013
    ½" Binder Course Item 402.256903
    8" Base Course Item 402.376903 (2 4" lifts)
    12" Subbase Course Item 304.11000008

    *Response: These items numbers are now reflected on the pavement restoration details. However, it is our understanding that the Department is transitioning to the use of Warm Mix Asphalt (404 Items). Please confirm whether Hot Mix Asphalt or Warm Mix Asphalt items should be specified for this Project.*

Colliers Engineering & Design

12. Please include a stop bar and stop sign at all exits onto Route 9D meeting NYSDOT standards and specifications.

    ***Response:*** ***Stop bars and Stop signs have been added to both the Main Driveway exit lane and the northerly gated exit driveway at NYS Route 9D.***

Sincerely,

Colliers Engineering & Design CT, P.C.

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

R:\Projects\2021\21004333A\Correspondence\OUT\220425RGD_NYSDOT 4.7.22 Comment Response.docx

Colliers Engineering & Design

# Technical Appendix

## Traffic & Parking Sensitivity Analysis

# Traffic & Parking Sensitivity Analysis

Based on discussions with the City of Beacon Planning Board as well as comments from the City's Traffic Consultant, Creighton Manning, a Traffic & Parking Sensitivity Analysis has been conducted for the 1113 Wolcott Avenue Project to further assess the potential traffic and parking impacts of the Project. This sensitivity analysis focuses on the traffic and parking impacts of planned maximum attendance events, totaling 350 persons, to be held within the Church. As part of this analysis, it was requested that the traffic and parking demand for employees be further accounted for within the traffic volume and parking demand projections for the Project. In addition, the traffic analysis has been updated to account for traffic destined to and from the planned off-site parking locations identified to accommodate the parking needs of the planned events. The details of these sensitivity analyses are discussed further below.

## Traffic Sensitivity Analysis

### Site Generated Traffic Volumes

It has been estimated by the Applicant that a typical 350-person event will be staffed by approximately 10 employees/vendors. As indicated in the Traffic & Parking Study dated February 21, 2022, the maximum on-site occupancy including staff & vendors will be 350 persons so the actual event attendance accounting for these 10 employees will be reduced to 340 persons.

Based on the above, 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. However, for the purposes of the 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.

Consistent with the Traffic & Parking Study, for the purposes of the analysis a 2.75 persons per vehicle car occupancy has been utilized for event attendees, which is at the low end of the anticipated vehicle occupancy for the events. In addition, a vehicle car occupancy of 1.0 persons per vehicle has been utilized for the employees/vendors. Applying this to the anticipated maximum occupancy of 350 persons, including 10 employees/vendors, for the larger weekend events results in the anticipated peak entering and exiting traffic volumes as summarized in Table No. 1-S. It has been conservatively assumed that all traffic will either enter or exit during a one-hour period. The sensitivity analysis also accounts for a 10% credit to account for event attendees that are anticipated to arrive to the events via non-vehicular transportation.

### Sensitivity Analysis Arrival/Departure Distributions & Build Conditions Traffic Volumes

In order to account for the fact that all event parking will be accommodated by offsite parking locations, modified arrival and departure distributions for the event conditions have been established accounting for traffic destined to and from the anticipated off-site parking locations. These locations primarily include the Tompkins Lot, the City of Beacon Municipal Plaza Lot, on-street metered parking along Beekman Street and the Riverview Funeral Home at which the Applicant is currently finalizing an agreement to utilize 46 parking spaces during the on-site events. These sensitivity analysis arrival and departure distributions are summarized on Figures No. 12S and 13S, attached.

The event conditions site generated traffic volumes summarized in Table No. 1-S were assigned to the roadway network based on the arrival and departure distributions referenced above. The resulting event conditions site generated traffic volumes for the Friday PM Event Entry Period and Friday PM Event Exit Period are identified on Figures No. 16S and 17S, while the site generated traffic volumes for the Saturday Event Entry and Event Exit Period are identified on Figures No. 18S and 19S. 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 for the sensitivity analysis are shown on Figures No. 22S through 25S.

### Results of Analysis

Capacity analyses were recomputed utilizing the Build Conditions Sensitivity Analysis traffic volumes for each of the study area intersections consistent with the procedures identified in the Traffic & Parking Study. Table No. 2S, attached summarizes the results of the capacity analysis for the 2021 Existing, 2024 No-Build and 2024 Build Event Conditions. The results of these analyses are generally consistent with the analysis results provided in the Traffic & Parking Study which concluded that the Project is not anticipated to have a significant impact on traffic conditions in the vicinity of the Project site. However as previously indicated, 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.

## Parking Sensitivity Analysis

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. 3 of the Traffic & Parking Study indicated a total need parking requirement of 119 parking spaces. However, 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 and no additional persons outside of those attending the events will be permitted in the Café during these times.

As indicated above, it has been estimated by the Applicant that a typical 350-person event will be staffed by approximately 10 employees/vendors. As indicated in the Traffic & Parking Study dated February 21, 2022, the maximum on-site occupancy including staff & vendors will be 350 persons so the actual event attendance accounting for these 10 employees will be reduced to 340 persons. However, as part of this sensitivity analysis, employee/vendor parking will be accounted for separately at a rate of 1.0 parking spaces per employee/vendor.

Consistent with the parking analysis conducted in the Traffic & Parking Study it is also assumed that 10% of event attendees will arrive via non-vehicular modes of transportation and therefore will not generate any additional parking demand. Applying this 10% reduction, the total number of event occupants arriving by personal vehicle would be 306 occupants *(340 occupants X 0.90% non-vehicular = 315 Occupants)*. In addition, 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. For the purposes of the sensitivity analysis, it is assumed that 50% of the hotel guests will also be attending an event in the Church building. Assuming a room occupancy of two (2) persons per room this would reduce the total occupants arriving at events by personal vehicle to 276 occupants *(15 rooms X 2 persons/room = 30 occupants in Hotel also attending events, 306 – 30 = 276 occupants by personal vehicle)*

The below provides a summary of the anticipated parking demand based on the City of Beacon Code parking requirements and accounting for the credits identified above. In addition, as indicated previously the table also provides for 10 spaces for employees/vendors.

**Table No. 3S – Event Conditions Sensitivity Anticipated Parking Demand**

| Proposed Use | Size | City of Beacon Code Requirement | Required Spaces |
|---|---|---|---|
| Hotel | 30 Rooms<br>1 Employee | 1 Space/Room<br>+1 Space/Employee | 31 Spaces |
| Event Space | 276 Persons (Seats) | 1 Space/4 seats | 69 Spaces |
| Event Space | 10 Employees/ Vendors[1] | 1 Space/4 seats | 10 Spaces |
| | | **Total Anticipated Parking Demand** | **110 Spaces** |
| | | **On-Site Parking Provided** | **32 Spaces** |
| | | **Total Required Off-Site Parking Spaces** | **78 Spaces** |

As noted in the table above the anticipated parking demand for the project during the largest events is 110 spaces using the sensitivity analysis assumptions identified above. Accounting for the 32 parking spaces provided on-site, the total required off-site parking spaces to accommodate these events if 78 parking spaces.

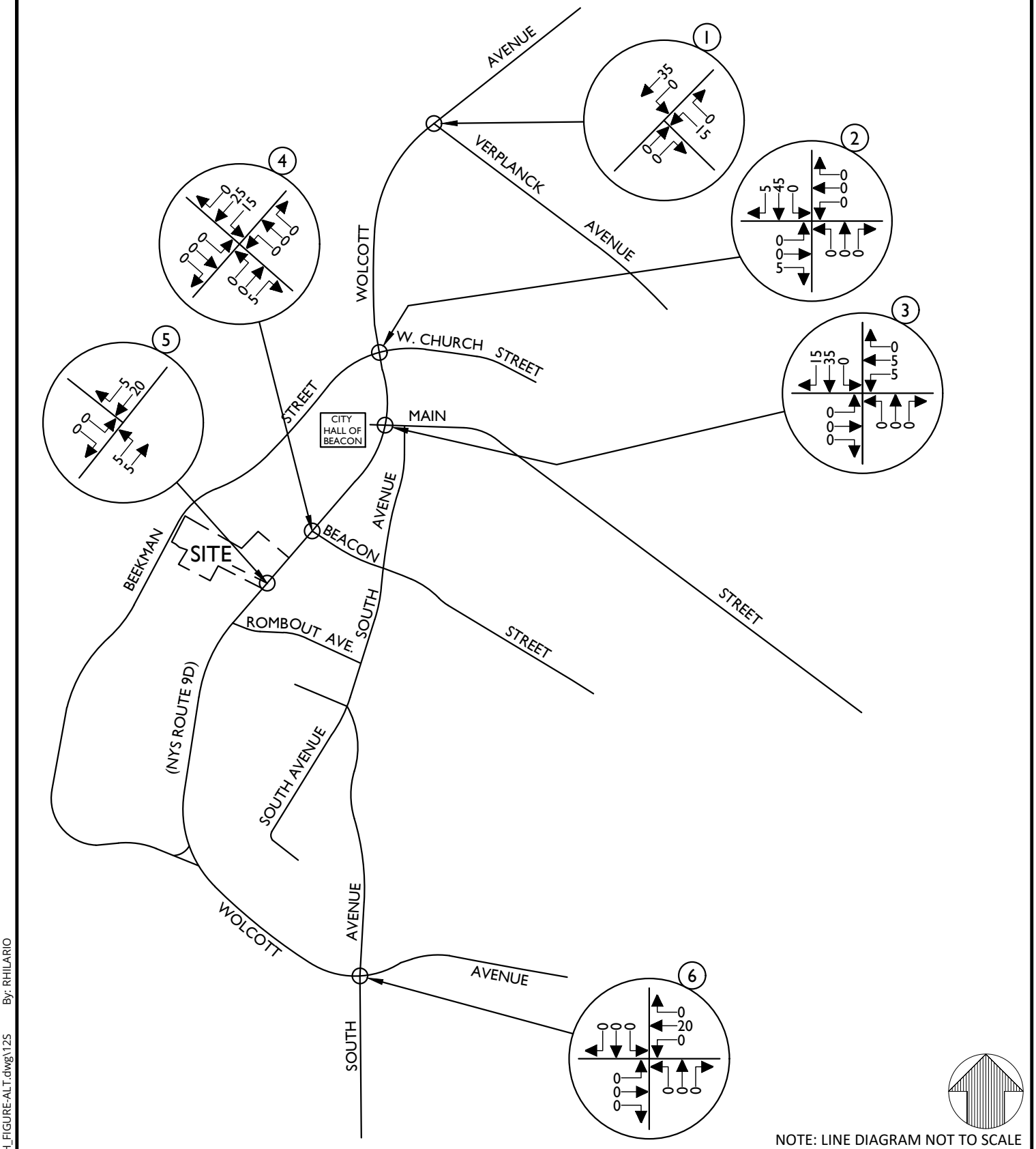
The Traffic & Parking Study had identified sufficient public parking in the vicinity of the site within the nearest public parking locations including the Tompkins Lot, the Municipal Plaza Lot and Beekman Street on-street metered parking to accommodate the parking needs of the Project during these maximum attendance events. To further supplement this parking, the Applicant is currently finalizing an agreement with the Riverview Funeral Home located at 2 Beekman Street to utilize 46 parking spaces during the on-site events. Further information will be provided to the City regarding this agreement will be provided once completed.

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

| 1113 Wolcott Avenue<br>City of Beacon, New York | Entry | | | Exit | | | Total Trips |
|---|---|---|---|---|---|---|---|
| | HTGR[1] | Volume | New Trips[2] | HTGR1 | HTGR[1] | New Trips[2] | |
| **Event Conditions** | | | | | | | |
| Weekday Peak Event Entry Hour | | | | | | | |
| Hotel (30 Rooms) | 0.37 | 11 | 6 | 0.40 | 12 | 8 | 14 |
| Event (340 Attendees) | 0.99 | 124 | 107 | 0.20 | 25 | 19 | 125 |
| Event (10 Employees/Vendors) | 1.00 | 10 | 10 | 0.00 | 0 | 0 | 10 |
| **Total** | - | **145** | **123** | - | **37** | **27** | **149** |
| Weekday Peak Event Exit Hour | | | | | | | |
| Hotel (30 Rooms) | 0.37 | 11 | 6 | 0.40 | 12 | 8 | 14 |
| Event (340 Attendees) | 0.20 | 25 | 18 | 0.99 | 124 | 108 | 125 |
| Event (10 Employees/Vendors) | 0.00 | 0 | 0 | 1.00 | 10 | 10 | 10 |
| **Total** | - | **36** | **24** | - | **146** | **126** | **149** |
| Saturday Peak Event Entry Hour | | | | | | | |
| Hotel (30 Rooms) | 0.50 | 15 | 8 | 0.40 | 12 | 6 | 14 |
| Event (340 Attendees) | 0.99 | 124 | 105 | 0.20 | 25 | 17 | 121 |
| Event (10 Employees/Vendors) | 1.00 | 10 | 10 | 0.00 | 0 | 0 | 10 |
| **Total** | - | **149** | **123** | - | **37** | **23** | **145** |
| Saturday Peak Event Exit Hour | | | | | | | |
| Hotel (30 Rooms) | 0.50 | 15 | 8 | 0.40 | 12 | 6 | 14 |
| Event (340 Attendees) | 0.20 | 25 | 16 | 0.99 | 124 | 106 | 121 |
| Event (10 Employees/Vendors) | 0.00 | 0 | 0 | 0.00 | 0 | 0 | 0 |
| **Total** | - | **40** | **24** | - | **136** | **112** | **135** |

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 attedees and 1.0 Persons per Vehicle car occupancy ratio for Employees/Vendors. It is assumed that all guests & employees/vendors will enter in a one hour period prior to the event and exit in a one hour period following the event.




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 | 3/30/22 | R.H. | P.J.G. |

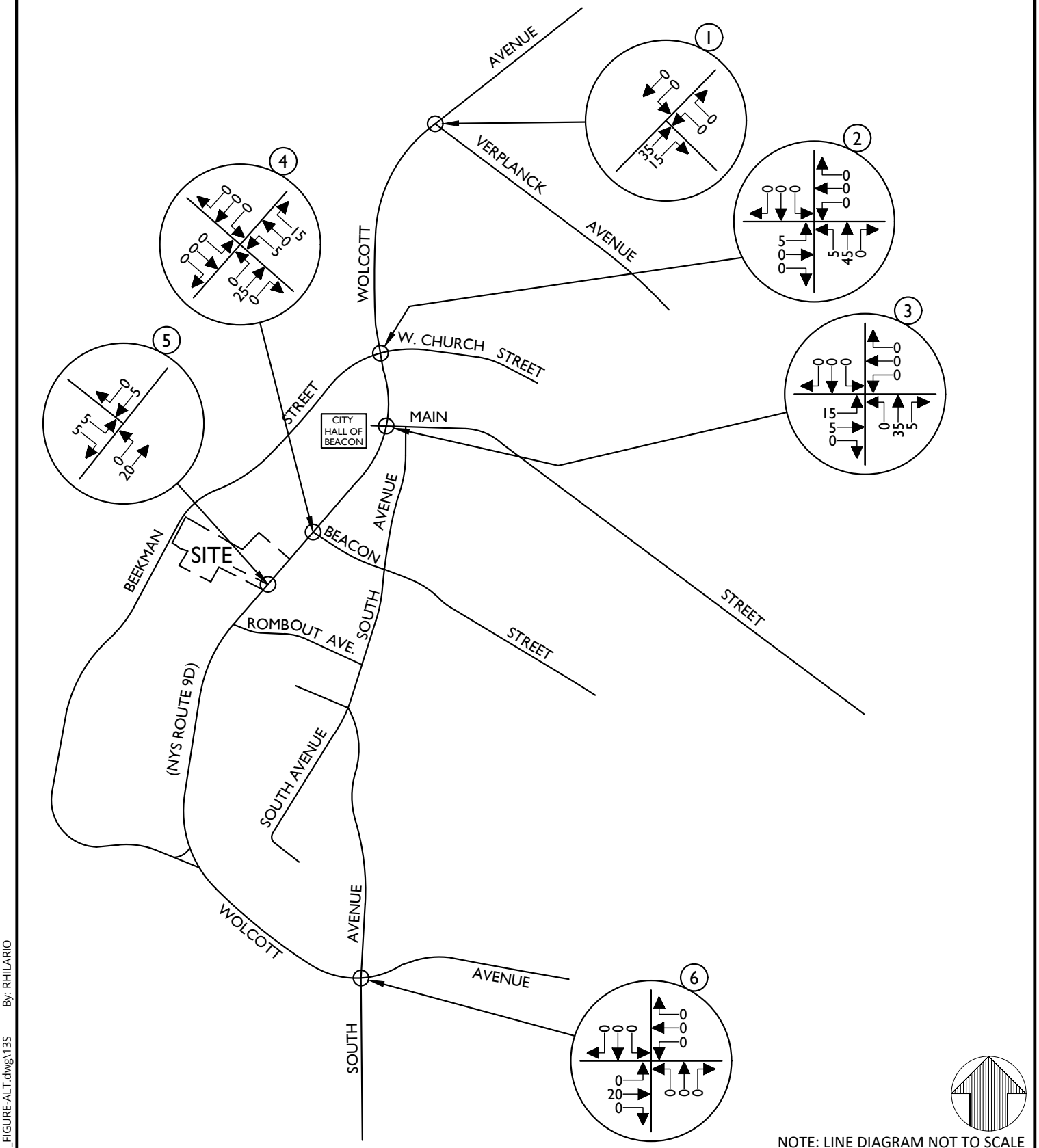
| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21004333A | 220330RH_FIGURE-ALT |

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

SHEET NUMBER:
12S



4333A\Reports\Traffic\Figures\220330RH_FIGURE-ALT.dwg\12S By: RHILARIO




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 | 3/30/22 | R.H. | P.J.G. |

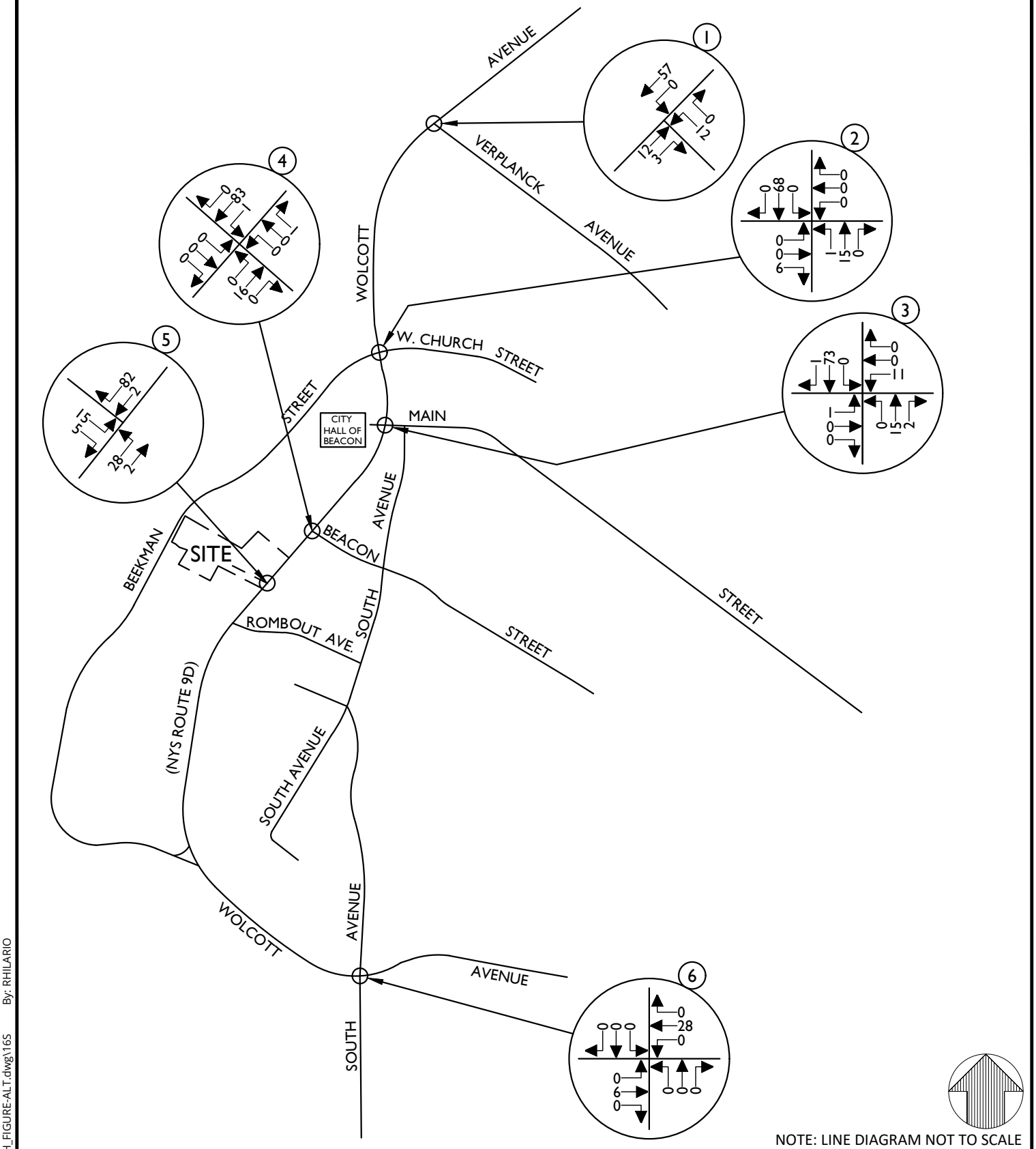
| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21004333A | 220330RH_FIGURE-ALT |

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

SHEET NUMBER:
13S



4333A\Reports\Traffic\Figures\220330RH_FIGURE-ALT.dwg\13S By: RHILARIO




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 | 3/30/22 | R.H. | P.J.G. |

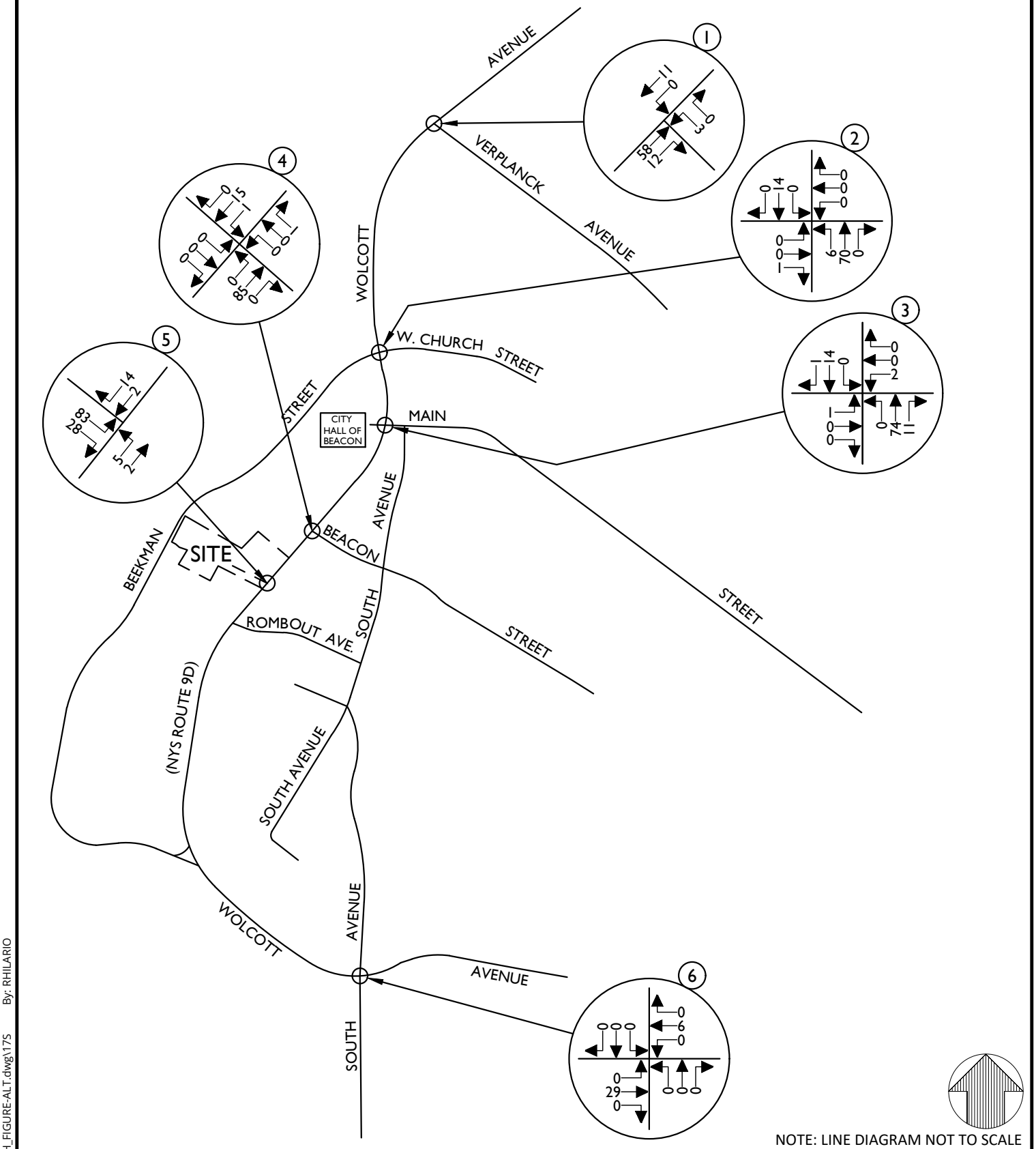
| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21004333A | 220330RH_FIGURE-ALT |

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

SHEET NUMBER:
16S



4333A\Reports\Traffic\Figures\220330RH_FIGURE-ALT.dwg\16S By: RHILARIO




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 | 3/30/22 | R.H. | P.J.G. |

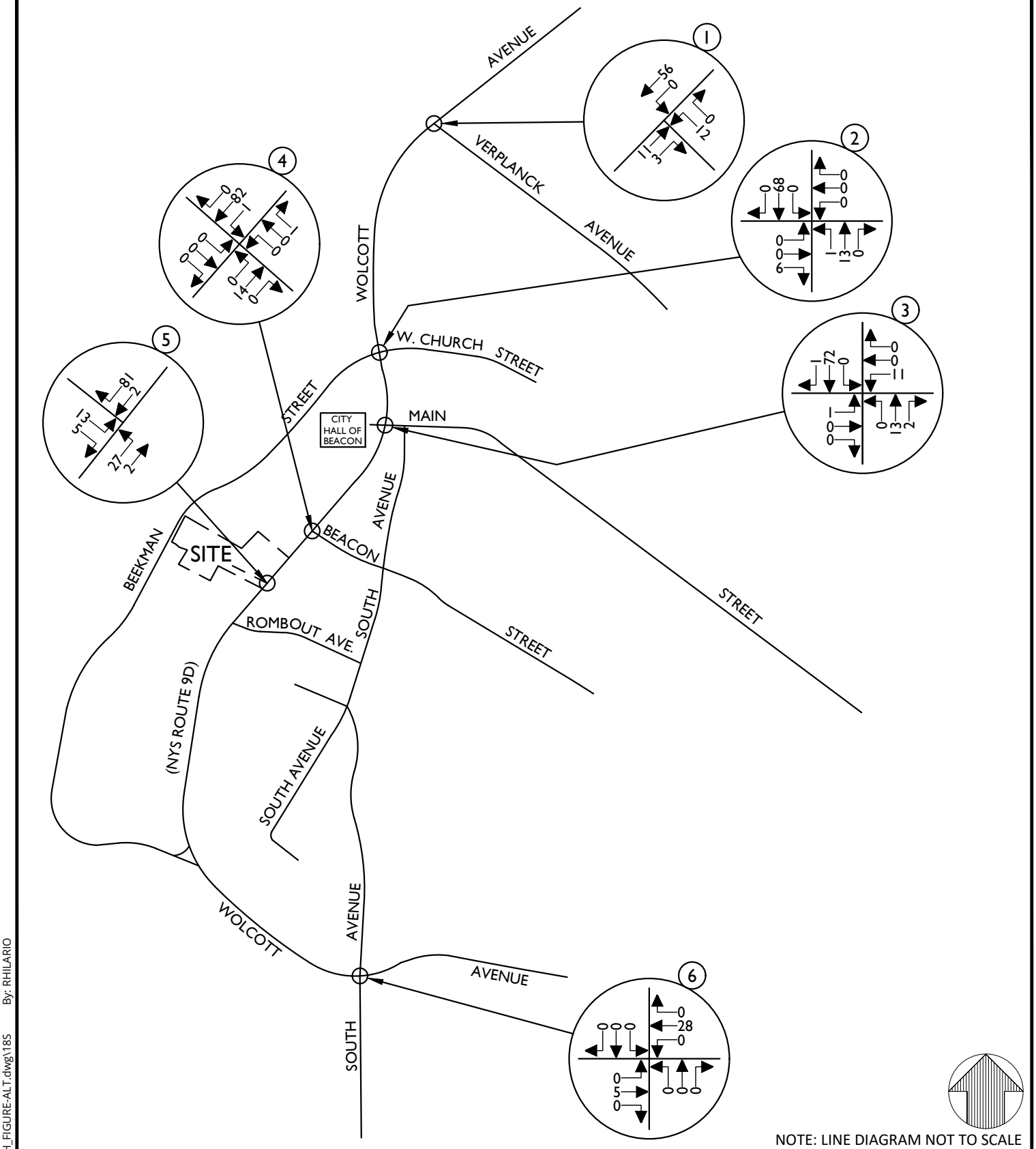
| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21004333A | 220330RH_FIGURE-ALT |

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

SHEET NUMBER:
17S



4333A\Reports\Traffic\Figures\220330RH_FIGURE-ALT.dwg\17S By: RHILARIO




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 | 3/30/22 | R.H. | P.J.G. |

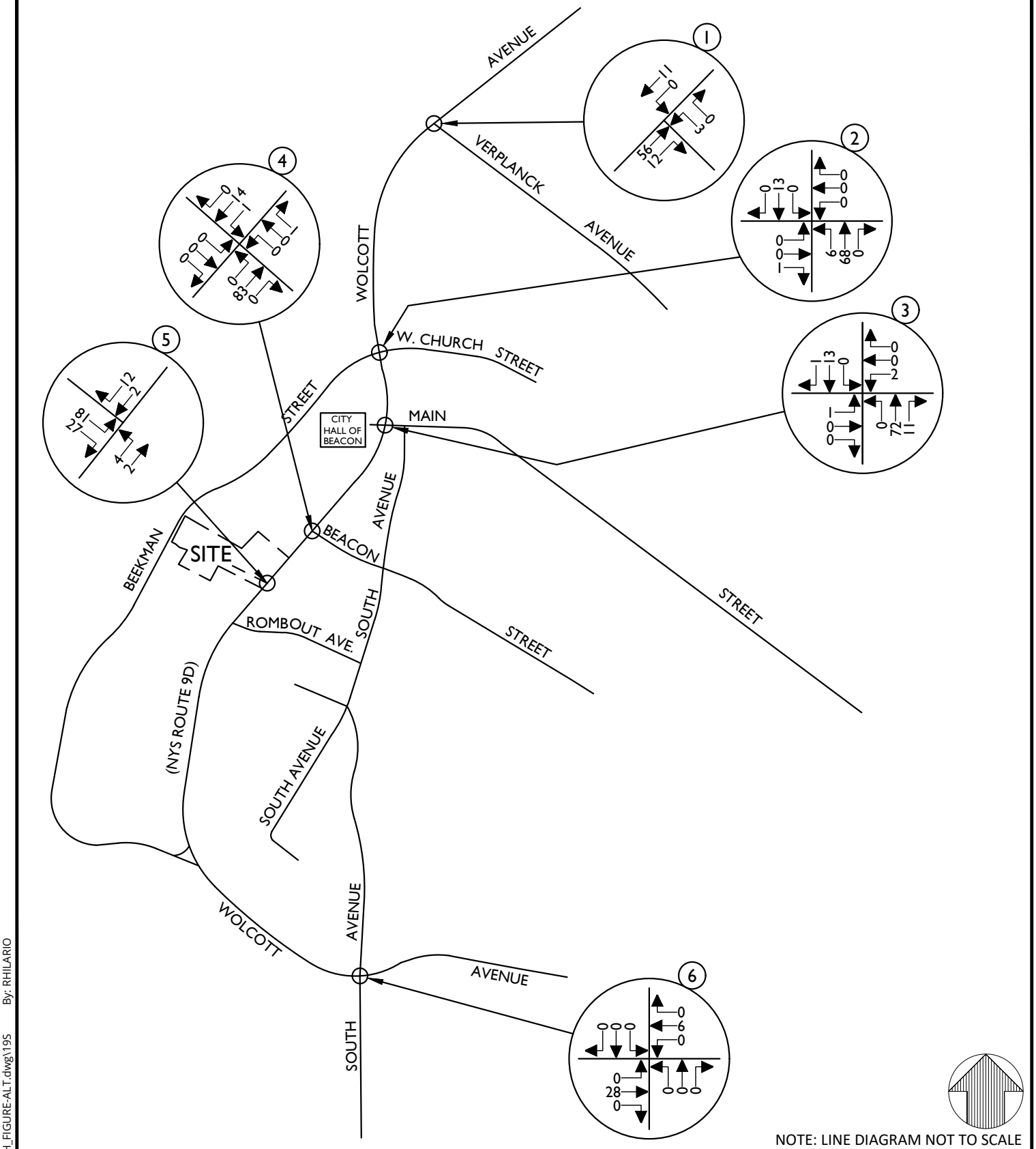
| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21004333A | 220330RH_FIGURE-ALT |

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

SHEET NUMBER:
18S



4333A\Reports\Traffic\Figures\220330RH_FIGURE-ALT.dwg\18S By: RHILARIO




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

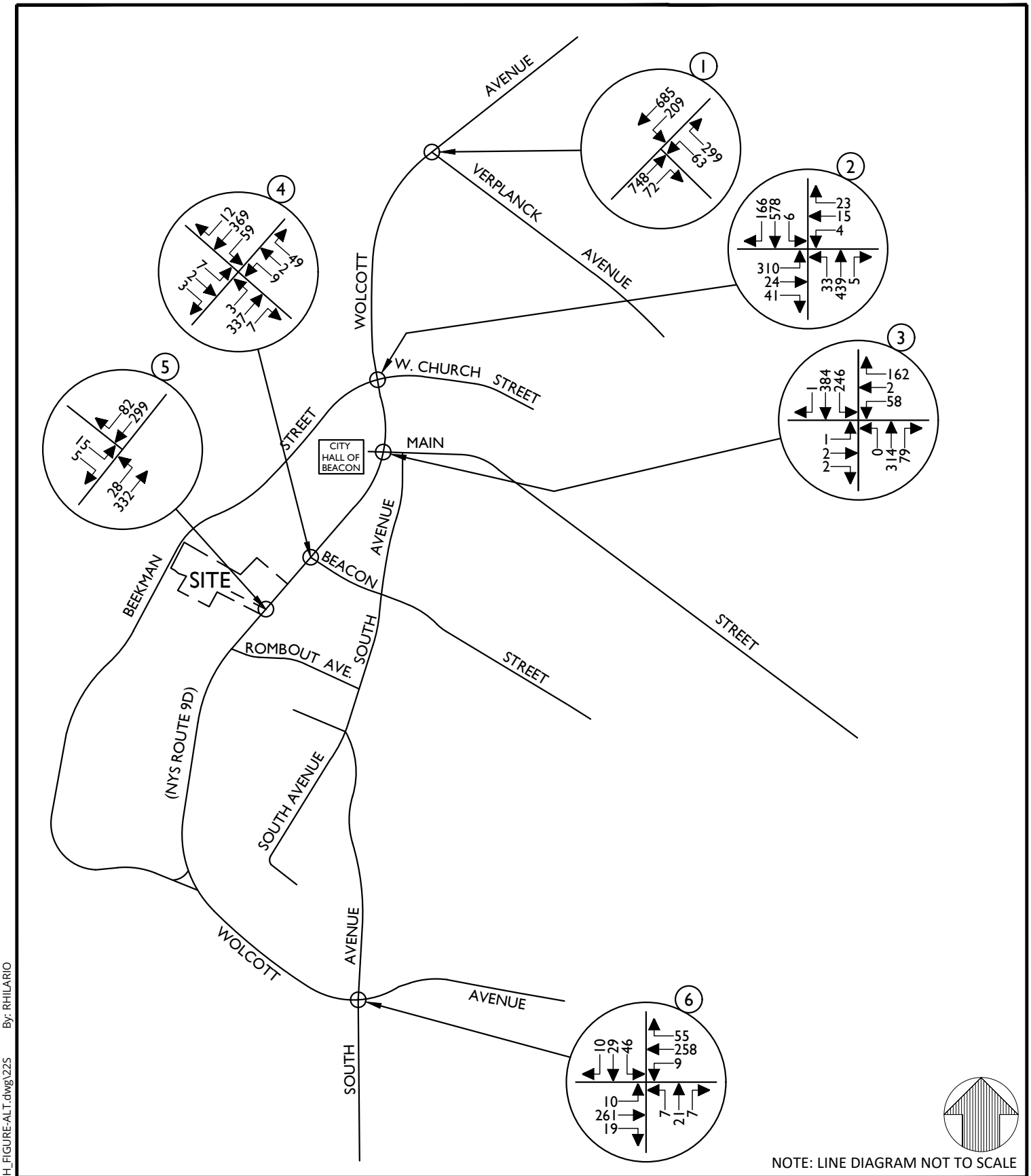
| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 3/30/22 | R.H. | P.J.G. |

| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21004333A | 220330RH_FIGURE-ALT |

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

SHEET NUMBER:
19S

4333A\Reports\Traffic\Figures\220330RH_FIGURE-ALT.dwg\19S By: RHILARIO




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

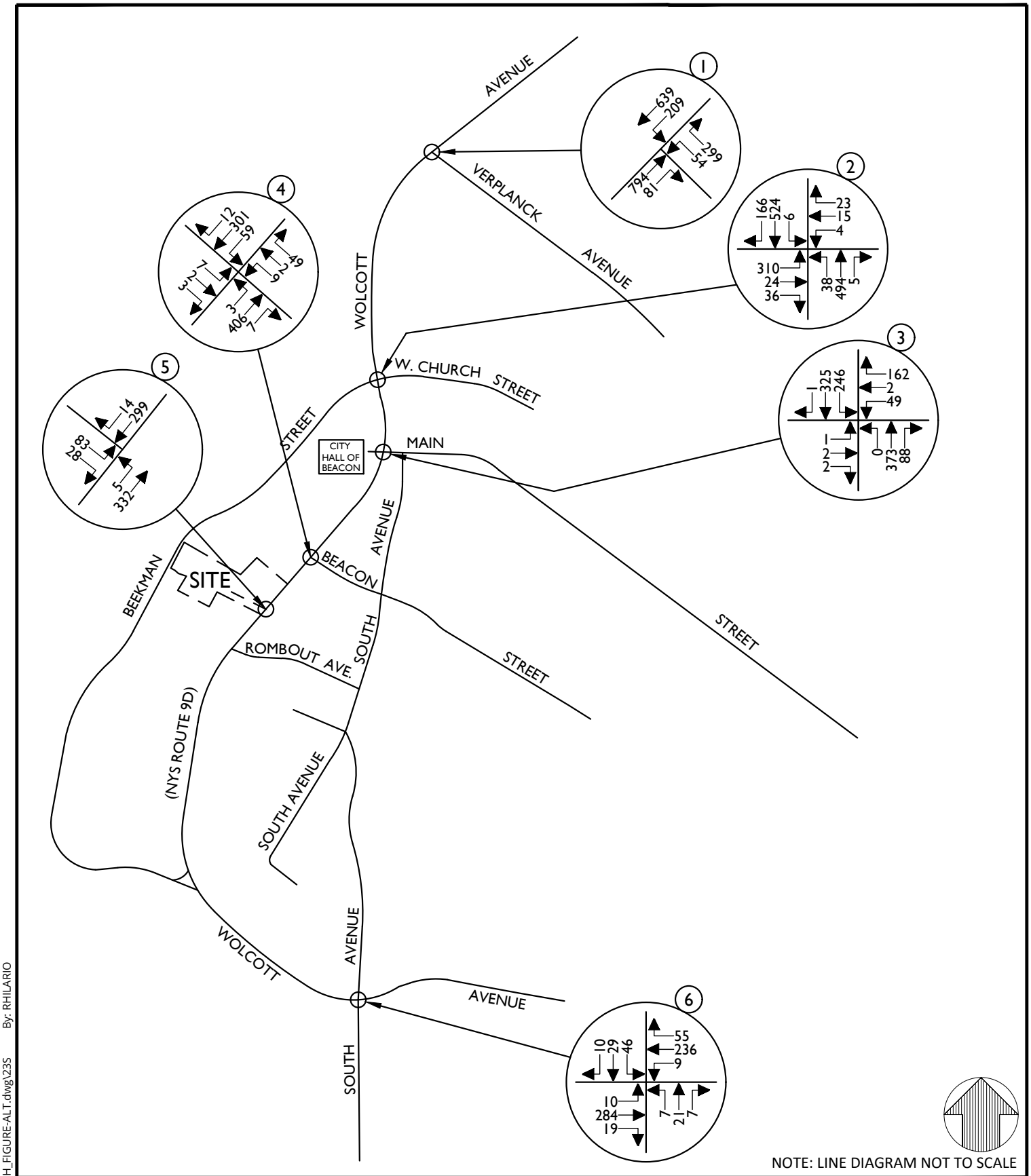
| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 3/30/22 | R.H. | P.J.G. |

| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21004333A | 220330RH_FIGURE-ALT |

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

SHEET NUMBER:
22S

4333A\Reports\Traffic\Figures\220330RH_FIGURE-ALT.dwg\22S By: RHILARIO




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

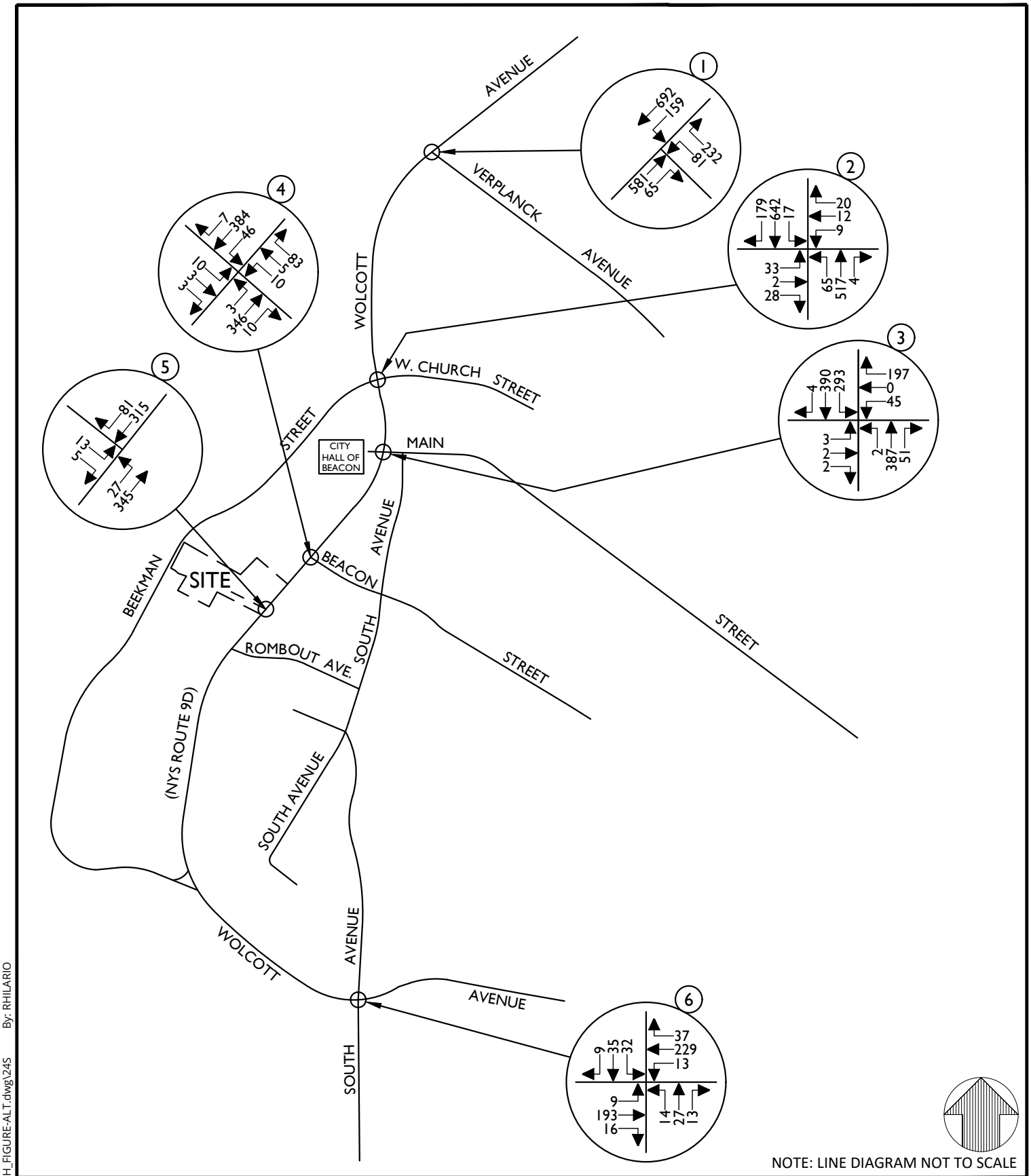
| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 3/30/22 | R.H. | P.J.G. |

| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21004333A | 220330RH_FIGURE-ALT |

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

SHEET NUMBER:
23S

4333A\Reports\Traffic\Figures\220330RH_FIGURE-ALT.dwg\23S By: RHILARIO




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 | 3/30/22 | R.H. | P.J.G. |

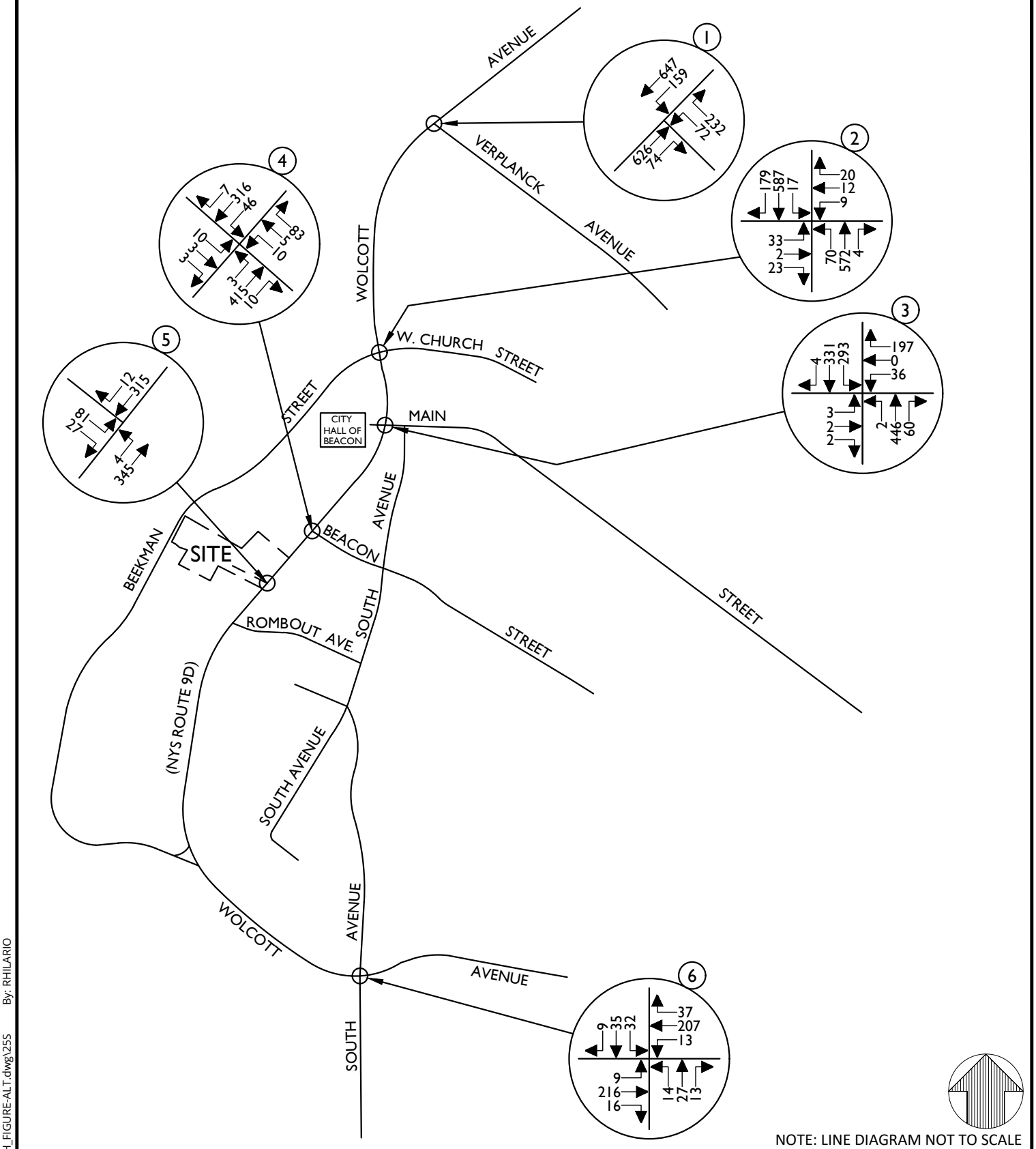
| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21004333A | 220330RH_FIGURE-ALT |

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

SHEET NUMBER:
24S



4333A\Reports\Traffic\Figures\220330RH_FIGURE-ALT.dwg\24S By: RHILARIO




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 | 3/30/22 | R.H. | P.J.G. |

| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21004333A | 220330RH_FIGURE-ALT |

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

SHEET NUMBER:
25S

4333A\Reports\Traffic\Figures\220330RH_FIGURE-ALT.dwg\25S By: RHILARIO

**Table No. 2S**
**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 | 0.20 | D | 40.5 | 0.17 | D | 40.1 |
| | | | R | 0.53 | D | 36.4 | 0.64 | D | 41.1 | 0.63 | D | 39.6 | 0.67 | D | 41.4 | 0.67 | D | 41.4 |
| | | *WB Approach* | | | *D* | *36.9* | | *D* | *41.0* | | *D* | *39.6* | | *D* | *41.2* | | *D* | *41.2* |
| | NYS Route 9D | NB | TR | 0.83 | C | 30.8 | 0.88 | D | 35.2 | 0.91 | D | 38.5 | 0.92 | D | 40.1 | 0.98 | D | 51.9 |
| | | *NB Approach* | | | *C* | *30.8* | | *D* | *35.2* | | *D* | *38.5* | | *D* | *40.1* | | *D* | *51.9* |
| | NYS Route 9D | SB | L | 0.54 | C | 25.3 | 0.63 | C | 31.9 | 0.66 | C | 34.6 | 0.66 | D | 36.2 | 0.76 | D | 52.7 |
| | | | T | 0.46 | A | 8.8 | 0.51 | A | 9.3 | 0.52 | A | 9.6 | 0.55 | A | 10.0 | 0.51 | A | 9.4 |
| | | *SB Approach* | | | *B* | *13.0* | | *B* | *14.9* | | *B* | *15.8* | | *B* | *16.1* | | *C* | *20.1* |
| | | **Overall** | | | **C** | **24.4** | | **C** | **27.7** | | **C** | **29.1** | | **C** | **30.0** | | **D** | **37.1** |
| 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 | 2.35 | F | 656.0 | 2.36 | F | 658.8 |
| | | | 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* | *586.0* | | *F* | *596.2* |
| | W. Church Street | WB | LTR | 0.09 | B | 18.4 | 0.12 | B | 18.5 | 0.12 | B | 18.5 | 0.11 | B | 18.4 | 0.11 | B | 18.5 |
| | | *WB Approach* | | | *B* | *18.4* | | *B* | *18.5* | | *B* | *18.5* | | *B* | *18.4* | | *B* | *18.5* |
| | NYS Route 9D | NB | L | 0.16 | B | 17.1 | 0.21 | B | 19.0 | 0.23 | B | 19.6 | 0.27 | C | 21.0 | 0.25 | B | 19.9 |
| | | | TR | 0.54 | B | 19 | 0.60 | C | 20.2 | 0.61 | C | 20.6 | 0.56 | B | 19.2 | 0.63 | C | 20.7 |
| | | *NB Approach* | | | *B* | *18.9* | | *C* | *20.1* | | *C* | *20.5* | | *B* | *19.4* | | *C* | *20.6* |
| | NYS Route 9D | SB | L | 0.01 | B | 14.4 | 0.02 | B | 14.7 | 0.02 | B | 14.8 | 0.02 | B | 14.5 | 0.02 | B | 15.0 |
| | | | TR | 0.83 | C | 31.3 | 0.92 | D | 40.6 | 0.94 | D | 44.0 | 1.02 | F | 62.2 | 0.95 | D | 46.4 |
| | | *SB Approach* | | | *C* | *31.2* | | *D* | *40.4* | | *D* | *43.7* | | *E* | *61.8* | | *D* | *46.2* |
| | | **Overall** | | | **F** | **172.5** | | **F** | **191.1** | | **F** | **189.6** | | **F** | **193.5** | | **F** | **186.8** |
| | <u>With Signal Timing & Phasing Modifications</u> | | | | | | | | | | | | | | | | | |
| | Beekman Street | EB | LT | - | - | - | - | - | - | 1.23 | F | 152.5 | 1.31 | F | 188.8 | 1.26 | F | 166.0 |
| | | | R | - | - | - | - | - | - | 0.15 | C | 22.1 | 0.18 | C | 24.0 | 0.15 | C | 22.5 |
| | | *EB Approach* | | - | - | - | - | - | - | | *F* | *139.8* | | *F* | *170.7* | | *F* | *151.8* |
| | W. Church Street | WB | LTR | - | - | - | - | - | - | 0.83 | E | 59.6 | 0.76 | D | 52.6 | 0.75 | D | 50.0 |
| | | *WB Approach* | | - | - | - | - | - | - | | *E* | *59.6* | | *D* | *52.6* | | *D* | *50.0* |
| | NYS Route 9D | NB | L | - | - | - | - | - | - | 0.20 | B | 16.1 | 0.21 | B | 17.0 | 0.22 | B | 16.2 |
| | | | TR | - | - | - | - | - | - | 0.61 | B | 15.1 | 0.53 | B | 13.7 | 0.61 | B | 15.2 |
| | | *NB Approach* | | - | - | - | - | - | - | | *B* | *15.2* | | *B* | *13.9* | | *B* | *15.2* |
| | NYS Route 9D | SB | L | - | - | - | - | - | - | 0.02 | B | 12.2 | 0.02 | B | 11.4 | 0.02 | B | 12.3 |
| | | | TR | - | - | - | - | - | - | 0.93 | C | 33.4 | 0.95 | D | 38.8 | 0.93 | C | 34.5 |
| | | *SB Approach* | | - | - | - | - | - | - | | *C* | *33.2* | | *D* | *38.6* | | *C* | *34.3* |
| | | **Overall** | | **-** | **-** | **-** | **-** | **-** | **-** | | **E** | **58.5** | | **E** | **68.2** | | **E** | **60.3** |
| 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 | 0.20 | C | 24.8 | 0.17 | C | 24.6 |
| | | | R | 0.56 | C | 24.2 | 0.59 | C | 24.5 | 0.59 | C | 24.5 | 0.52 | C | 23.6 | 0.52 | C | 23.6 |
| | | *WB Approach* | | | *C* | *24.2* | | *C* | *24.6* | | *C* | *24.6* | | *C* | *23.9* | | *C* | *23.8* |
| | 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 | 0.46 | A | 9.3 | 0.54 | B | 10.3 |
| | | *NB Approach* | | | *A* | *8.8* | | *A* | *9.5* | | *A* | *9.8* | | *A* | *9.3* | | *B* | *10.3* |
| | NYS Route 9D | SB | L | 0.38 | B | 10.8 | 0.47 | B | 13.0 | 0.48 | B | 13.7 | 0.48 | B | 13.1 | 0.53 | B | 15.7 |
| | | | TR | 0.30 | A | 7.7 | 0.34 | A | 8.1 | 0.36 | A | 8.2 | 0.42 | A | 8.9 | 0.36 | A | 8.3 |
| | | *SB Approach* | | | *A* | *9.0* | | *B* | *10.2* | | *B* | *10.6* | | *B* | *10.6* | | *B* | *11.5* |
| | | **Overall** | | | **B** | **11.6** | | **B** | **12.5** | | **B** | **12.7** | | **B** | **12.4** | | **B** | **13.1** |

**Table No. 2S**
**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 | 23.8 | 0.08 | C | 24.8 |
| | Beacon Street | WB | LTR | 0.15 | B | 12.5 | 0.18 | B | 13.8 | 0.19 | B | 14.3 | 0.20 | B | 14.7 | 0.22 | 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 | 7.9 |
| | 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 | 0.04 | B | 12.5 | 0.22 | B | 13.5 |
| | | NB | LT | - | - | - | - | - | - | 0.01 | A | 8.0 | 0.03 | A | 8.2 | 0.00 | 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 | 0.41 | C | 24.9 | 0.44 | C | 25.6 |
| | NYS Route 9D | WB | LTR | 0.37 | C | 24.1 | 0.41 | C | 24.8 | 0.42 | C | 24.9 | 0.41 | C | 24.6 | 0.38 | C | 24.1 |
| | 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 | 0.16 | C | 20.8 | 0.16 | C | 20.8 |
| | | **Overall** | | | **C** | **23.2** | | **C** | **23.7** | | **C** | **23.8** | | **C** | **24.0** | | **C** | **24.1** |

NOTES:

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

**Table No. 2S**
**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 | 0.26 | D | 41.5 | 0.23 | D | 41.0 |
| | | | R | 0.41 | C | 33.3 | 0.49 | D | 35.2 | 0.49 | D | 35.2 | 0.52 | D | 36.1 | 0.52 | D | 36.1 |
| | | *WB Approach* | | | *D* | *35.1* | | *D* | *36.4* | | *D* | *36.5* | | *D* | *37.5* | | *D* | *37.3* |
| | NYS Route 9D | NB | TR | 0.64 | C | 22.6 | 0.70 | C | 24.6 | 0.72 | C | 25.2 | 0.73 | C | 25.6 | 0.79 | C | 28.4 |
| | | *NB Approach* | | | *C* | *22.6* | | *C* | *24.6* | | *C* | *25.2* | | *C* | *25.6* | | *C* | *28.4* |
| | NYS Route 9D | SB | L | 0.31 | B | 13.3 | 0.36 | B | 15.7 | 0.37 | B | 16.4 | 0.37 | B | 16.5 | 0.40 | B | 19.5 |
| | | | T | 0.47 | A | 8.8 | 0.52 | A | 9.6 | 0.53 | A | 9.7 | 0.56 | B | 10.1 | 0.52 | A | 9.5 |
| | | *SB Approach* | | | *A* | *9.7* | | *B* | *10.8* | | *B* | *11.0* | | *B* | *11.3* | | *B* | *11.5* |
| | | **Overall** | | | **B** | **18.7** | | **C** | **20.3** | | **C** | **20.7** | | **C** | **20.9** | | **C** | **22.4** |
| 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 | 25.0 | 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 | 0.25 | C | 25.7 |
| | | *EB Approach* | | | *C* | *25.2* | | *C* | *25.2* | | *C* | *25.3* | | *C* | *25.5* | | *C* | *25.3* |
| | W. Church Street | WB | LTR | 0.17 | C | 24.9 | 0.24 | C | 25.3 | 0.24 | C | 25.3 | 0.22 | C | 25.1 | 0.22 | C | 25.2 |
| | | *WB Approach* | | | *C* | *24.9* | | *C* | *25.3* | | *C* | *25.3* | | *C* | *25.1* | | *C* | *25.2* |
| | NYS Route 9D | NB | L | 0.14 | A | 5.9 | 0.17 | A | 7.1 | 0.18 | A | 7.4 | 0.18 | A | 8.5 | 0.18 | A | 7.4 |
| | | | TR | 0.40 | A | 6.0 | 0.44 | A | 6.5 | 0.45 | A | 6.6 | 0.41 | A | 6.2 | 0.46 | A | 6.5 |
| | | *NB Approach* | | | *A* | *6.0* | | *A* | *6.5* | | *A* | *6.7* | | *A* | *6.4* | | *A* | *6.6* |
| | NYS Route 9D | SB | L | 0.03 | A | 4.3 | 0.03 | A | 4.5 | 0.03 | A | 4.6 | 0.03 | A | 4.5 | 0.03 | A | 4.6 |
| | | | TR | 0.66 | B | 10.6 | 0.74 | B | 12.6 | 0.76 | B | 13.2 | 0.81 | B | 15.5 | 0.76 | B | 13.5 |
| | | *SB Approach* | | | *B* | *10.4* | | *B* | *12.4* | | *B* | *13.1* | | *B* | *15.3* | | *B* | *13.3* |
| | | **Overall** | | | **A** | **9.8** | | **B** | **11.2** | | **B** | **11.6** | | **B** | **12.8** | | **B** | **11.5** |
| 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 | 0.04 | C | 23.7 | 0.04 | 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 | 0.16 | C | 24.5 | 0.12 | C | 24.3 |
| | | | R | 0.66 | C | 25.5 | 0.70 | C | 26.2 | 0.70 | C | 26.1 | 0.63 | C | 24.7 | 0.63 | C | 24.7 |
| | | *WB Approach* | | | *C* | *25.4* | | *C* | *25.9* | | *C* | *25.9* | | *C* | *24.7* | | *C* | *24.7* |
| | NYS Route 9D | NB | L | 0.00 | A | 6.4 | 0.00 | A | 6.9 | 0.00 | A | 7.1 | 0.00 | A | 7.9 | 0.00 | A | 7.1 |
| | | | TR | 0.40 | A | 8.7 | 0.46 | A | 9.4 | 0.49 | A | 9.7 | 0.46 | A | 9.2 | 0.53 | B | 10.1 |
| | | *NB Approach* | | | *A* | *8.7* | | *A* | *9.4* | | *A* | *9.7* | | *A* | *9.2* | | *B* | *10.1* |
| | NYS Route 9D | SB | L | 0.44 | B | 11.4 | 0.53 | B | 13.9 | 0.55 | B | 14.7 | 0.54 | B | 14.0 | 0.59 | B | 16.6 |
| | | | TR | 0.29 | A | 7.7 | 0.33 | A | 8.1 | 0.35 | A | 8.3 | 0.41 | A | 8.9 | 0.35 | A | 8.2 |
| | | *SB Approach* | | | *A* | *9.5* | | *B* | *10.9* | | *B* | *11.2* | | *B* | *11.0* | | *B* | *12.1* |
| | | **Overall** | | | **B** | **12.2** | | **B** | **13.2** | | **B** | **13.4** | | **B** | **13.0** | | **B** | **13.6** |
| 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 | 25.1 | 0.13 | D | 25.5 |
| | Beacon Street | WB | LTR | 0.17 | B | 12.1 | 0.21 | B | 13.3 | 0.21 | B | 13.7 | 0.22 | B | 13.9 | 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 | 0.03 | 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. 2S**
**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 | 0.04 | B | 12.5 | 0.22 | B | 13.7 |
| | | NB | LT | - | - | - | - | - | - | 0.01 | A | 8.1 | 0.03 | A | 8.3 | 0.00 | 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 | 0.34 | C | 23.6 | 0.37 | C | 24.2 |
| | NYS Route 9D | WB | LTR | 0.31 | C | 23.0 | 0.34 | C | 23.5 | 0.35 | C | 23.7 | 0.34 | C | 23.5 | 0.32 | C | 23.1 |
| | 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 | 20.4 | 0.13 | C | 20.4 |
| | | **Overall** | | | **C** | **22.1** | | **C** | **22.5** | | **C** | **22.6** | | **C** | **22.7** | | **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.

| 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 |

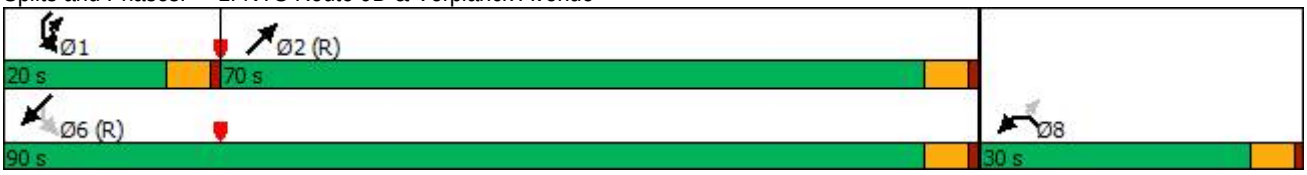


This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1723 | 1723 | 1817 | 1817 | 1909 | 1909 |
| Adj Flow Rate, veh/h | 68 | 325 | 813 | 78 | 227 | 745 |
| 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 | 342 | 487 | 884 | 85 | 343 | 1352 |
| Arrive On Green | 0.21 | 0.21 | 0.54 | 0.54 | 0.13 | 0.71 |
| Sat Flow, veh/h | 1641 | 1460 | 1633 | 157 | 1818 | 1909 |
| Grp Volume(v), veh/h | 68 | 325 | 0 | 891 | 227 | 745 |
| Grp Sat Flow(s),veh/h/ln | 1641 | 1460 | 0 | 1789 | 1818 | 1909 |
| Q Serve(g_s), s | 4.1 | 22.9 | 0.0 | 54.6 | 6.3 | 22.4 |
| Cycle Q Clear(g_c), s | 4.1 | 22.9 | 0.0 | 54.6 | 6.3 | 22.4 |
| Prop In Lane | 1.00 | 1.00 | | 0.09 | 1.00 | |
| Lane Grp Cap(c), veh/h | 342 | 487 | 0 | 969 | 343 | 1352 |
| V/C Ratio(X) | 0.20 | 0.67 | 0.00 | 0.92 | 0.66 | 0.55 |
| Avail Cap(c_a), veh/h | 342 | 487 | 0 | 969 | 343 | 1352 |
| 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 | 34.3 | 0.0 | 25.1 | 26.5 | 8.4 |
| Incr Delay (d2), s/veh | 1.3 | 7.1 | 0.0 | 15.0 | 9.7 | 1.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.8 | 9.0 | 0.0 | 26.0 | 4.5 | 8.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 40.5 | 41.4 | 0.0 | 40.1 | 36.2 | 10.0 |
| LnGrp LOS | D | D | A | D | D | A |
| Approach Vol, veh/h | 393 | | 891 | | | 972 |
| Approach Delay, s/veh | 41.2 | | 40.1 | | | 16.1 |
| Approach LOS | D | | D | | | B |

| Timer - 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 6th Ctrl Delay | 30.0 |
| HCM 6th LOS | C |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 33 | 439 | 5 | 6 | 578 | 166 |
| Future Volume (vph) | 310 | 24 | 41 | 4 | 15 | 23 | 33 | 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 | 39 | 523 | 6 | 6 | 590 | 169 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 471 | 58 | 0 | 45 | 0 | 39 | 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 | |



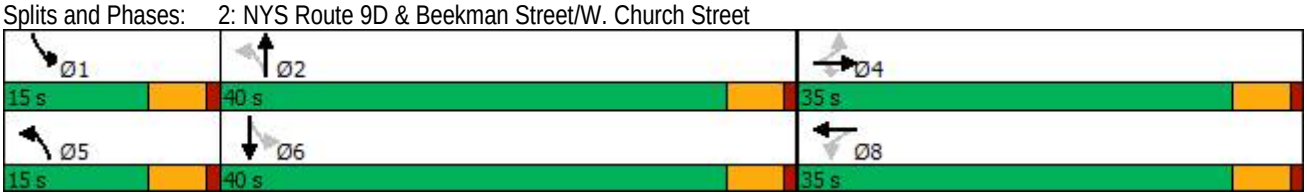
This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | 0.17 | 0.57 | | 0.02 | 0.98 | |
| Control Delay | | 67.7 | 2.7 | | 11.7 | | 11.3 | 18.6 | | 9.5 | 55.0 | |
| Queue Delay | | 0.0 | 0.0 | | 0.0 | | 0.0 | 4.5 | | 0.0 | 0.0 | |
| Total Delay | | 67.7 | 2.7 | | 11.7 | | 11.3 | 23.1 | | 9.5 | 55.0 | |
| Queue Length 50th (ft) | | ~282 | 0 | | 7 | | 9 | 172 | | 1 | ~447 | |
| Queue Length 95th (ft) | | #318 | 5 | | 30 | | 22 | 306 | | 7 | #677 | |
| Internal Link Dist (ft) | | 504 | | | 248 | | | 308 | | | 255 | |
| Turn Bay Length (ft) | | | 95 | | | | 75 | | | 75 | | |
| Base Capacity (vph) | | 478 | 626 | | 632 | | 294 | 931 | | 444 | 771 | |
| Starvation Cap Reductn | | 0 | 0 | | 0 | | 0 | 320 | | 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 | | 0.13 | 0.87 | | 0.01 | 0.98 | |

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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 33 | 439 | 5 | 6 | 578 | 166 |
| Future Volume (veh/h) | 310 | 24 | 41 | 4 | 15 | 23 | 33 | 439 | 5 | 6 | 578 | 166 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1847 | 1817 | 1876 | 2293 | 2188 | 2293 | 2091 | 2106 | 2136 | 1847 | 1832 | 1832 |
| Adj Flow Rate, veh/h | 437 | 34 | 58 | 4 | 16 | 25 | 39 | 523 | 6 | 6 | 590 | 169 |
| 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 | 192 | 8 | 578 | 48 | 162 | 202 | 145 | 929 | 11 | 324 | 578 | 165 |
| 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 | 296 | 23 | 1586 | 0 | 444 | 555 | 1991 | 2077 | 24 | 1759 | 1360 | 389 |
| Grp Volume(v), veh/h | 471 | 0 | 58 | 45 | 0 | 0 | 39 | 0 | 529 | 6 | 0 | 759 |
| Grp Sat Flow(s),veh/h/ln | 319 | 0 | 1586 | 999 | 0 | 0 | 1991 | 0 | 2101 | 1759 | 0 | 1749 |
| Q Serve(g_s), s | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 15.3 | 0.2 | 0.0 | 35.0 |
| Cycle Q Clear(g_c), s | 30.0 | 0.0 | 2.0 | 30.0 | 0.0 | 0.0 | 0.9 | 0.0 | 15.3 | 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 | 200 | 0 | 578 | 412 | 0 | 0 | 145 | 0 | 940 | 324 | 0 | 743 |
| V/C Ratio(X) | 2.35 | 0.00 | 0.10 | 0.11 | 0.00 | 0.00 | 0.27 | 0.00 | 0.56 | 0.02 | 0.00 | 1.02 |
| Avail Cap(c_a), veh/h | 200 | 0 | 578 | 412 | 0 | 0 | 329 | 0 | 940 | 527 | 0 | 743 |
| 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 | 18.3 | 0.0 | 0.0 | 20.0 | 0.0 | 16.8 | 14.5 | 0.0 | 23.7 |
| Incr Delay (d2), s/veh | 623.5 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 1.0 | 0.0 | 2.4 | 0.0 | 0.0 | 38.5 |
| 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 | 38.7 | 0.0 | 0.7 | 0.5 | 0.0 | 0.0 | 0.4 | 0.0 | 7.5 | 0.1 | 0.0 | 21.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 656.0 | 0.0 | 17.4 | 18.4 | 0.0 | 0.0 | 21.0 | 0.0 | 19.2 | 14.5 | 0.0 | 62.2 |
| LnGrp LOS | F | A | B | B | A | A | C | A | B | B | A | F |
| Approach Vol, veh/h | | 529 | | | 45 | | | 568 | | | 765 | |
| Approach Delay, s/veh | | 586.0 | | | 18.4 | | | 19.4 | | | 61.8 | |
| Approach LOS | | F | | | B | | | B | | | E | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 5.5 | 41.8 | | 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 | 17.3 | | 32.0 | 2.9 | 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 6th Ctrl Delay | | 193.5 | |
| HCM 6th LOS | | F | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 1 | 2 | 2 | 58 | 2 | 162 | 0 | 314 | 79 | 246 | 384 | 1 |
| Future Volume (vph) | 1 | 2 | 2 | 58 | 2 | 162 | 0 | 314 | 79 | 246 | 384 | 1 |
| 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 | | | 1.00 | |
| Frt | | 0.949 | | | | 0.850 | | 0.970 | | | | |
| Flt Protected | | 0.988 | | | 0.954 | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1742 | 0 | 0 | 1885 | 1647 | 1928 | 1794 | 0 | 1743 | 1853 | 0 |
| Flt Permitted | | 0.894 | | | 0.743 | | | | | 0.406 | | |
| Satd. Flow (perm) | 0 | 1576 | 0 | 0 | 1468 | 1587 | 1928 | 1794 | 0 | 745 | 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) | 2 | 3 | 3 | 64 | 2 | 178 | 0 | 397 | 100 | 280 | 436 | 1 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 8 | 0 | 0 | 66 | 178 | 0 | 497 | 0 | 280 | 437 | 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 | |



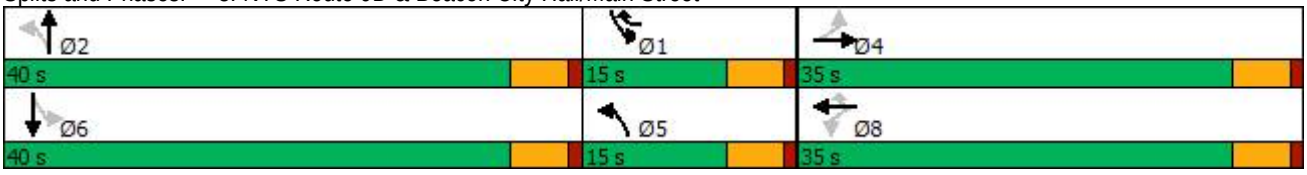
This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | 0.04 | | | 0.31 | 0.47 | | 0.49 | | 0.38 | 0.28 | |
| Control Delay | | 22.4 | | | 30.9 | 21.7 | | 12.6 | | 6.1 | 3.5 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.3 | |
| Total Delay | | 22.4 | | | 30.9 | 21.7 | | 12.6 | | 6.1 | 3.7 | |
| Queue Length 50th (ft) | | 2 | | | 26 | 54 | | 131 | | 29 | 49 | |
| Queue Length 95th (ft) | | 8 | | | 60 | 100 | | 190 | | 59 | 95 | |
| Internal Link Dist (ft) | | 53 | | | 270 | | | 613 | | | 308 | |
| Turn Bay Length (ft) | | | | | | 70 | | | | 120 | | |
| Base Capacity (vph) | | 760 | | | 706 | 397 | | 1007 | | 757 | 1537 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | | 0 | | 0 | 521 | |
| Spillback Cap Reductn | | 0 | | | 0 | 0 | | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | 0 | | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 0.01 | | | 0.09 | 0.45 | | 0.49 | | 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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 1 | 2 | 2 | 58 | 2 | 162 | 0 | 314 | 79 | 246 | 384 | 1 |
| Future Volume (veh/h) | 1 | 2 | 2 | 58 | 2 | 162 | 0 | 314 | 79 | 246 | 384 | 1 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 0.96 | | 0.94 | 0.97 | | 0.94 | 1.00 | | 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1894 | 1894 | 1894 | 2215 | 2215 | 2185 | 2018 | 1988 | 1943 | 1817 | 1832 | 1847 |
| Adj Flow Rate, veh/h | 2 | 3 | 3 | 64 | 2 | 178 | 0 | 397 | 100 | 280 | 436 | 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 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 5 | 2 | 1 | 0 |
| Cap, veh/h | 96 | 106 | 78 | 315 | 9 | 341 | 681 | 859 | 216 | 587 | 1034 | 2 |
| Arrive On Green | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.00 | 0.57 | 0.57 | 0.06 | 0.57 | 0.57 |
| Sat Flow, veh/h | 184 | 833 | 610 | 1573 | 67 | 1744 | 1922 | 1518 | 382 | 1731 | 1827 | 4 |
| Grp Volume(v), veh/h | 8 | 0 | 0 | 66 | 0 | 178 | 0 | 0 | 497 | 280 | 0 | 437 |
| Grp Sat Flow(s),veh/h/ln | 1627 | 0 | 0 | 1640 | 0 | 1744 | 1922 | 0 | 1901 | 1731 | 0 | 1831 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 1.4 | 0.0 | 0.0 | 9.5 | 0.0 | 0.0 | 8.4 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 0.0 | 2.2 | 0.0 | 1.4 | 0.0 | 0.0 | 9.5 | 0.0 | 0.0 | 8.4 |
| Prop In Lane | 0.25 | | 0.37 | 0.97 | | 1.00 | 1.00 | | 0.20 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 280 | 0 | 0 | 324 | 0 | 341 | 681 | 0 | 1075 | 587 | 0 | 1036 |
| V/C Ratio(X) | 0.03 | 0.00 | 0.00 | 0.20 | 0.00 | 0.52 | 0.00 | 0.00 | 0.46 | 0.48 | 0.00 | 0.42 |
| Avail Cap(c_a), veh/h | 822 | 0 | 0 | 905 | 0 | 964 | 868 | 0 | 1075 | 755 | 0 | 1036 |
| 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 23.6 | 0.0 | 0.0 | 24.5 | 0.0 | 22.4 | 0.0 | 0.0 | 7.9 | 12.5 | 0.0 | 7.7 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 1.2 | 0.0 | 0.0 | 1.4 | 0.6 | 0.0 | 1.3 |
| 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 | 0.1 | 0.0 | 0.0 | 0.9 | 0.0 | 2.3 | 0.0 | 0.0 | 3.5 | 2.6 | 0.0 | 3.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.7 | 0.0 | 0.0 | 24.8 | 0.0 | 23.6 | 0.0 | 0.0 | 9.3 | 13.1 | 0.0 | 8.9 |
| LnGrp LOS | C | A | A | C | A | C | A | A | A | B | A | A |
| Approach Vol, veh/h | | 8 | | | 244 | | | 497 | | | 717 | |
| Approach Delay, s/veh | | 23.7 | | | 23.9 | | | 9.3 | | | 10.6 | |
| Approach LOS | | C | | | C | | | A | | | B | |

| Timer - 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 | 11.5 | | 2.3 | 0.0 | 10.4 | | 4.2 | | | | |
| Green Ext Time (p_c), s | 0.9 | 1.4 | | 0.0 | 0.0 | 1.1 | | 1.4 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 12.4 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 7 | 2 | 3 | 9 | 2 | 49 | 3 | 337 | 7 | 59 | 369 | 12 |
| Future Volume (vph) | 7 | 2 | 3 | 9 | 2 | 49 | 3 | 337 | 7 | 59 | 369 | 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 | 74 | 4 | 488 | 10 | 64 | 401 | 13 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 15 | 0 | 0 | 91 | 0 | 0 | 502 | 0 | 0 | 478 | 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 |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 49 | 3 | 337 | 7 | 59 | 369 | 12 |
| Future Vol, veh/h | 7 | 2 | 3 | 9 | 2 | 49 | 3 | 337 | 7 | 59 | 369 | 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 | 74 | 4 | 488 | 10 | 64 | 401 | 13 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1082 | 1047 | 412 | 1045 | 1048 | 500 | 416 | 0 | 0 | 501 | 0 | 0 |
| Stage 1 | 538 | 538 | - | 504 | 504 | - | - | - | - | - | - | - |
| Stage 2 | 544 | 509 | - | 541 | 544 | - | - | - | - | - | - | - |
| 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 | 197 | 230 | 644 | 248 | 273 | 599 | 1154 | - | - | 1063 | - | - |
| Stage 1 | 531 | 526 | - | 602 | 592 | - | - | - | - | - | - | - |
| Stage 2 | 527 | 541 | - | 579 | 572 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 159 | 210 | 642 | 228 | 249 | 596 | 1152 | - | - | 1060 | - | - |
| Mov Cap-2 Maneuver | 159 | 210 | - | 228 | 249 | - | - | - | - | - | - | - |
| Stage 1 | 527 | 483 | - | 598 | 588 | - | - | - | - | - | - | - |
| Stage 2 | 455 | 537 | - | 527 | 526 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 23.8 | 14.7 | 0.1 | 1.2 |
| HCM LOS | C | B | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | SELn1 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1152 | - | - | 463 | 206 | 1060 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 0.196 | 0.072 | 0.061 | - | - |
| HCM Control Delay (s) | 8.1 | 0 | - | 14.7 | 23.8 | 8.6 | 0 | - |
| HCM Lane LOS | A | A | - | B | C | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.7 | 0.2 | 0.2 | - | - |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | SEL | SER | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 15 | 5 | 28 | 332 | 299 | 82 |
| Future Volume (vph) | 15 | 5 | 28 | 332 | 299 | 82 |
| 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 | | | | 0.971 | |
| Flt Protected | 0.963 | | | 0.996 | | |
| Satd. Flow (prot) | 1736 | 0 | 0 | 1855 | 1809 | 0 |
| Flt Permitted | 0.963 | | | 0.996 | | |
| Satd. Flow (perm) | 1736 | 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) | 16 | 5 | 30 | 361 | 325 | 89 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 21 | 0 | 0 | 391 | 414 | 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



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | SEL | SER | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 15 | 5 | 28 | 332 | 299 | 82 |
| Future Vol, veh/h | 15 | 5 | 28 | 332 | 299 | 82 |
| 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 | 16 | 5 | 30 | 361 | 325 | 89 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 791 | 370 | 414 | 0 | - | 0 |
| Stage 1 | 370 | - | - | - | - | - |
| Stage 2 | 421 | - | - | - | - | - |
| 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 | 358 | 676 | 1145 | - | - | - |
| Stage 1 | 699 | - | - | - | - | - |
| Stage 2 | 662 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 346 | 676 | 1145 | - | - | - |
| Mov Cap-2 Maneuver | 463 | - | - | - | - | - |
| Stage 1 | 676 | - | - | - | - | - |
| Stage 2 | 662 | - | - | - | - | - |

| Approach | SE | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 12.5 | 0.6 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NEL | NET | SELn1 | SWT | SWR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1145 | - | 503 | - | - |
| HCM Lane V/C Ratio | 0.027 | - | 0.043 | - | - |
| HCM Control Delay (s) | 8.2 | 0 | 12.5 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.1 | - | - |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 1779 | 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 | |

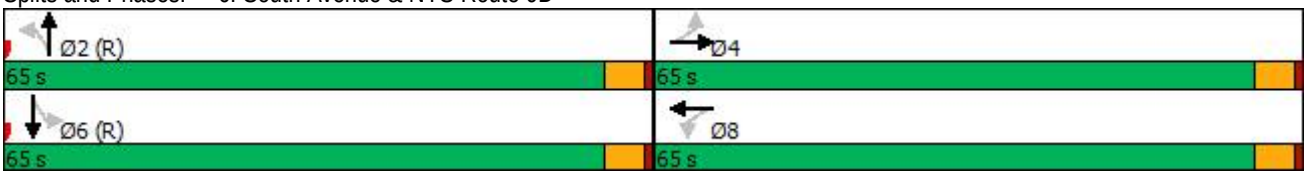


This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | | 825 | | | 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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1688 | 1688 | 1688 | 1956 | 2076 | 2136 | 1939 | 1939 | 1939 | 1817 | 1669 | 1847 |
| Adj Flow Rate, veh/h | 11 | 290 | 21 | 11 | 311 | 66 | 8 | 25 | 8 | 58 | 37 | 13 |
| 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 | 701 | 50 | 39 | 754 | 157 | 169 | 519 | 159 | 372 | 229 | 76 |
| 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 | 1518 | 108 | 23 | 1634 | 340 | 294 | 1124 | 344 | 714 | 497 | 166 |
| Grp Volume(v), veh/h | 322 | 0 | 0 | 388 | 0 | 0 | 41 | 0 | 0 | 108 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1649 | 0 | 0 | 1997 | 0 | 0 | 1762 | 0 | 0 | 1376 | 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 | 3.9 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 16.7 | 0.0 | 0.0 | 16.7 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 | 5.6 | 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 | 790 | 0 | 0 | 950 | 0 | 0 | 846 | 0 | 0 | 678 | 0 | 0 |
| V/C Ratio(X) | 0.41 | 0.00 | 0.00 | 0.41 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.16 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 790 | 0 | 0 | 950 | 0 | 0 | 846 | 0 | 0 | 678 | 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 | 23.4 | 0.0 | 0.0 | 23.3 | 0.0 | 0.0 | 19.3 | 0.0 | 0.0 | 20.3 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 1.6 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.5 | 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 | 6.9 | 0.0 | 0.0 | 8.3 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 24.9 | 0.0 | 0.0 | 24.6 | 0.0 | 0.0 | 19.4 | 0.0 | 0.0 | 20.8 | 0.0 | 0.0 |
| LnGrp LOS | C | A | A | C | A | A | B | A | A | C | A | A |
| Approach Vol, veh/h | | 322 | | | 388 | | | 41 | | | 108 | |
| Approach Delay, s/veh | | 24.9 | | | 24.6 | | | 19.4 | | | 20.8 | |
| Approach LOS | | C | | | C | | | B | | | C | |

| Timer - 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 6th Ctrl Delay | 24.0 |
| HCM 6th LOS | C |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 33 | 439 | 5 | 6 | 578 | 166 |
| Future Volume (vph) | 310 | 24 | 41 | 4 | 15 | 23 | 33 | 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 | 39 | 523 | 6 | 6 | 590 | 169 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 471 | 58 | 0 | 45 | 0 | 39 | 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 | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | 0.15 | 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) | | ~345 | 0 | | 10 | | 8 | 155 | | 1 | ~380 | |
| Queue Length 95th (ft) | | #399 | 0 | | 41 | | 21 | 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 | 333 | | 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

This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 33 | 439 | 5 | 6 | 578 | 166 |
| Future Volume (veh/h) | 310 | 24 | 41 | 4 | 15 | 23 | 33 | 439 | 5 | 6 | 578 | 166 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1847 | 1817 | 1876 | 2293 | 2188 | 2293 | 2091 | 2106 | 2136 | 1847 | 1832 | 1832 |
| Adj Flow Rate, veh/h | 437 | 34 | 58 | 4 | 16 | 25 | 39 | 523 | 6 | 6 | 590 | 169 |
| 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 | 333 | 26 | 327 | 5 | 21 | 33 | 189 | 996 | 11 | 373 | 620 | 177 |
| Arrive On Green | 0.21 | 0.21 | 0.21 | 0.03 | 0.03 | 0.03 | 0.03 | 0.48 | 0.48 | 0.01 | 0.46 | 0.46 |
| Sat Flow, veh/h | 1611 | 125 | 1582 | 160 | 642 | 1002 | 1991 | 2077 | 24 | 1759 | 1360 | 389 |
| Grp Volume(v), veh/h | 471 | 0 | 58 | 45 | 0 | 0 | 39 | 0 | 529 | 6 | 0 | 759 |
| Grp Sat Flow(s),veh/h/ln | 1737 | 0 | 1582 | 1804 | 0 | 0 | 1991 | 0 | 2101 | 1759 | 0 | 1749 |
| Q Serve(g_s), s | 15.0 | 0.0 | 2.2 | 1.8 | 0.0 | 0.0 | 0.7 | 0.0 | 12.7 | 0.1 | 0.0 | 30.3 |
| Cycle Q Clear(g_c), s | 15.0 | 0.0 | 2.2 | 1.8 | 0.0 | 0.0 | 0.7 | 0.0 | 12.7 | 0.1 | 0.0 | 30.3 |
| 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 | 358 | 0 | 327 | 59 | 0 | 0 | 189 | 0 | 1007 | 373 | 0 | 797 |
| V/C Ratio(X) | 1.31 | 0.00 | 0.18 | 0.76 | 0.00 | 0.00 | 0.21 | 0.00 | 0.53 | 0.02 | 0.00 | 0.95 |
| Avail Cap(c_a), veh/h | 358 | 0 | 327 | 248 | 0 | 0 | 403 | 0 | 1012 | 604 | 0 | 842 |
| 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 | 28.8 | 0.0 | 23.8 | 34.9 | 0.0 | 0.0 | 16.5 | 0.0 | 13.2 | 11.4 | 0.0 | 19.0 |
| Incr Delay (d2), s/veh | 160.0 | 0.0 | 0.3 | 17.8 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 19.8 |
| 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 | 21.8 | 0.0 | 0.8 | 1.1 | 0.0 | 0.0 | 0.3 | 0.0 | 5.5 | 0.0 | 0.0 | 15.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 188.8 | 0.0 | 24.0 | 52.6 | 0.0 | 0.0 | 17.0 | 0.0 | 13.7 | 11.4 | 0.0 | 38.8 |
| LnGrp LOS | F | A | C | D | A | A | B | A | B | B | A | D |
| Approach Vol, veh/h | | 529 | | | 45 | | | 568 | | | 765 | |
| Approach Delay, s/veh | | 170.7 | | | 52.6 | | | 13.9 | | | 38.6 | |
| Approach LOS | | F | | | D | | | B | | | D | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 5.5 | 39.8 | | 20.0 | 7.2 | 38.1 | | 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 | 14.7 | | 17.0 | 2.7 | 32.3 | | 3.8 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.4 | | 0.0 | 0.0 | 0.8 | | 0.1 | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 6th Ctrl Delay | | 68.2 | |
| HCM 6th LOS | | E | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 |

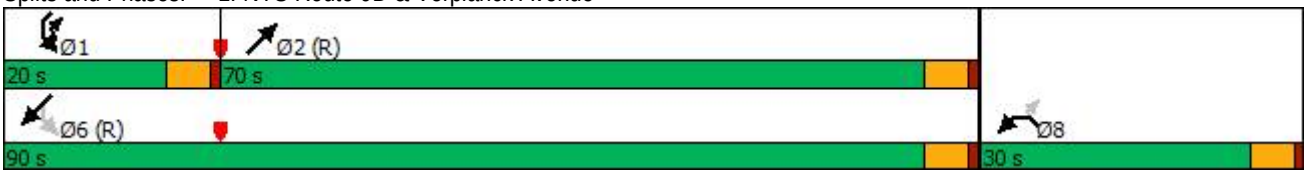


This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1723 | 1723 | 1817 | 1817 | 1909 | 1909 |
| Adj Flow Rate, veh/h | 59 | 325 | 863 | 88 | 227 | 695 |
| 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 | 342 | 487 | 879 | 90 | 300 | 1352 |
| Arrive On Green | 0.21 | 0.21 | 0.54 | 0.54 | 0.13 | 0.71 |
| Sat Flow, veh/h | 1641 | 1460 | 1622 | 165 | 1818 | 1909 |
| Grp Volume(v), veh/h | 59 | 325 | 0 | 951 | 227 | 695 |
| Grp Sat Flow(s),veh/h/ln | 1641 | 1460 | 0 | 1788 | 1818 | 1909 |
| Q Serve(g_s), s | 3.5 | 22.9 | 0.0 | 62.5 | 9.5 | 20.0 |
| Cycle Q Clear(g_c), s | 3.5 | 22.9 | 0.0 | 62.5 | 9.5 | 20.0 |
| Prop In Lane | 1.00 | 1.00 | | 0.09 | 1.00 | |
| Lane Grp Cap(c), veh/h | 342 | 487 | 0 | 968 | 300 | 1352 |
| V/C Ratio(X) | 0.17 | 0.67 | 0.00 | 0.98 | 0.76 | 0.51 |
| Avail Cap(c_a), veh/h | 342 | 487 | 0 | 968 | 300 | 1352 |
| 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 | 39.0 | 34.3 | 0.0 | 26.9 | 36.4 | 8.0 |
| Incr Delay (d2), s/veh | 1.1 | 7.1 | 0.0 | 24.9 | 16.3 | 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 | 1.5 | 9.0 | 0.0 | 31.9 | 4.9 | 8.0 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 40.1 | 41.4 | 0.0 | 51.9 | 52.7 | 9.4 |
| LnGrp LOS | D | D | A | D | D | A |
| Approach Vol, veh/h | 384 | | 951 | | | 922 |
| Approach Delay, s/veh | 41.2 | | 51.9 | | | 20.1 |
| Approach LOS | D | | D | | | C |

| Timer - 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 6th Ctrl Delay | 37.1 |
| HCM 6th LOS | D |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 310 | 24 | 36 | 4 | 15 | 23 | 38 | 494 | 5 | 6 | 524 | 166 |
| Future Volume (vph) | 310 | 24 | 36 | 4 | 15 | 23 | 38 | 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 | 51 | 4 | 16 | 25 | 45 | 588 | 6 | 6 | 535 | 169 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 471 | 51 | 0 | 45 | 0 | 45 | 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 | |



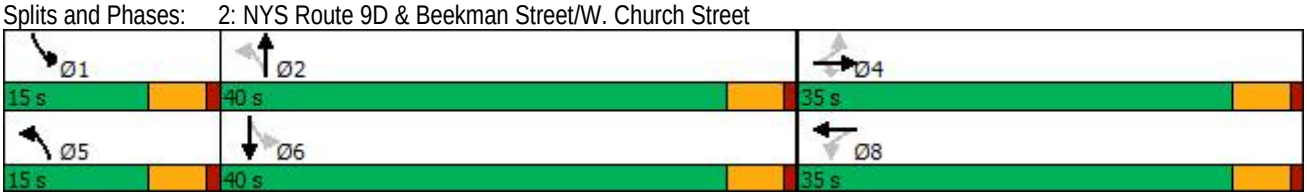
This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | 0.19 | 0.64 | | 0.02 | 0.92 | |
| Control Delay | | 68.2 | 2.1 | | 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 | 2.1 | | 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 | 1 | | 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 | | 0.15 | 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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 310 | 24 | 36 | 4 | 15 | 23 | 38 | 494 | 5 | 6 | 524 | 166 |
| Future Volume (veh/h) | 310 | 24 | 36 | 4 | 15 | 23 | 38 | 494 | 5 | 6 | 524 | 166 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1847 | 1817 | 1876 | 2293 | 2188 | 2293 | 2091 | 2106 | 2136 | 1847 | 1832 | 1832 |
| Adj Flow Rate, veh/h | 437 | 34 | 51 | 4 | 16 | 25 | 45 | 588 | 6 | 6 | 535 | 169 |
| 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 | 191 | 8 | 576 | 47 | 161 | 202 | 177 | 934 | 10 | 286 | 561 | 177 |
| 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 | 296 | 23 | 1586 | 0 | 444 | 555 | 1991 | 2080 | 21 | 1759 | 1324 | 418 |
| Grp Volume(v), veh/h | 471 | 0 | 51 | 45 | 0 | 0 | 45 | 0 | 594 | 6 | 0 | 704 |
| Grp Sat Flow(s),veh/h/ln | 319 | 0 | 1586 | 999 | 0 | 0 | 1991 | 0 | 2102 | 1759 | 0 | 1743 |
| Q Serve(g_s), s | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 17.9 | 0.2 | 0.0 | 32.2 |
| Cycle Q Clear(g_c), s | 30.0 | 0.0 | 1.7 | 30.0 | 0.0 | 0.0 | 1.0 | 0.0 | 17.9 | 0.2 | 0.0 | 32.2 |
| 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 | 200 | 0 | 576 | 410 | 0 | 0 | 177 | 0 | 943 | 286 | 0 | 739 |
| V/C Ratio(X) | 2.36 | 0.00 | 0.09 | 0.11 | 0.00 | 0.00 | 0.25 | 0.00 | 0.63 | 0.02 | 0.00 | 0.95 |
| Avail Cap(c_a), veh/h | 200 | 0 | 576 | 410 | 0 | 0 | 356 | 0 | 943 | 488 | 0 | 739 |
| 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 | 18.4 | 0.0 | 0.0 | 19.2 | 0.0 | 17.5 | 15.0 | 0.0 | 23.0 |
| Incr Delay (d2), s/veh | 626.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.7 | 0.0 | 3.2 | 0.0 | 0.0 | 23.4 |
| 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 | 38.8 | 0.0 | 0.6 | 0.6 | 0.0 | 0.0 | 0.5 | 0.0 | 8.9 | 0.1 | 0.0 | 17.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 658.8 | 0.0 | 17.4 | 18.5 | 0.0 | 0.0 | 19.9 | 0.0 | 20.7 | 15.0 | 0.0 | 46.4 |
| LnGrp LOS | F | A | B | B | A | A | B | A | C | B | A | D |
| Approach Vol, veh/h | | 522 | | | 45 | | | 639 | | | 710 | |
| Approach Delay, s/veh | | 596.2 | | | 18.5 | | | 20.6 | | | 46.2 | |
| Approach LOS | | F | | | B | | | C | | | D | |

| Timer - 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 | 19.9 | | 32.0 | 3.0 | 34.2 | | 32.0 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.5 | | 0.0 | 0.1 | 0.2 | | 0.0 | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 6th Ctrl Delay | | 186.8 | |
| HCM 6th LOS | | F | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 1 | 2 | 2 | 49 | 2 | 162 | 0 | 373 | 88 | 246 | 325 | 1 |
| Future Volume (vph) | 1 | 2 | 2 | 49 | 2 | 162 | 0 | 373 | 88 | 246 | 325 | 1 |
| 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 | | 0.99 | | | 1.00 | |
| Frt | | 0.949 | | | | 0.850 | | 0.971 | | | | |
| Flt Protected | | 0.988 | | | 0.954 | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1742 | 0 | 0 | 1885 | 1647 | 1928 | 1798 | 0 | 1743 | 1853 | 0 |
| Flt Permitted | | 0.897 | | | 0.786 | | | | | 0.343 | | |
| Satd. Flow (perm) | 0 | 1582 | 0 | 0 | 1553 | 1587 | 1928 | 1798 | 0 | 629 | 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) | 2 | 3 | 3 | 54 | 2 | 178 | 0 | 472 | 111 | 280 | 369 | 1 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 8 | 0 | 0 | 56 | 178 | 0 | 583 | 0 | 280 | 370 | 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 | |



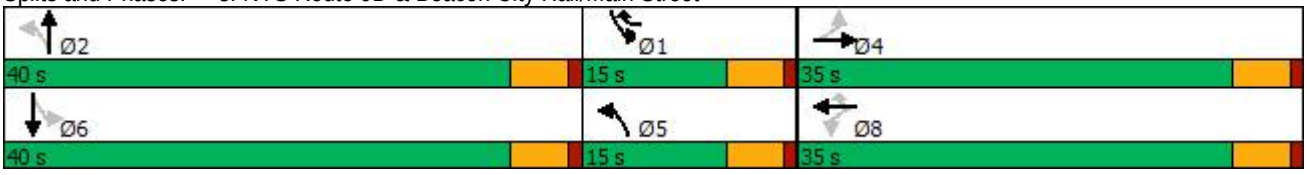
This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | 0.04 | | | 0.26 | 0.47 | | 0.58 | | 0.42 | 0.24 | |
| Control Delay | | 22.6 | | | 29.9 | 22.0 | | 13.7 | | 7.4 | 3.1 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.2 | |
| Total Delay | | 22.6 | | | 29.9 | 22.0 | | 13.7 | | 7.4 | 3.3 | |
| Queue Length 50th (ft) | | 2 | | | 22 | 54 | | 162 | | 28 | 38 | |
| Queue Length 95th (ft) | | 8 | | | 53 | 100 | | 228 | | 56 | 75 | |
| Internal Link Dist (ft) | | 53 | | | 270 | | | 613 | | | 308 | |
| Turn Bay Length (ft) | | | | | | 70 | | | | 120 | | |
| Base Capacity (vph) | | 765 | | | 750 | 391 | | 1013 | | 685 | 1544 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | | 0 | | 0 | 552 | |
| 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 | | 0.58 | | 0.41 | 0.37 | |

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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 1 | 2 | 2 | 49 | 2 | 162 | 0 | 373 | 88 | 246 | 325 | 1 |
| Future Volume (veh/h) | 1 | 2 | 2 | 49 | 2 | 162 | 0 | 373 | 88 | 246 | 325 | 1 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 0.96 | | 0.94 | 0.97 | | 0.94 | 1.00 | | 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1894 | 1894 | 1894 | 2215 | 2215 | 2185 | 2018 | 1988 | 1943 | 1817 | 1832 | 1847 |
| Adj Flow Rate, veh/h | 2 | 3 | 3 | 54 | 2 | 178 | 0 | 472 | 111 | 280 | 369 | 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 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 5 | 2 | 1 | 0 |
| Cap, veh/h | 96 | 106 | 78 | 313 | 10 | 341 | 738 | 873 | 205 | 530 | 1034 | 3 |
| Arrive On Green | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.00 | 0.57 | 0.57 | 0.06 | 0.57 | 0.57 |
| Sat Flow, veh/h | 183 | 834 | 610 | 1564 | 79 | 1744 | 1922 | 1543 | 363 | 1731 | 1826 | 5 |
| Grp Volume(v), veh/h | 8 | 0 | 0 | 56 | 0 | 178 | 0 | 0 | 583 | 280 | 0 | 370 |
| Grp Sat Flow(s),veh/h/ln | 1627 | 0 | 0 | 1642 | 0 | 1744 | 1922 | 0 | 1905 | 1731 | 0 | 1831 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 | 1.4 | 0.0 | 0.0 | 11.8 | 0.0 | 0.0 | 6.8 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 0.0 | 1.8 | 0.0 | 1.4 | 0.0 | 0.0 | 11.8 | 0.0 | 0.0 | 6.8 |
| Prop In Lane | 0.25 | | 0.37 | 0.96 | | 1.00 | 1.00 | | 0.19 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 280 | 0 | 0 | 323 | 0 | 341 | 738 | 0 | 1078 | 530 | 0 | 1036 |
| V/C Ratio(X) | 0.03 | 0.00 | 0.00 | 0.17 | 0.00 | 0.52 | 0.00 | 0.00 | 0.54 | 0.53 | 0.00 | 0.36 |
| Avail Cap(c_a), veh/h | 822 | 0 | 0 | 906 | 0 | 965 | 925 | 0 | 1078 | 698 | 0 | 1036 |
| 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 23.7 | 0.0 | 0.0 | 24.3 | 0.0 | 22.4 | 0.0 | 0.0 | 8.4 | 14.9 | 0.0 | 7.3 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 1.2 | 0.0 | 0.0 | 1.9 | 0.8 | 0.0 | 1.0 |
| 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 | 0.1 | 0.0 | 0.0 | 0.7 | 0.0 | 2.3 | 0.0 | 0.0 | 4.4 | 3.0 | 0.0 | 2.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.7 | 0.0 | 0.0 | 24.6 | 0.0 | 23.6 | 0.0 | 0.0 | 10.3 | 15.7 | 0.0 | 8.3 |
| LnGrp LOS | C | A | A | C | A | C | A | A | B | B | A | A |
| Approach Vol, veh/h | | 8 | | | 234 | | | 583 | | | 650 | |
| Approach Delay, s/veh | | 23.7 | | | 23.8 | | | 10.3 | | | 11.5 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Timer - 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 | 13.8 | | 2.3 | 0.0 | 8.8 | | 3.8 | | | | |
| Green Ext Time (p_c), s | 0.9 | 1.6 | | 0.0 | 0.0 | 0.9 | | 1.4 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 13.1 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 7 | 2 | 3 | 9 | 2 | 49 | 3 | 406 | 7 | 59 | 301 | 12 |
| Future Volume (vph) | 7 | 2 | 3 | 9 | 2 | 49 | 3 | 406 | 7 | 59 | 301 | 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 | 74 | 4 | 588 | 10 | 64 | 327 | 13 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 15 | 0 | 0 | 91 | 0 | 0 | 602 | 0 | 0 | 404 | 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 | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 49 | 3 | 406 | 7 | 59 | 301 | 12 |
| Future Vol, veh/h | 7 | 2 | 3 | 9 | 2 | 49 | 3 | 406 | 7 | 59 | 301 | 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 | 74 | 4 | 588 | 10 | 64 | 327 | 13 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1108 | 1073 | 338 | 1071 | 1074 | 600 | 342 | 0 | 0 | 601 | 0 | 0 |
| Stage 1 | 464 | 464 | - | 604 | 604 | - | - | - | - | - | - | - |
| Stage 2 | 644 | 609 | - | 467 | 470 | - | - | - | - | - | - | - |
| 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 | 189 | 222 | 709 | 239 | 265 | 531 | 1228 | - | - | 976 | - | - |
| Stage 1 | 582 | 567 | - | 540 | 543 | - | - | - | - | - | - | - |
| Stage 2 | 465 | 488 | - | 627 | 609 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 150 | 202 | 707 | 219 | 241 | 528 | 1226 | - | - | 974 | - | - |
| Mov Cap-2 Maneuver | 150 | 202 | - | 219 | 241 | - | - | - | - | - | - | - |
| Stage 1 | 578 | 520 | - | 536 | 539 | - | - | - | - | - | - | - |
| Stage 2 | 394 | 485 | - | 570 | 558 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 24.8 | 15.9 | 0.1 | 1.4 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | SELn1 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1226 | - | - | 422 | 197 | 974 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 0.215 | 0.075 | 0.066 | - | - |
| HCM Control Delay (s) | 7.9 | 0 | - | 15.9 | 24.8 | 9 | 0 | - |
| HCM Lane LOS | A | A | - | C | C | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.8 | 0.2 | 0.2 | - | - |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | SEL | SER | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 83 | 28 | 5 | 332 | 299 | 14 |
| Future Volume (vph) | 83 | 28 | 5 | 332 | 299 | 14 |
| 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 | 0.966 | | | | 0.994 | |
| Flt Protected | 0.964 | | | 0.999 | | |
| Satd. Flow (prot) | 1735 | 0 | 0 | 1861 | 1852 | 0 |
| Flt Permitted | 0.964 | | | 0.999 | | |
| Satd. Flow (perm) | 1735 | 0 | 0 | 1861 | 1852 | 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) | 90 | 30 | 5 | 361 | 325 | 15 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 120 | 0 | 0 | 366 | 340 | 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



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Intersection | |
|---|---|
| Int Delay, s/veh | 2 |

| Movement | SEL | SER | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 83 | 28 | 5 | 332 | 299 | 14 |
| Future Vol, veh/h | 83 | 28 | 5 | 332 | 299 | 14 |
| 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 | 90 | 30 | 5 | 361 | 325 | 15 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 704 | 333 | 340 | 0 | - | 0 |
| Stage 1 | 333 | - | - | - | - | - |
| Stage 2 | 371 | - | - | - | - | - |
| 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 | 403 | 709 | 1219 | - | - | - |
| Stage 1 | 726 | - | - | - | - | - |
| Stage 2 | 698 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 401 | 709 | 1219 | - | - | - |
| Mov Cap-2 Maneuver | 507 | - | - | - | - | - |
| Stage 1 | 722 | - | - | - | - | - |
| Stage 2 | 698 | - | - | - | - | - |

| Approach | SE | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 13.5 | 0.1 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NEL | NET | SELn1 | SWT | SWR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1219 | - | 546 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | 0.221 | - | - |
| HCM Control Delay (s) | 8 | 0 | 13.5 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.8 | - | - |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 1779 | 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 | |

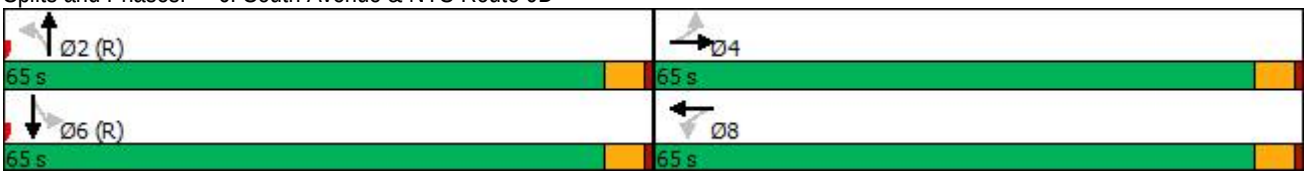


This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | | 825 | | | 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 | |

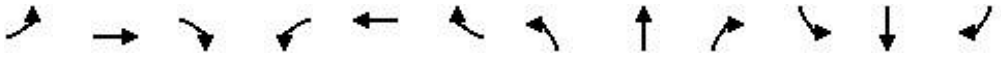
| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 130 | |
| Actuated Cycle Length: 130 | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | |
| Natural Cycle: 45 | |
| Control Type: Pretimed | |

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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.



| 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 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1688 | 1688 | 1688 | 1956 | 2076 | 2136 | 1939 | 1939 | 1939 | 1817 | 1669 | 1847 |
| Adj Flow Rate, veh/h | 11 | 316 | 21 | 11 | 284 | 66 | 8 | 25 | 8 | 58 | 37 | 13 |
| 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 | 38 | 707 | 46 | 40 | 739 | 168 | 169 | 519 | 159 | 372 | 229 | 76 |
| 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 | 21 | 1532 | 100 | 25 | 1602 | 364 | 294 | 1124 | 344 | 714 | 497 | 166 |
| Grp Volume(v), veh/h | 348 | 0 | 0 | 361 | 0 | 0 | 41 | 0 | 0 | 108 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1653 | 0 | 0 | 1991 | 0 | 0 | 1762 | 0 | 0 | 1376 | 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 | 3.9 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 18.4 | 0.0 | 0.0 | 15.3 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 | 5.6 | 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 | 791 | 0 | 0 | 947 | 0 | 0 | 846 | 0 | 0 | 678 | 0 | 0 |
| V/C Ratio(X) | 0.44 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.16 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 791 | 0 | 0 | 947 | 0 | 0 | 846 | 0 | 0 | 678 | 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 | 23.8 | 0.0 | 0.0 | 23.0 | 0.0 | 0.0 | 19.3 | 0.0 | 0.0 | 20.3 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 1.8 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.5 | 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 | 7.7 | 0.0 | 0.0 | 7.6 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 25.6 | 0.0 | 0.0 | 24.1 | 0.0 | 0.0 | 19.4 | 0.0 | 0.0 | 20.8 | 0.0 | 0.0 |
| LnGrp LOS | C | A | A | C | A | A | B | A | A | C | A | A |
| Approach Vol, veh/h | | 348 | | | 361 | | | 41 | | | 108 | |
| Approach Delay, s/veh | | 25.6 | | | 24.1 | | | 19.4 | | | 20.8 | |
| Approach LOS | | C | | | C | | | B | | | C | |

| Timer - 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 6th Ctrl Delay | 24.1 |
| HCM 6th LOS | C |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | |

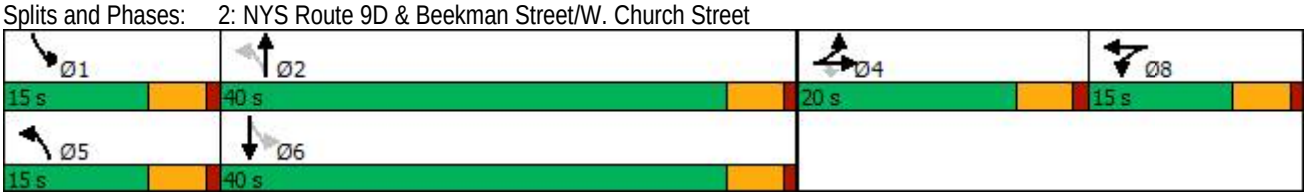


This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | |

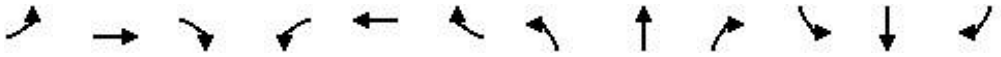
| Intersection Summary |
|---|
| Area Type: Other |
| Cycle Length: 90 |
| Actuated Cycle Length: 73.8 |
| Natural Cycle: 90 |
| Control Type: Semi Act-Uncoord |
| ~ Volume exceeds capacity, queue is theoretically infinite. |
| Queue shown is maximum after two cycles. |
| # 95th percentile volume exceeds capacity, queue may be longer. |
| Queue shown is maximum after two cycles. |

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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.



| 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 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1847 | 1817 | 1876 | 2293 | 2188 | 2293 | 2091 | 2106 | 2136 | 1847 | 1832 | 1832 |
| Adj Flow Rate, veh/h | 437 | 34 | 52 | 4 | 16 | 25 | 46 | 588 | 6 | 6 | 535 | 169 |
| 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 | 346 | 27 | 340 | 5 | 21 | 34 | 210 | 956 | 10 | 315 | 572 | 181 |
| Arrive On Green | 0.21 | 0.21 | 0.21 | 0.03 | 0.03 | 0.03 | 0.03 | 0.46 | 0.46 | 0.01 | 0.43 | 0.43 |
| Sat Flow, veh/h | 1611 | 125 | 1583 | 161 | 644 | 1006 | 1991 | 2080 | 21 | 1759 | 1324 | 418 |
| Grp Volume(v), veh/h | 471 | 0 | 52 | 45 | 0 | 0 | 46 | 0 | 594 | 6 | 0 | 704 |
| Grp Sat Flow(s),veh/h/ln | 1737 | 0 | 1583 | 1811 | 0 | 0 | 1991 | 0 | 2102 | 1759 | 0 | 1743 |
| Q Serve(g_s), s | 15.0 | 0.0 | 1.9 | 1.7 | 0.0 | 0.0 | 0.9 | 0.0 | 14.9 | 0.1 | 0.0 | 26.9 |
| Cycle Q Clear(g_c), s | 15.0 | 0.0 | 1.9 | 1.7 | 0.0 | 0.0 | 0.9 | 0.0 | 14.9 | 0.1 | 0.0 | 26.9 |
| 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 | 373 | 0 | 340 | 60 | 0 | 0 | 210 | 0 | 966 | 315 | 0 | 753 |
| V/C Ratio(X) | 1.26 | 0.00 | 0.15 | 0.75 | 0.00 | 0.00 | 0.22 | 0.00 | 0.61 | 0.02 | 0.00 | 0.93 |
| Avail Cap(c_a), veh/h | 373 | 0 | 340 | 259 | 0 | 0 | 427 | 0 | 1052 | 555 | 0 | 873 |
| 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 | 27.5 | 0.0 | 22.3 | 33.5 | 0.0 | 0.0 | 15.7 | 0.0 | 14.2 | 12.3 | 0.0 | 18.9 |
| Incr Delay (d2), s/veh | 138.6 | 0.0 | 0.2 | 16.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.9 | 0.0 | 0.0 | 15.6 |
| 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 | 20.2 | 0.0 | 0.7 | 1.0 | 0.0 | 0.0 | 0.4 | 0.0 | 6.5 | 0.0 | 0.0 | 12.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 166.0 | 0.0 | 22.5 | 50.0 | 0.0 | 0.0 | 16.2 | 0.0 | 15.2 | 12.3 | 0.0 | 34.5 |
| LnGrp LOS | F | A | C | D | A | A | B | A | B | B | A | C |
| Approach Vol, veh/h | | 523 | | | 45 | | | 640 | | | 710 | |
| Approach Delay, s/veh | | 151.8 | | | 50.0 | | | 15.2 | | | 34.3 | |
| Approach LOS | | F | | | D | | | B | | | C | |

| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 5.4 | 37.1 | | 20.0 | 7.4 | 35.2 | | 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 | 16.9 | | 17.0 | 2.9 | 28.9 | | 3.7 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.5 | | 0.0 | 0.1 | 1.3 | | 0.1 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 60.3 | | | | | | | | | |
| HCM 6th LOS | | | E | | | | | | | | | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 |

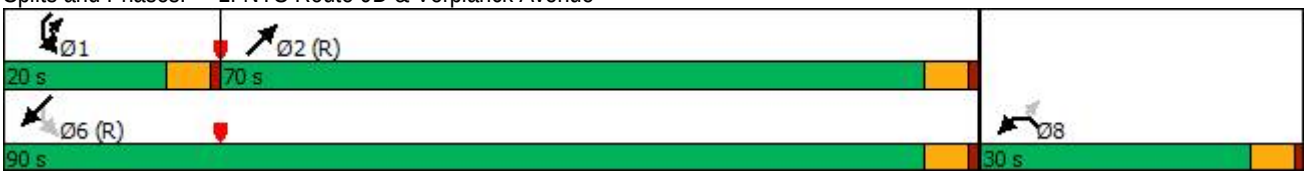


This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1723 | 1723 | 1817 | 1817 | 1909 | 1909 |
| Adj Flow Rate, veh/h | 88 | 252 | 632 | 71 | 173 | 752 |
| 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 | 342 | 487 | 869 | 98 | 473 | 1352 |
| Arrive On Green | 0.21 | 0.21 | 0.54 | 0.54 | 0.13 | 0.71 |
| Sat Flow, veh/h | 1641 | 1460 | 1605 | 180 | 1818 | 1909 |
| Grp Volume(v), veh/h | 88 | 252 | 0 | 703 | 173 | 752 |
| Grp Sat Flow(s),veh/h/ln | 1641 | 1460 | 0 | 1785 | 1818 | 1909 |
| Q Serve(g_s), s | 5.4 | 16.7 | 0.0 | 35.7 | 4.0 | 22.7 |
| Cycle Q Clear(g_c), s | 5.4 | 16.7 | 0.0 | 35.7 | 4.0 | 22.7 |
| Prop In Lane | 1.00 | 1.00 | | 0.10 | 1.00 | |
| Lane Grp Cap(c), veh/h | 342 | 487 | 0 | 967 | 473 | 1352 |
| V/C Ratio(X) | 0.26 | 0.52 | 0.00 | 0.73 | 0.37 | 0.56 |
| Avail Cap(c_a), veh/h | 342 | 487 | 0 | 967 | 473 | 1352 |
| 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 | 39.7 | 32.2 | 0.0 | 20.8 | 14.3 | 8.4 |
| Incr Delay (d2), s/veh | 1.8 | 3.9 | 0.0 | 4.8 | 2.2 | 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 | 2.4 | 6.4 | 0.0 | 15.6 | 2.0 | 9.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 41.5 | 36.1 | 0.0 | 25.6 | 16.5 | 10.1 |
| LnGrp LOS | D | D | A | C | B | B |
| Approach Vol, veh/h | 340 | | 703 | | | 925 |
| Approach Delay, s/veh | 37.5 | | 25.6 | | | 11.3 |
| Approach LOS | D | | C | | | B |

| Timer - 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 6th Ctrl Delay | 20.9 |
| HCM 6th LOS | C |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 65 | 517 | 4 | 17 | 642 | 179 |
| Future Volume (vph) | 33 | 2 | 28 | 9 | 12 | 20 | 65 | 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 | 69 | 550 | 4 | 18 | 676 | 188 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 48 | 38 | 0 | 55 | 0 | 69 | 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 | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | 0.17 | 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 | | 0.14 | 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

This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 65 | 517 | 4 | 17 | 642 | 179 |
| Future Volume (veh/h) | 33 | 2 | 28 | 9 | 12 | 20 | 65 | 517 | 4 | 17 | 642 | 179 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1862 | 1876 | 1876 | 2293 | 2293 | 2293 | 2061 | 2121 | 2136 | 1847 | 1832 | 1817 |
| Adj Flow Rate, veh/h | 45 | 3 | 38 | 12 | 16 | 27 | 69 | 550 | 4 | 18 | 676 | 188 |
| 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 | 100 | 65 | 86 | 374 | 1335 | 10 | 581 | 834 | 232 |
| 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 | 1342 | 138 | 1434 | 273 | 730 | 967 | 1963 | 2103 | 15 | 1759 | 1377 | 383 |
| Grp Volume(v), veh/h | 48 | 0 | 38 | 55 | 0 | 0 | 69 | 0 | 554 | 18 | 0 | 864 |
| Grp Sat Flow(s),veh/h/ln | 1481 | 0 | 1434 | 1970 | 0 | 0 | 1963 | 0 | 2118 | 1759 | 0 | 1759 |
| Q Serve(g_s), s | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 7.5 | 0.2 | 0.0 | 22.0 |
| Cycle Q Clear(g_c), s | 1.5 | 0.0 | 1.4 | 1.4 | 0.0 | 0.0 | 0.7 | 0.0 | 7.5 | 0.2 | 0.0 | 22.0 |
| 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 | 250 | 0 | 0 | 374 | 0 | 1344 | 581 | 0 | 1066 |
| V/C Ratio(X) | 0.19 | 0.00 | 0.30 | 0.22 | 0.00 | 0.00 | 0.18 | 0.00 | 0.41 | 0.03 | 0.00 | 0.81 |
| Avail Cap(c_a), veh/h | 840 | 0 | 744 | 1073 | 0 | 0 | 623 | 0 | 1344 | 855 | 0 | 1066 |
| 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 | 24.7 | 0.0 | 0.0 | 8.3 | 0.0 | 5.2 | 4.4 | 0.0 | 8.8 |
| Incr Delay (d2), s/veh | 0.4 | 0.0 | 1.3 | 0.4 | 0.0 | 0.0 | 0.2 | 0.0 | 0.9 | 0.0 | 0.0 | 6.7 |
| 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 | 0.6 | 0.0 | 0.5 | 0.7 | 0.0 | 0.0 | 0.3 | 0.0 | 2.6 | 0.1 | 0.0 | 7.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 25.0 | 0.0 | 26.0 | 25.1 | 0.0 | 0.0 | 8.5 | 0.0 | 6.2 | 4.5 | 0.0 | 15.5 |
| LnGrp LOS | C | A | C | C | A | A | A | A | A | A | A | B |
| Approach Vol, veh/h | | 86 | | | 55 | | | 623 | | | 882 | |
| Approach Delay, s/veh | | 25.5 | | | 25.1 | | | 6.4 | | | 15.3 | |
| Approach LOS | | C | | | C | | | A | | | B | |

| Timer - 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 | 9.5 | | 3.5 | 2.7 | 24.0 | | 3.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.5 | | 0.4 | 0.1 | 2.4 | | 0.2 | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 6th Ctrl Delay | | 12.8 | |
| HCM 6th LOS | | B | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 3 | 2 | 2 | 45 | 0 | 197 | 2 | 387 | 51 | 293 | 390 | 4 |
| Future Volume (vph) | 3 | 2 | 2 | 45 | 0 | 197 | 2 | 387 | 51 | 293 | 390 | 4 |
| 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 | | 0.959 | | | | 0.850 | | 0.983 | | | 0.999 | |
| Flt Protected | | 0.980 | | | 0.950 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1746 | 0 | 0 | 1877 | 1663 | 1832 | 1819 | 0 | 1760 | 1851 | 0 |
| Flt Permitted | | 0.847 | | | 0.800 | | 0.487 | | | 0.386 | | |
| Satd. Flow (perm) | 0 | 1509 | 0 | 0 | 1581 | 1619 | 939 | 1819 | 0 | 715 | 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) | 4 | 3 | 3 | 51 | 0 | 221 | 2 | 440 | 58 | 318 | 424 | 4 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 10 | 0 | 0 | 51 | 221 | 2 | 498 | 0 | 318 | 428 | 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 | | |

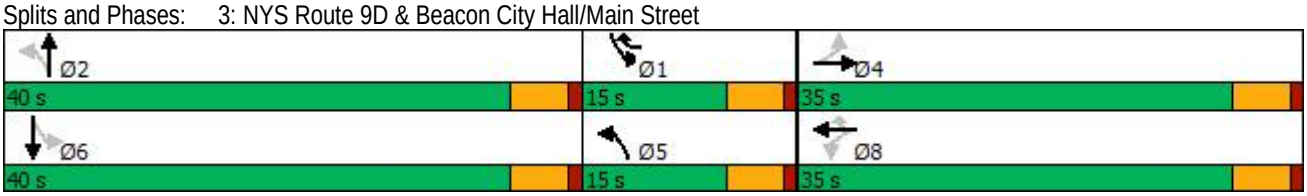


This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | | 0.23 | 0.57 | 0.00 | 0.49 | | 0.44 | 0.29 | |
| Control Delay | | 23.6 | | | 29.4 | 24.7 | 3.5 | 12.2 | | 7.2 | 5.9 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.2 | |
| Total Delay | | 23.6 | | | 29.4 | 24.7 | 3.5 | 12.2 | | 7.2 | 6.1 | |
| Queue Length 50th (ft) | | 3 | | | 20 | 69 | 0 | 129 | | 32 | 46 | |
| Queue Length 95th (ft) | | 12 | | | 49 | 121 | 2 | 217 | | 65 | 183 | |
| Internal Link Dist (ft) | | 53 | | | 270 | | | 613 | | | 308 | |
| Turn Bay Length (ft) | | | | | | 70 | 65 | | | 120 | | |
| Base Capacity (vph) | | 727 | | | 761 | 395 | 821 | 1021 | | 731 | 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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 3 | 2 | 2 | 45 | 0 | 197 | 2 | 387 | 51 | 293 | 390 | 4 |
| Future Volume (veh/h) | 3 | 2 | 2 | 45 | 0 | 197 | 2 | 387 | 51 | 293 | 390 | 4 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1894 | 1894 | 1894 | 2215 | 2215 | 2200 | 2018 | 1988 | 1943 | 1832 | 1832 | 1847 |
| Adj Flow Rate, veh/h | 4 | 3 | 3 | 51 | 0 | 221 | 2 | 440 | 58 | 318 | 424 | 4 |
| 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 | 130 | 89 | 59 | 321 | 0 | 353 | 686 | 967 | 127 | 591 | 1024 | 10 |
| 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 | 383 | 692 | 461 | 1597 | 0 | 1821 | 1922 | 1710 | 225 | 1745 | 1812 | 17 |
| Grp Volume(v), veh/h | 10 | 0 | 0 | 51 | 0 | 221 | 2 | 0 | 498 | 318 | 0 | 428 |
| Grp Sat Flow(s),veh/h/ln | 1536 | 0 | 0 | 1597 | 0 | 1821 | 1922 | 0 | 1936 | 1745 | 0 | 1829 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 | 2.8 | 0.0 | 0.0 | 9.3 | 0.0 | 0.0 | 8.2 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 0.0 | 1.7 | 0.0 | 2.8 | 0.0 | 0.0 | 9.3 | 0.0 | 0.0 | 8.2 |
| Prop In Lane | 0.40 | | 0.30 | 1.00 | | 1.00 | 1.00 | | 0.12 | 1.00 | | 0.01 |
| Lane Grp Cap(c), veh/h | 278 | 0 | 0 | 321 | 0 | 353 | 686 | 0 | 1094 | 591 | 0 | 1034 |
| V/C Ratio(X) | 0.04 | 0.00 | 0.00 | 0.16 | 0.00 | 0.63 | 0.00 | 0.00 | 0.46 | 0.54 | 0.00 | 0.41 |
| Avail Cap(c_a), veh/h | 786 | 0 | 0 | 884 | 0 | 1002 | 872 | 0 | 1094 | 760 | 0 | 1034 |
| 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 | 24.3 | 0.0 | 22.9 | 7.9 | 0.0 | 7.9 | 13.2 | 0.0 | 7.6 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 1.8 | 0.0 | 0.0 | 1.4 | 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 | 0.7 | 0.0 | 2.9 | 0.0 | 0.0 | 3.5 | 3.2 | 0.0 | 2.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.7 | 0.0 | 0.0 | 24.5 | 0.0 | 24.7 | 7.9 | 0.0 | 9.2 | 14.0 | 0.0 | 8.9 |
| LnGrp LOS | C | A | A | C | A | C | A | A | A | B | A | A |
| Approach Vol, veh/h | | 10 | | | 272 | | | 500 | | | 746 | |
| Approach Delay, s/veh | | 23.7 | | | 24.7 | | | 9.2 | | | 11.0 | |
| Approach LOS | | C | | | C | | | A | | | B | |

| Timer - 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 | 11.3 | | 2.3 | 2.0 | 10.2 | | 4.8 | | | | |
| Green Ext Time (p_c), s | 1.0 | 1.3 | | 0.0 | 0.0 | 1.1 | | 1.6 | | | | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM 6th Ctrl Delay | | 13.0 | |
| HCM 6th LOS | | B | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 10 | 3 | 3 | 10 | 5 | 83 | 3 | 346 | 10 | 46 | 384 | 7 |
| Future Volume (vph) | 10 | 3 | 3 | 10 | 5 | 83 | 3 | 346 | 10 | 46 | 384 | 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 | 94 | 4 | 407 | 12 | 50 | 417 | 8 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 26 | 0 | 0 | 111 | 0 | 0 | 423 | 0 | 0 | 475 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 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 | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 83 | 3 | 346 | 10 | 46 | 384 | 7 |
| Future Vol, veh/h | 10 | 3 | 3 | 10 | 5 | 83 | 3 | 346 | 10 | 46 | 384 | 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 | 94 | 4 | 407 | 12 | 50 | 417 | 8 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1014 | 953 | 428 | 953 | 951 | 434 | 428 | 0 | 0 | 421 | 0 | 0 |
| Stage 1 | 524 | 524 | - | 423 | 423 | - | - | - | - | - | - | - |
| Stage 2 | 490 | 429 | - | 530 | 528 | - | - | - | - | - | - | - |
| 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 | 219 | 216 | 631 | 270 | 279 | 647 | 1142 | - | - | 1138 | - | - |
| Stage 1 | 540 | 459 | - | 635 | 590 | - | - | - | - | - | - | - |
| Stage 2 | 564 | 510 | - | 564 | 537 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 171 | 202 | 627 | 249 | 261 | 636 | 1139 | - | - | 1136 | - | - |
| Mov Cap-2 Maneuver | 171 | 202 | - | 249 | 261 | - | - | - | - | - | - | - |
| Stage 1 | 536 | 431 | - | 631 | 586 | - | - | - | - | - | - | - |
| Stage 2 | 466 | 506 | - | 519 | 505 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 25.1 | 13.9 | 0.1 | 0.9 |
| HCM LOS | D | B | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | SELn1 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1139 | - | - | 516 | 205 | 1136 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.216 | 0.128 | 0.044 | - | - |
| HCM Control Delay (s) | 8.2 | 0 | - | 13.9 | 25.1 | 8.3 | 0 | - |
| HCM Lane LOS | A | A | - | B | D | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.8 | 0.4 | 0.1 | - | - |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | SEL | SER | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 13 | 5 | 27 | 345 | 315 | 81 |
| Future Volume (vph) | 13 | 5 | 27 | 345 | 315 | 81 |
| 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 | 0.964 | | | | 0.972 | |
| Flt Protected | 0.964 | | | 0.996 | | |
| Satd. Flow (prot) | 1731 | 0 | 0 | 1855 | 1811 | 0 |
| Flt Permitted | 0.964 | | | 0.996 | | |
| Satd. Flow (perm) | 1731 | 0 | 0 | 1855 | 1811 | 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) | 14 | 5 | 29 | 375 | 342 | 88 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 19 | 0 | 0 | 404 | 430 | 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



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | SEL | SER | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 13 | 5 | 27 | 345 | 315 | 81 |
| Future Vol, veh/h | 13 | 5 | 27 | 345 | 315 | 81 |
| 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 | 14 | 5 | 29 | 375 | 342 | 88 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 819 | 386 | 430 | 0 | - | 0 |
| Stage 1 | 386 | - | - | - | - | - |
| 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 | 345 | 662 | 1129 | - | - | - |
| Stage 1 | 687 | - | - | - | - | - |
| Stage 2 | 654 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 334 | 662 | 1129 | - | - | - |
| Mov Cap-2 Maneuver | 453 | - | - | - | - | - |
| Stage 1 | 665 | - | - | - | - | - |
| Stage 2 | 654 | - | - | - | - | - |

| Approach | SE | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 12.5 | 0.6 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NEL | NET | SELn1 | SWT | SWR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1129 | - | 497 | - | - |
| HCM Lane V/C Ratio | 0.026 | - | 0.039 | - | - |
| HCM Control Delay (s) | 8.3 | 0 | 12.5 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.1 | - | - |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 1700 | 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 | | | 17.0 | | | 19.2 | |
| Queue Delay | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Delay | | 23.1 | | | 24.1 | | | 17.0 | | | 19.2 | |
| Queue Length 50th (ft) | | 137 | | | 173 | | | 38 | | | 41 | |
| Queue Length 95th (ft) | | 180 | | | 232 | | | 39 | | | 67 | |

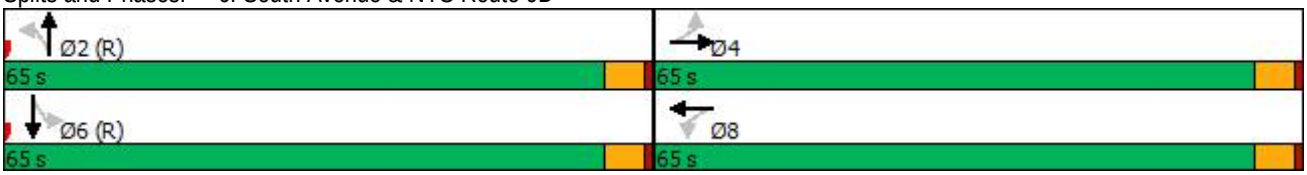


This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | | 793 | | | 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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1688 | 1688 | 1688 | 1956 | 2076 | 2136 | 1939 | 1939 | 1939 | 1817 | 1669 | 1847 |
| Adj Flow Rate, veh/h | 11 | 235 | 20 | 15 | 269 | 44 | 25 | 49 | 24 | 39 | 43 | 11 |
| 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 | 43 | 688 | 57 | 49 | 779 | 124 | 215 | 415 | 193 | 298 | 316 | 77 |
| 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 | 30 | 1490 | 124 | 43 | 1688 | 268 | 390 | 900 | 418 | 560 | 684 | 167 |
| Grp Volume(v), veh/h | 266 | 0 | 0 | 328 | 0 | 0 | 98 | 0 | 0 | 93 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1643 | 0 | 0 | 1999 | 0 | 0 | 1708 | 0 | 0 | 1411 | 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 | 0.4 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 13.3 | 0.0 | 0.0 | 13.5 | 0.0 | 0.0 | 3.9 | 0.0 | 0.0 | 4.3 | 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 | 787 | 0 | 0 | 952 | 0 | 0 | 823 | 0 | 0 | 690 | 0 | 0 |
| V/C Ratio(X) | 0.34 | 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 | 787 | 0 | 0 | 952 | 0 | 0 | 823 | 0 | 0 | 690 | 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 | 22.5 | 0.0 | 0.0 | 19.9 | 0.0 | 0.0 | 20.0 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 1.2 | 0.0 | 0.0 | 1.0 | 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 | 5.5 | 0.0 | 0.0 | 6.7 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.6 | 0.0 | 0.0 | 23.5 | 0.0 | 0.0 | 20.2 | 0.0 | 0.0 | 20.4 | 0.0 | 0.0 |
| LnGrp LOS | C | A | A | C | A | A | C | A | A | C | A | A |
| Approach Vol, veh/h | | 266 | | | 328 | | | 98 | | | 93 | |
| Approach Delay, s/veh | | 23.6 | | | 23.5 | | | 20.2 | | | 20.4 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer - 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 6th Ctrl Delay | 22.7 |
| HCM 6th LOS | C |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 |

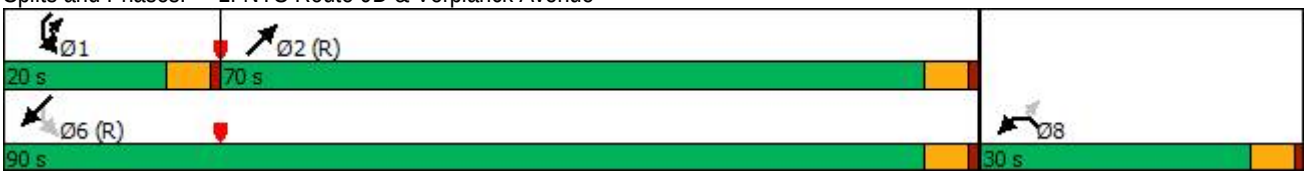


This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | No | | | No |
| Adj Sat Flow, veh/h/ln | 1723 | 1723 | 1817 | 1817 | 1909 | 1909 |
| Adj Flow Rate, veh/h | 78 | 252 | 680 | 80 | 173 | 703 |
| 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 | 342 | 487 | 864 | 102 | 432 | 1352 |
| Arrive On Green | 0.21 | 0.21 | 0.54 | 0.54 | 0.13 | 0.71 |
| Sat Flow, veh/h | 1641 | 1460 | 1596 | 188 | 1818 | 1909 |
| Grp Volume(v), veh/h | 78 | 252 | 0 | 760 | 173 | 703 |
| Grp Sat Flow(s),veh/h/ln | 1641 | 1460 | 0 | 1784 | 1818 | 1909 |
| Q Serve(g_s), s | 4.7 | 16.7 | 0.0 | 40.8 | 4.0 | 20.4 |
| Cycle Q Clear(g_c), s | 4.7 | 16.7 | 0.0 | 40.8 | 4.0 | 20.4 |
| Prop In Lane | 1.00 | 1.00 | | 0.11 | 1.00 | |
| Lane Grp Cap(c), veh/h | 342 | 487 | 0 | 966 | 432 | 1352 |
| V/C Ratio(X) | 0.23 | 0.52 | 0.00 | 0.79 | 0.40 | 0.52 |
| Avail Cap(c_a), veh/h | 342 | 487 | 0 | 966 | 432 | 1352 |
| 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 | 39.5 | 32.2 | 0.0 | 22.0 | 16.7 | 8.1 |
| Incr Delay (d2), s/veh | 1.5 | 3.9 | 0.0 | 6.4 | 2.7 | 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 | 2.1 | 6.4 | 0.0 | 18.1 | 2.4 | 8.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 41.0 | 36.1 | 0.0 | 28.4 | 19.5 | 9.5 |
| LnGrp LOS | D | D | A | C | B | A |
| Approach Vol, veh/h | 330 | | 760 | | | 876 |
| Approach Delay, s/veh | 37.3 | | 28.4 | | | 11.5 |
| Approach LOS | D | | C | | | B |

| Timer - 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 6th Ctrl Delay | 22.4 |
| HCM 6th LOS | C |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 33 | 2 | 23 | 9 | 12 | 20 | 70 | 572 | 4 | 17 | 587 | 179 |
| Future Volume (vph) | 33 | 2 | 23 | 9 | 12 | 20 | 70 | 572 | 4 | 17 | 587 | 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 | | 0.223 | | | 0.402 | | |
| Satd. Flow (perm) | 0 | 1536 | 1533 | 0 | 1672 | 0 | 416 | 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 | 32 | 12 | 16 | 27 | 74 | 609 | 4 | 18 | 618 | 188 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 48 | 32 | 0 | 55 | 0 | 74 | 613 | 0 | 18 | 806 | 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 | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 0.9 | | 19.0 | | 3.5 | 6.1 | | 3.3 | 14.2 | |
| Queue Delay | | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.3 | | 0.0 | 0.0 | |
| Total Delay | | 28.3 | 0.9 | | 19.0 | | 3.5 | 6.4 | | 3.3 | 14.2 | |
| Queue Length 50th (ft) | | 18 | 0 | | 10 | | 6 | 72 | | 2 | 234 | |
| Queue Length 95th (ft) | | 37 | 0 | | 31 | | 18 | 253 | | 6 | #506 | |
| Internal Link Dist (ft) | | 504 | | | 248 | | | 308 | | | 255 | |
| Turn Bay Length (ft) | | | 95 | | | | 75 | | | 75 | | |
| Base Capacity (vph) | | 815 | 853 | | 900 | | 565 | 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

This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 33 | 2 | 23 | 9 | 12 | 20 | 70 | 572 | 4 | 17 | 587 | 179 |
| Future Volume (veh/h) | 33 | 2 | 23 | 9 | 12 | 20 | 70 | 572 | 4 | 17 | 587 | 179 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1862 | 1876 | 1876 | 2293 | 2293 | 2293 | 2061 | 2121 | 2136 | 1847 | 1832 | 1817 |
| Adj Flow Rate, veh/h | 45 | 3 | 32 | 12 | 16 | 27 | 74 | 609 | 4 | 18 | 618 | 188 |
| 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 | 238 | 12 | 126 | 100 | 64 | 85 | 419 | 1338 | 9 | 544 | 814 | 248 |
| 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 | 1343 | 139 | 1433 | 274 | 729 | 968 | 1963 | 2105 | 14 | 1759 | 1345 | 409 |
| Grp Volume(v), veh/h | 48 | 0 | 32 | 55 | 0 | 0 | 74 | 0 | 613 | 18 | 0 | 806 |
| Grp Sat Flow(s),veh/h/ln | 1481 | 0 | 1433 | 1971 | 0 | 0 | 1963 | 0 | 2118 | 1759 | 0 | 1754 |
| Q Serve(g_s), s | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 8.6 | 0.2 | 0.0 | 19.4 |
| Cycle Q Clear(g_c), s | 1.5 | 0.0 | 1.2 | 1.4 | 0.0 | 0.0 | 0.8 | 0.0 | 8.6 | 0.2 | 0.0 | 19.4 |
| 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 | 250 | 0 | 126 | 249 | 0 | 0 | 419 | 0 | 1347 | 544 | 0 | 1061 |
| V/C Ratio(X) | 0.19 | 0.00 | 0.25 | 0.22 | 0.00 | 0.00 | 0.18 | 0.00 | 0.46 | 0.03 | 0.00 | 0.76 |
| Avail Cap(c_a), veh/h | 839 | 0 | 743 | 1073 | 0 | 0 | 664 | 0 | 1347 | 818 | 0 | 1061 |
| 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 | 24.7 | 0.0 | 0.0 | 7.2 | 0.0 | 5.4 | 4.6 | 0.0 | 8.4 |
| Incr Delay (d2), s/veh | 0.4 | 0.0 | 1.1 | 0.4 | 0.0 | 0.0 | 0.2 | 0.0 | 1.1 | 0.0 | 0.0 | 5.1 |
| 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 | 0.6 | 0.0 | 0.4 | 0.7 | 0.0 | 0.0 | 0.2 | 0.0 | 3.0 | 0.1 | 0.0 | 6.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 25.1 | 0.0 | 25.7 | 25.2 | 0.0 | 0.0 | 7.4 | 0.0 | 6.5 | 4.6 | 0.0 | 13.5 |
| LnGrp LOS | C | A | C | C | A | A | A | A | A | A | A | B |
| Approach Vol, veh/h | | 80 | | | 55 | | | 687 | | | 824 | |
| Approach Delay, s/veh | | 25.3 | | | 25.2 | | | 6.6 | | | 13.3 | |
| Approach LOS | | C | | | C | | | A | | | B | |

| Timer - 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 | 10.6 | | 3.5 | 2.8 | 21.4 | | 3.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.7 | | 0.4 | 0.1 | 2.3 | | 0.2 | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 11.5 |
| HCM 6th LOS | | B |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 3 | 2 | 2 | 36 | 0 | 197 | 2 | 446 | 60 | 293 | 331 | 4 |
| Future Volume (vph) | 3 | 2 | 2 | 36 | 0 | 197 | 2 | 446 | 60 | 293 | 331 | 4 |
| 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 | | 0.959 | | | | 0.850 | | 0.982 | | | 0.998 | |
| Flt Protected | | 0.980 | | | 0.950 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1746 | 0 | 0 | 1877 | 1663 | 1832 | 1817 | 0 | 1760 | 1849 | 0 |
| Flt Permitted | | 0.903 | | | | | 0.544 | | | 0.335 | | |
| Satd. Flow (perm) | 0 | 1608 | 0 | 0 | 1976 | 1619 | 1049 | 1817 | 0 | 621 | 1849 | 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) | 4 | 3 | 3 | 40 | 0 | 221 | 2 | 507 | 68 | 318 | 360 | 4 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 10 | 0 | 0 | 40 | 221 | 2 | 575 | 0 | 318 | 364 | 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 | | |

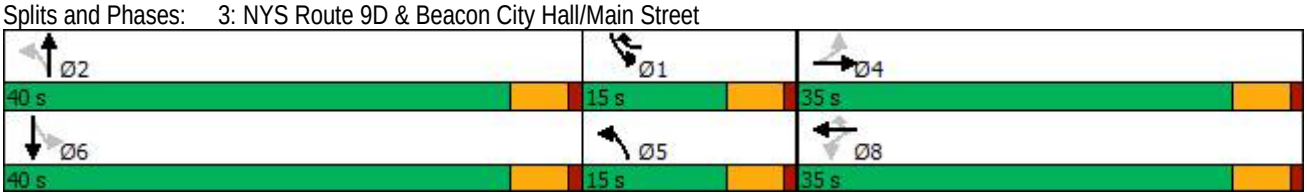


This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | | 0.15 | 0.61 | 0.00 | 0.54 | | 0.45 | 0.23 | |
| Control Delay | | 23.3 | | | 26.7 | 27.1 | 3.0 | 11.7 | | 7.4 | 4.8 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 23.3 | | | 26.7 | 27.1 | 3.0 | 11.7 | | 7.4 | 4.8 | |
| Queue Length 50th (ft) | | 2 | | | 12 | 69 | 0 | 82 | | 0 | 0 | |
| Queue Length 95th (ft) | | 12 | | | 40 | 122 | 2 | 258 | | 62 | 148 | |
| Internal Link Dist (ft) | | 53 | | | 270 | | | 613 | | | 308 | |
| Turn Bay Length (ft) | | | | | | 70 | 65 | | | 120 | | |
| Base Capacity (vph) | | 807 | | | 990 | 361 | 919 | 1063 | | 700 | 1566 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 72 | |
| 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 | 0.54 | | 0.45 | 0.24 | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 90 | |
| Actuated Cycle Length: 60.6 | |
| Natural Cycle: 70 | |
| Control Type: Semi Act-Uncoord | |

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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 3 | 2 | 2 | 36 | 0 | 197 | 2 | 446 | 60 | 293 | 331 | 4 |
| Future Volume (veh/h) | 3 | 2 | 2 | 36 | 0 | 197 | 2 | 446 | 60 | 293 | 331 | 4 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1894 | 1894 | 1894 | 2215 | 2215 | 2200 | 2018 | 1988 | 1943 | 1832 | 1832 | 1847 |
| Adj Flow Rate, veh/h | 4 | 3 | 3 | 40 | 0 | 221 | 2 | 507 | 68 | 318 | 360 | 4 |
| 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 | 130 | 89 | 59 | 321 | 0 | 353 | 739 | 965 | 129 | 540 | 1022 | 11 |
| 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 | 383 | 692 | 461 | 1597 | 0 | 1821 | 1922 | 1706 | 229 | 1745 | 1808 | 20 |
| Grp Volume(v), veh/h | 10 | 0 | 0 | 40 | 0 | 221 | 2 | 0 | 575 | 318 | 0 | 364 |
| Grp Sat Flow(s),veh/h/ln | 1536 | 0 | 0 | 1597 | 0 | 1821 | 1922 | 0 | 1935 | 1745 | 0 | 1828 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 2.8 | 0.0 | 0.0 | 11.4 | 0.0 | 0.0 | 6.7 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 0.0 | 1.3 | 0.0 | 2.8 | 0.0 | 0.0 | 11.4 | 0.0 | 0.0 | 6.7 |
| Prop In Lane | 0.40 | | 0.30 | 1.00 | | 1.00 | 1.00 | | 0.12 | 1.00 | | 0.01 |
| Lane Grp Cap(c), veh/h | 278 | 0 | 0 | 321 | 0 | 353 | 739 | 0 | 1094 | 540 | 0 | 1034 |
| V/C Ratio(X) | 0.04 | 0.00 | 0.00 | 0.12 | 0.00 | 0.63 | 0.00 | 0.00 | 0.53 | 0.59 | 0.00 | 0.35 |
| Avail Cap(c_a), veh/h | 786 | 0 | 0 | 884 | 0 | 1002 | 926 | 0 | 1094 | 710 | 0 | 1034 |
| 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 | 22.9 | 7.1 | 0.0 | 8.3 | 15.6 | 0.0 | 7.3 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 1.8 | 0.0 | 0.0 | 1.8 | 1.0 | 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 | 0.5 | 0.0 | 2.9 | 0.0 | 0.0 | 4.3 | 3.6 | 0.0 | 2.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.7 | 0.0 | 0.0 | 24.3 | 0.0 | 24.7 | 7.1 | 0.0 | 10.1 | 16.6 | 0.0 | 8.2 |
| LnGrp LOS | C | A | A | C | A | C | A | A | B | B | A | A |
| Approach Vol, veh/h | | 10 | | | 261 | | | 577 | | | 682 | |
| Approach Delay, s/veh | | 23.7 | | | 24.7 | | | 10.1 | | | 12.1 | |
| Approach LOS | | C | | | C | | | B | | | B | |

| Timer - 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 | 13.4 | | 2.3 | 2.0 | 8.7 | | 4.8 | | | | |
| Green Ext Time (p_c), s | 1.0 | 1.6 | | 0.0 | 0.0 | 0.9 | | 1.5 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 13.6 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 10 | 3 | 3 | 10 | 5 | 83 | 3 | 415 | 10 | 46 | 316 | 7 |
| Future Volume (vph) | 10 | 3 | 3 | 10 | 5 | 83 | 3 | 415 | 10 | 46 | 316 | 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 | 94 | 4 | 488 | 12 | 50 | 343 | 8 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 26 | 0 | 0 | 111 | 0 | 0 | 504 | 0 | 0 | 401 | 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 | |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 83 | 3 | 415 | 10 | 46 | 316 | 7 |
| Future Vol, veh/h | 10 | 3 | 3 | 10 | 5 | 83 | 3 | 415 | 10 | 46 | 316 | 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 | 94 | 4 | 488 | 12 | 50 | 343 | 8 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1021 | 960 | 354 | 960 | 958 | 515 | 354 | 0 | 0 | 502 | 0 | 0 |
| Stage 1 | 450 | 450 | - | 504 | 504 | - | - | - | - | - | - | - |
| Stage 2 | 571 | 510 | - | 456 | 454 | - | - | - | - | - | - | - |
| 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 | 217 | 214 | 694 | 267 | 276 | 586 | 1216 | - | - | 1062 | - | - |
| Stage 1 | 592 | 498 | - | 581 | 549 | - | - | - | - | - | - | - |
| Stage 2 | 509 | 466 | - | 612 | 574 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 167 | 200 | 690 | 246 | 258 | 576 | 1213 | - | - | 1060 | - | - |
| Mov Cap-2 Maneuver | 167 | 200 | - | 246 | 258 | - | - | - | - | - | - | - |
| Stage 1 | 588 | 468 | - | 577 | 545 | - | - | - | - | - | - | - |
| Stage 2 | 412 | 463 | - | 564 | 539 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 25.5 | 14.8 | 0.1 | 1.1 |
| HCM LOS | D | B | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | SELn1 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1213 | - | - | 480 | 202 | 1060 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.232 | 0.13 | 0.047 | - | - |
| HCM Control Delay (s) | 8 | 0 | - | 14.8 | 25.5 | 8.6 | 0 | - |
| HCM Lane LOS | A | A | - | B | D | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.9 | 0.4 | 0.1 | - | - |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Lane Group | SEL | SER | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 81 | 27 | 4 | 345 | 315 | 12 |
| Future Volume (vph) | 81 | 27 | 4 | 345 | 315 | 12 |
| 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 | | | | 0.995 | |
| Flt Protected | 0.964 | | | 0.999 | | |
| Satd. Flow (prot) | 1736 | 0 | 0 | 1861 | 1853 | 0 |
| Flt Permitted | 0.964 | | | 0.999 | | |
| Satd. Flow (perm) | 1736 | 0 | 0 | 1861 | 1853 | 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) | 88 | 29 | 4 | 375 | 342 | 13 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 117 | 0 | 0 | 379 | 355 | 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



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | SEL | SER | NEL | NET | SWT | SWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 81 | 27 | 4 | 345 | 315 | 12 |
| Future Vol, veh/h | 81 | 27 | 4 | 345 | 315 | 12 |
| 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 | 88 | 29 | 4 | 375 | 342 | 13 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 732 | 349 | 355 | 0 | - | 0 |
| Stage 1 | 349 | - | - | - | - | - |
| Stage 2 | 383 | - | - | - | - | - |
| 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 | 388 | 694 | 1204 | - | - | - |
| Stage 1 | 714 | - | - | - | - | - |
| Stage 2 | 689 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 386 | 694 | 1204 | - | - | - |
| Mov Cap-2 Maneuver | 495 | - | - | - | - | - |
| Stage 1 | 711 | - | - | - | - | - |
| Stage 2 | 689 | - | - | - | - | - |

| 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) | 1204 | - | 533 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | 0.22 | - | - |
| HCM Control Delay (s) | 8 | 0 | 13.7 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.8 | - | - |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | 1700 | 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 | | | 17.0 | | | 19.2 | |
| Queue Delay | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Total Delay | | 23.7 | | | 23.4 | | | 17.0 | | | 19.2 | |
| Queue Length 50th (ft) | | 154 | | | 157 | | | 38 | | | 41 | |
| Queue Length 95th (ft) | | 199 | | | 213 | | | 39 | | | 67 | |

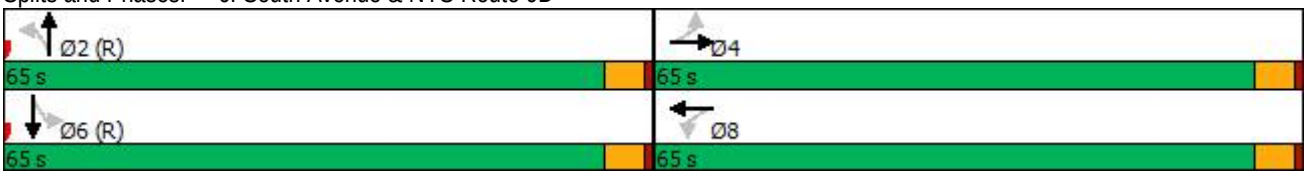


This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 | | | 793 | | | 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






This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

| 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 |
| 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 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1688 | 1688 | 1688 | 1956 | 2076 | 2136 | 1939 | 1939 | 1939 | 1817 | 1669 | 1847 |
| Adj Flow Rate, veh/h | 11 | 263 | 20 | 15 | 244 | 44 | 25 | 49 | 24 | 39 | 43 | 11 |
| 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 | 40 | 698 | 52 | 51 | 763 | 133 | 215 | 415 | 193 | 298 | 316 | 77 |
| 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 | 1512 | 112 | 48 | 1652 | 289 | 390 | 900 | 418 | 560 | 684 | 167 |
| Grp Volume(v), veh/h | 294 | 0 | 0 | 303 | 0 | 0 | 98 | 0 | 0 | 93 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1650 | 0 | 0 | 1990 | 0 | 0 | 1708 | 0 | 0 | 1411 | 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 | 0.4 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 15.0 | 0.0 | 0.0 | 12.3 | 0.0 | 0.0 | 3.9 | 0.0 | 0.0 | 4.3 | 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 | 790 | 0 | 0 | 947 | 0 | 0 | 823 | 0 | 0 | 690 | 0 | 0 |
| V/C Ratio(X) | 0.37 | 0.00 | 0.00 | 0.32 | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 0.13 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 790 | 0 | 0 | 947 | 0 | 0 | 823 | 0 | 0 | 690 | 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 | 22.2 | 0.0 | 0.0 | 19.9 | 0.0 | 0.0 | 20.0 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 1.3 | 0.0 | 0.0 | 0.9 | 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 | 6.1 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 24.2 | 0.0 | 0.0 | 23.1 | 0.0 | 0.0 | 20.2 | 0.0 | 0.0 | 20.4 | 0.0 | 0.0 |
| LnGrp LOS | C | A | A | C | A | A | C | A | A | C | A | A |
| Approach Vol, veh/h | | 294 | | | 303 | | | 98 | | | 93 | |
| Approach Delay, s/veh | | 24.2 | | | 23.1 | | | 20.2 | | | 20.4 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer - 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 6th Ctrl Delay | 22.8 |
| HCM 6th LOS | C |



This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

This document was created by an application that isn't licensed to use novaPDF.
Purchase a license to generate PDF files without this notice.

Colliers
Engineering
& Design

# Traffic & Parking Management Plan

April 25, 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** ..... 3

**Off-Site Parking** ..... 4
Off-Site Parking Locations ..... 4
Temporary Off-Site Signage ..... 6

**Dissemination of Information** ..... 7
Parking Information ..... 7
Public Transportation Information ..... 9

**Shuttles** ..... 9

**Pedestrian and Bicycle Access** ..... 9

**Ongoing Monitoring and Coordination** ..... 11

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. As discussed further herein, It is proposed that this secondary driveway will be gated and will only be available for use during event periods as well as for emergency access. 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.

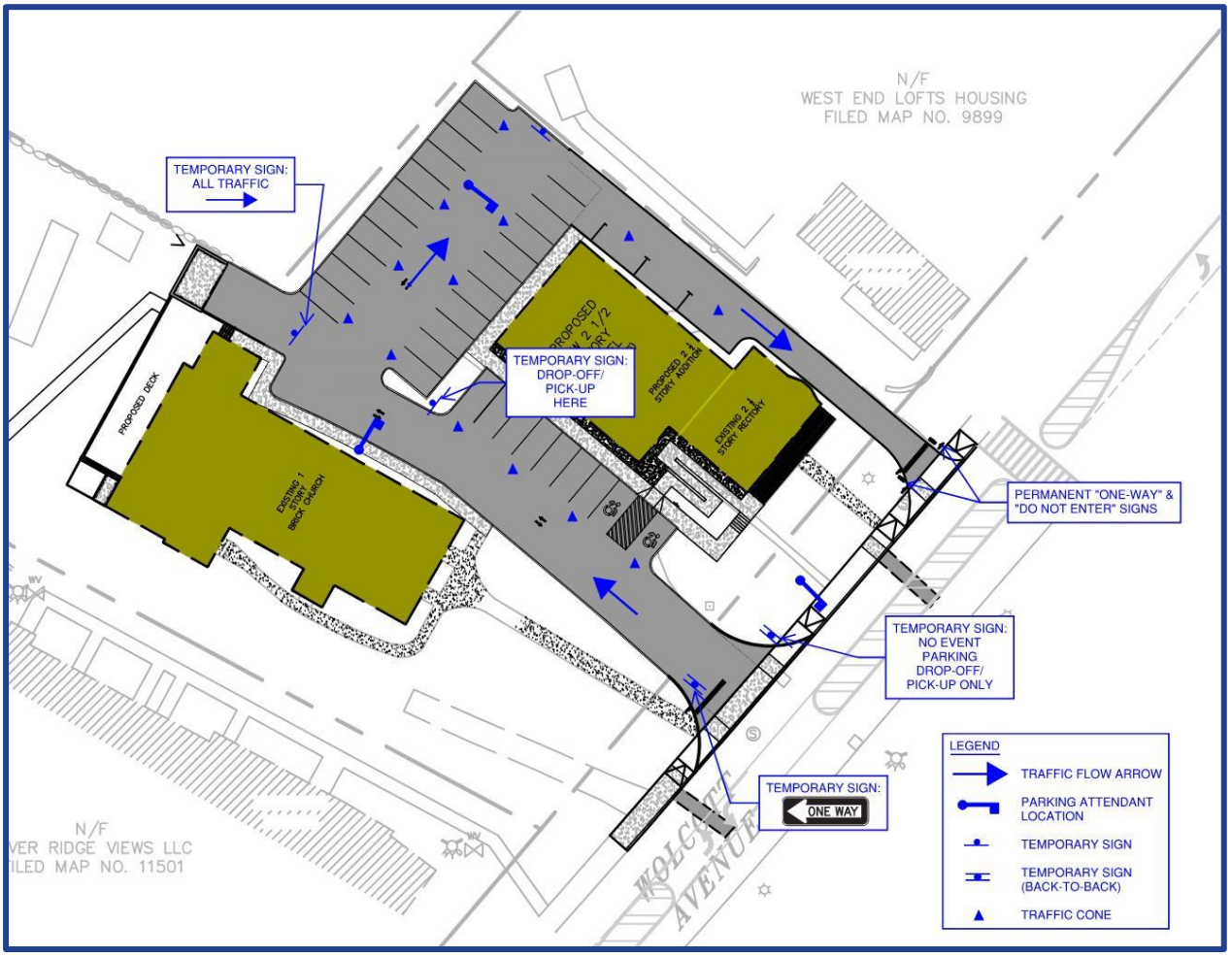
Based on the above, and associated with the review of the Project by the City of Beacon Planning Board and its consultants, this Traffic & Parking Management Plan has been prepared in order to provide an efficient and ongoing method of managing traffic flows, on-site and off-site parking, and other transportation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




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. A temporary One-Way sign will also be posted at the Main access driveway indicating this flow pattern to vehicles approaching the Site.

A total of three parking attendants will be provided on-site during events. The first will be provided near the Main entry driveway, the second at the intended drop-off/pick-up location and the third within the main parking area behind the hotel. The parking attendant near the Main entry driveway will assist with traffic flow entering the Site and monitoring of the queue of vehicles on the entry driveway to ensure no disruption of normal traffic flows along Route 9D. The driveway provides stacking for approximately 7-8 passenger car vehicles which is anticipated accommodate the vehicle queues during the drop-off/pick-up operations. However, in the unlikely event that this storage area is exceeded by the queue, there is sufficient space within the driveway to queue vehicles in two queues, which the parking attendants can adjust as necessary.

The parking attendant at the drop-off/pick-up location will be tasked with managing the drop-off/pick-up of event attendees as well as monitoring the queue of vehicles. The last parking attendant within the main parking area behind the hotel will be tasked with monitoring this parking area and maintaining the flow of exiting traffic. All three attendants will be able to provide information to vehicles on the nearby offsite parking locations as discussed further below.

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.

# 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:

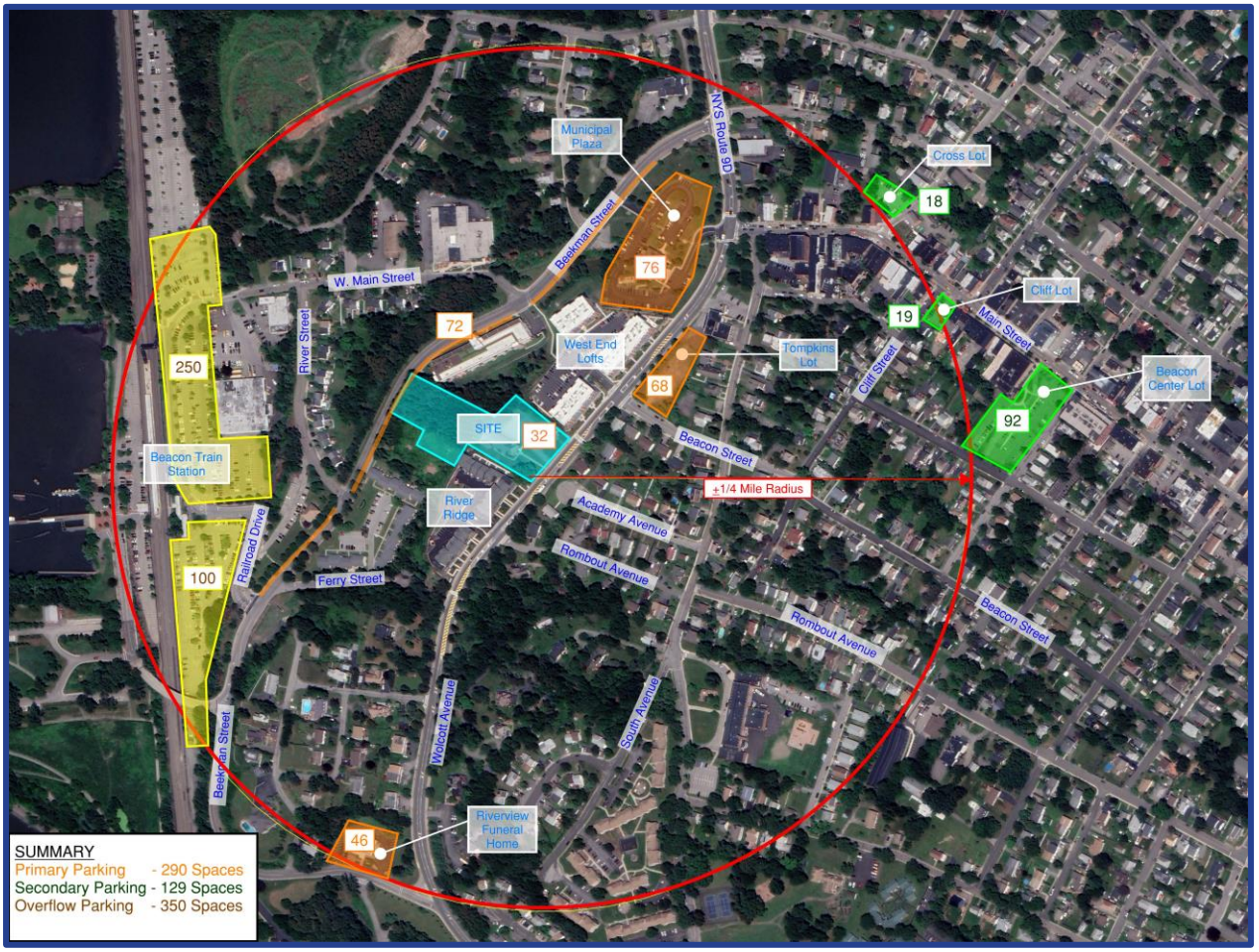
- **Tomkins Firehouse Parking Lot** – 68± Parking Spaces
- **City of Beacon Municipal Plaza (City Hall) Parking Lots** – 76 Parking Spaces
- **Beekman Street Metro North on-street parking between Railroad Drive and Wolcott Avenue** - 70± on-street metered parking spaces
  *This parking is operated by 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.*

In addition to the above parking locations, the Applicant is currently in the process of securing a license agreement with the nearby Riverview Funeral Home located at 2 Beekman Street, near the Wolcott Avenue/Beekman Street intersection, which will allow for the use of 46 parking spaces during the on-site events in an effort to reduce the Project's dependency on available public parking in the vicinity of the Site.

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 remote 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.

## Temporary Off-Site Signage

The installation of temporary off-site signage is also recommended during events to alert attendees of preferred parking areas and areas where parking is note permitted. As identified in Exhibit No. 3 below temporary signage is recommended to be installed along Route 9D at the entrance to the Municipal Plaza and at Beacon Street to direct attendees to both the Municipal Plaza and Tompkins Lots. The installation of these temporary signs is subject to approval by the City of Beacon.

In addition, temporary signage indicated “No Event Parking” is recommended to be installed at the entrance to the River Ridge and West End Lofts residential developments. The temporary installation of these signs will also be subject to approval by the City of Beacon as well as the residents/owners of those specific private developments.

**Exhibit No. 3 – Off-Site Signage**

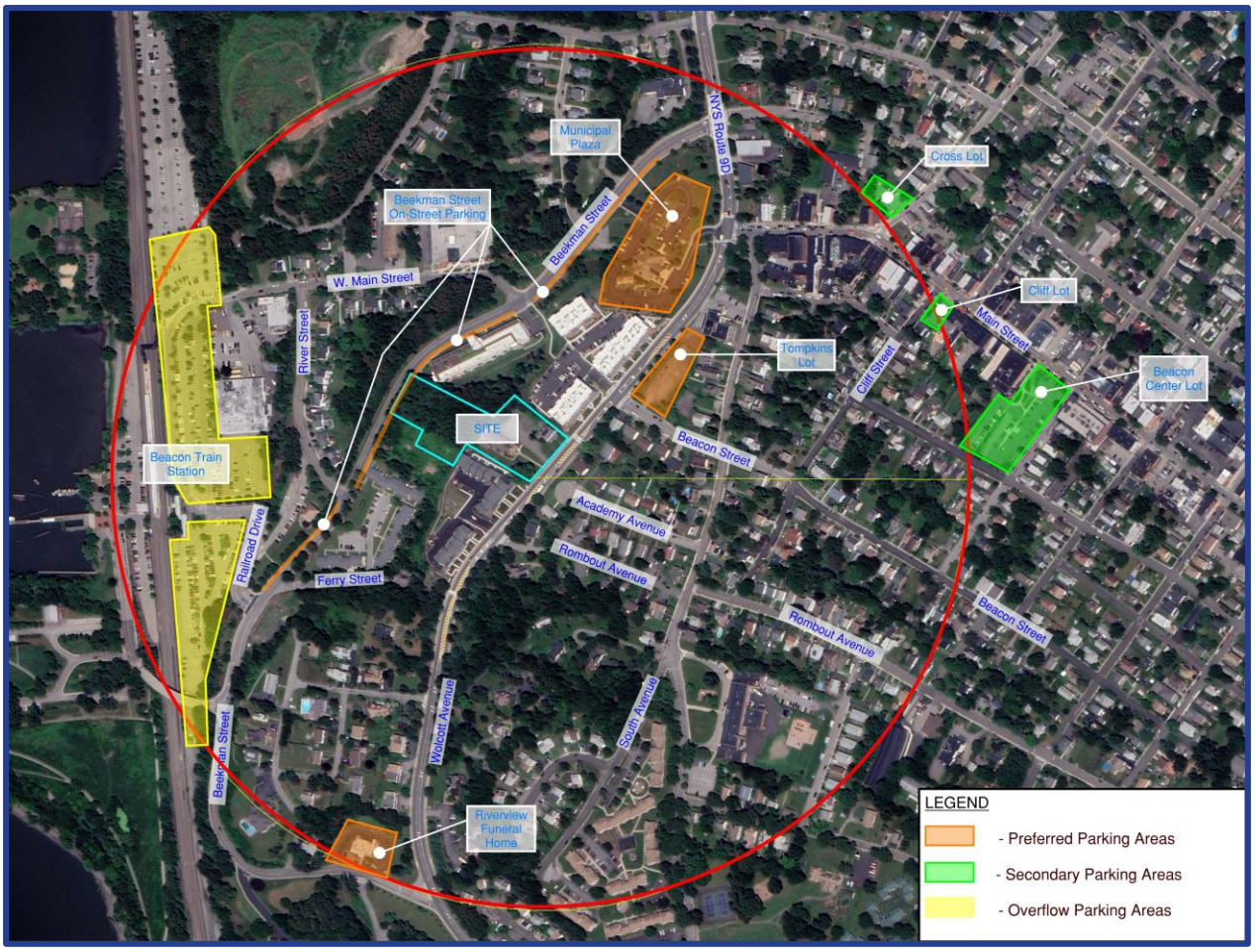
# Dissemination of Information

## 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 4 below. In addition, the map will indicate other more remote parking locations as identified above.

## Exhibit No. 4 - Preferred Parking Area Map




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 does not include reference to other areas of on-street parking, specifically those that may be located within residential neighborhoods near the Project in an effort to prevent attendees from parking along these roadways.

### 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 event 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

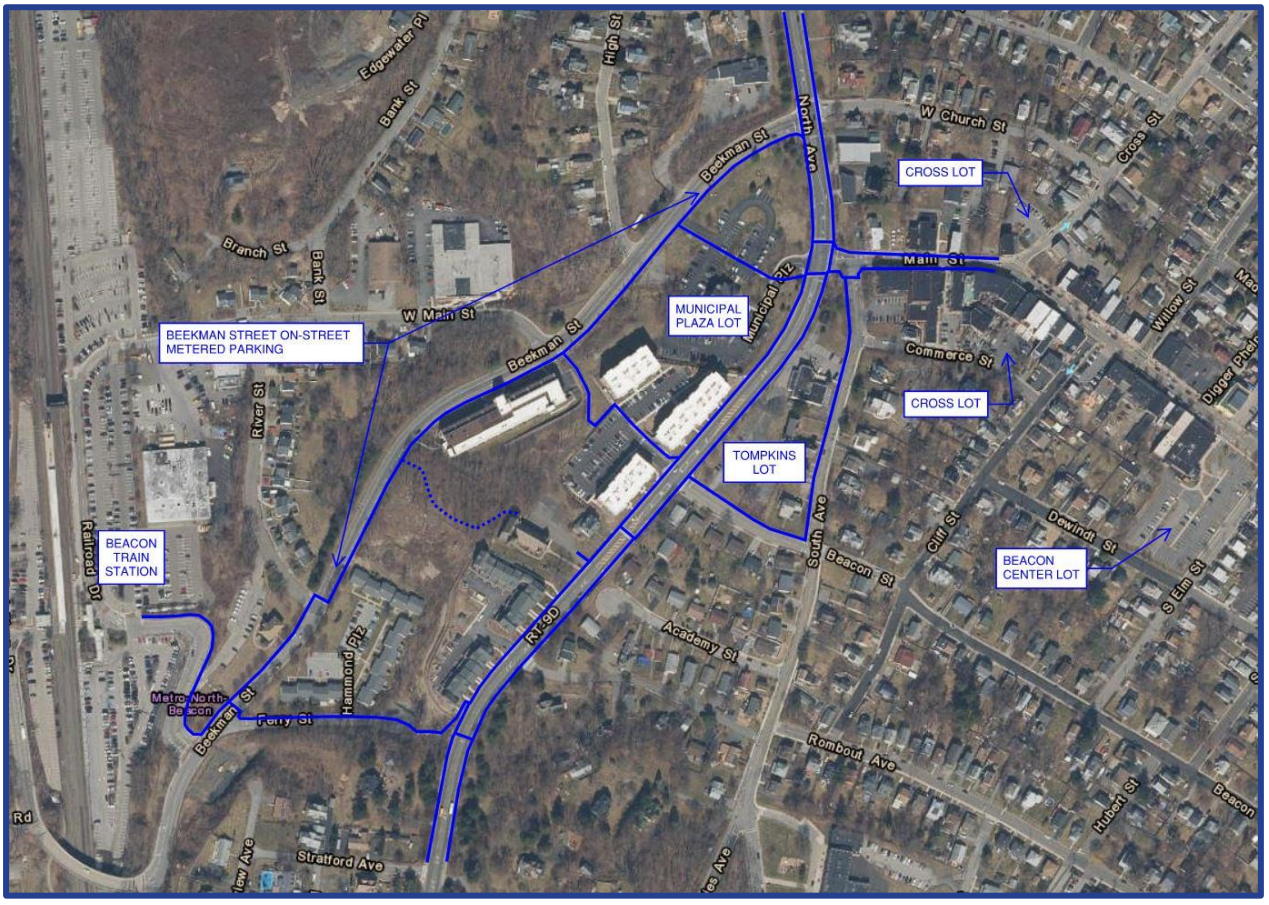
Access to the Project by pedestrians, including event attendees parking off-site, is provided in several manners. There are existing sidewalks along all area roadways surrounding the Project that can be utilized to access various parking areas or pedestrians arriving from other destinations. There are 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. 5 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.

### Exhibit No. 5 – 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 to 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.

In order to ensure that the Traffic & Parking Management Plan is achieving the goals set forth herein the Applicant agrees to conduct a monitoring of the event conditions within a 6 to 12-month period after initial occupancy of the event space. This monitoring will be utilized to incorporate further refinements to this plan at that time if determined to be necessary, which will be determined in consultation with the City of Beacon. This monitoring will be worked into the Project approvals with the City of Beacon.

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

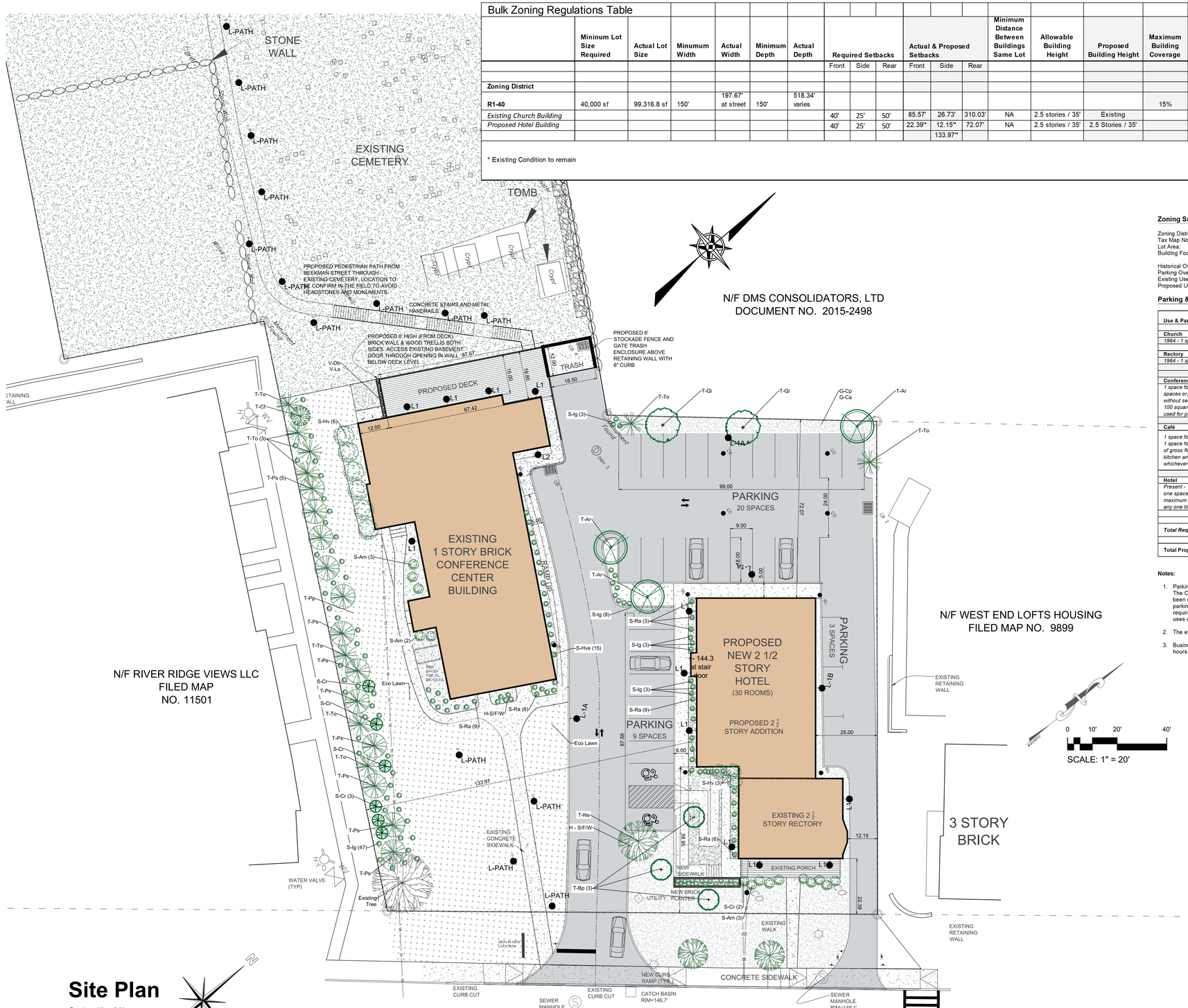
1 877 627 3772

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

## 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


L-PATH
STONE WALL
EXISTING CEMETERY
TOMB
Crypt
PROPOSED PEDESTRIAN PATH FROM BEEKMAN STREET THROUGH EXISTING CEMETERY, LOCATION TO BE CONFIRM IN THE FIELD TO AVOID HEADSTONES AND MONUMENTS.
CONCRETE STAIRS AND METAL HANDRAILS
PROPOSED 6' HIGH (FROM DECK) BRICK WALL & WOOD TRELLIS BOTH SIDES. ACCESS EXISTING BASEMENT DOOR THROUGH OPENING IN WALL BELOW DECK LEVEL
PROPOSED 6' STOCKADE FENCE AND GATE TRASH ENCLOSURE ABOVE RETAINING WALL WITH 6" CURB
TRASH
PROPOSED DECK
67.42
67.67
18.50
12.00
EXISTING 1 STORY BRICK CONFERENCE CENTER BUILDING
RAMP UP
PROPOSED NEW 2 1/2 STORY HOTEL (30 ROOMS)
PROPOSED 2 1/2 STORY ADDITION
144.3 ± at stair door
PARKING 9 SPACES
PARKING 3 SPACES
PARKING 20 SPACES
99.00
72.07'
24.00
9.00
25.00
6.00
87.58
133.97'
EXISTING 2 1/2 STORY RECTORY
12.15
22.39
EXISTING PORCH
NEW SIDEWALK
NEW BRICK PLANTER
UTILITY
EXISTING WALK
EXISTING RETAINING WALL
3 STORY BRICK
N/F DMS CONSOLIDATORS, LTD
DOCUMENT NO. 2015-2498
N/F WEST END LOFTS HOUSING
FILED MAP NO. 9899
N/F RIVER RIDGE VIEWS LLC
FILED MAP
NO. 11501
EXISTING CONCRETE SIDEWALK
Eco Lawn
Existing Tree
WATER VALVE (TYP)
SIGN IN NEW LOCATION
EXISTING CURB CUT
EXISTING CURB CUT
CATCH BASIN RIM=146.7'
SEWER MANHOLE RIM=146.2'
SEWER MANHOLE RIM=149.1'
NEW CURB RAMP (TYP.)
CONCRETE SIDEWALK
WOLCOTT AVENUE
Stone Wall
Wall
Monument Found
Iron Pipe Found
Curb Cut
Retaining Wall
T-To
T-Cf
T-To (3)
T-Ps (5)
S-Hv (6)
S-Am (3)
T-Pp
T-Ps
T-To
T-Ps
S-Cr
T-To
T-Ps
S-Cr
T-To
T-Ps
S-Cr (3)
T-Ps
S-Ig (47)
T-Ps
S-Ig (3)
T-Ar
T-Qi
G-Cp
G-Ca
T-To
S-Ra (3)
S-Ig (8)
S-Hve (15)
S-Ig (3)
S-Ra (9)
S-Ra (6)
H-S/F/W
T-Ns
T-Bp (3)
S-Cr (2)
S-Am (3)
S-Hv (3)
S-Ra (6)
L-1A
L-2
L-3
L-4
L-5
L-6
L-7
L-8
L-9
L-10
L-11
L-12
L-13
L-14
L-15
L-16
L-17
L-18
L-19
L-20
L-21
L-22
L-23
L-24
L-25
L-26
L-27
L-28
L-29
L-30
L-31
L-32
L-33
L-34
L-35
L-36
L-37
L-38
L-39
L-40
L-41

| 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 |
| 7 | 04/26/22 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| | | | |

## Site Plan

Scale: 1" = 30'

# Special Use Permit Application

**Sheet 2 of 14 - 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

CATCH BASIN RIM=79.1'

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'
25.1'
S 50°07'23" E 198.84'
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'
13.7'

STONE WALL
TOMB
GARBAGE
CONCRETE SIDEWALK
RETAINING WALL
GRAVEL PARKING
BLACKTOP PARKING
1 STORY BRICK CHURCH
2 STORY FRAME
3 STORY BRICK
REMOVE EXISTING GRAVEL DRIVEWAY
REMOVE EXISTING STAIR AND PORCH
REMOVE EXISTING ADDITIONS TO BUILDING
REMOVE EXISTING WALK
REMOVE BLACKTOP DRIVEWAY
UTILITIES
RELOCATE SIGN
SEWER MANHOLE RIM=149.1'
LIGHT POST (TYP)
WOLCOTT AVENUE
CATCH BASIN RIM=146.7'
FIRE HYDRANT (TYP)
SEWER MANHOLE RIM=146.2'
CATCH BASIN RIM=146.7'
WATER VALVE (TYP)

N/F
WEST END LOFTS HOUSING
FILED MAP NO. 9899

N/F
RIVER RIDGE VIEWS LLC
FILED MAP NO. 11501

N/F
RIVER RIDGE VIEWS LLC
FILED MAP NO. 11501

| 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 |
| 7 | 04/26/22 | NO CHANGE | AJS |
| | | | |

## Site Plan
Scale: 1" = 20'

# Special Use Permit Application

**Sheet 3 of 14 - 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)

KING LUMINAIRE "K-595 ARISTOCRAT" POLE MOUNTED 3000K LED FIXTURE. LOW GLARE CUTOFF SHIELD, DARK SKY COMPLIANT. COLOR: BLACK. PHOTOCELL CONTROL. OR APPROVED EQUAL. MOUNTING HEIGHT ON BLACK ALUMINUM 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)

VOLT Estate Colonial Brass Path Light. 25 watt, 2700K, COLOR: BRASS, 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.

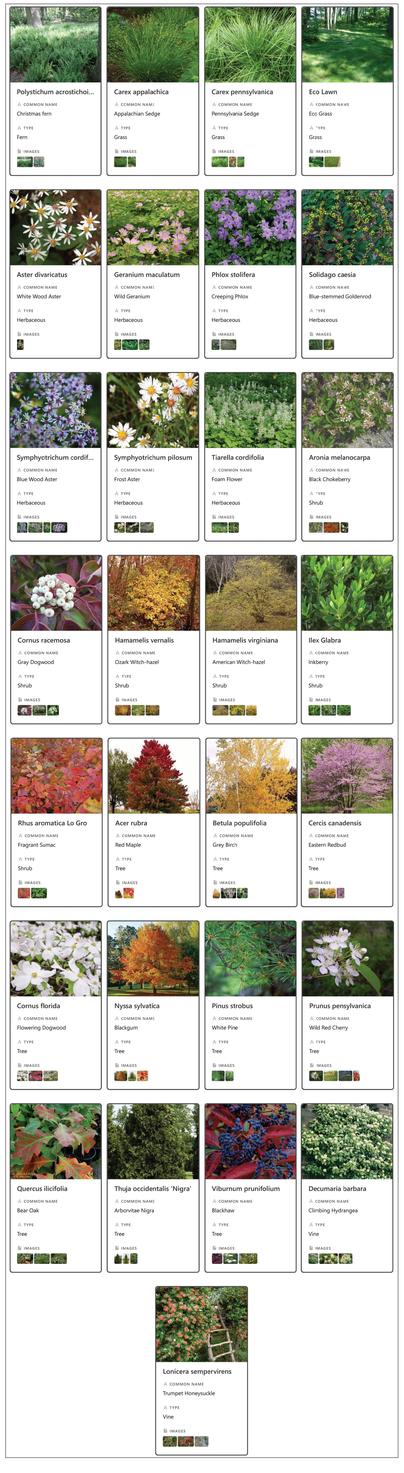
# Planting Schedule

| 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



| 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 |
| 7 | 04/26/22 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| | | | |

## Landscape Plan

Scale: 1" = 30'

# Special Use Permit Application

**Sheet 4 of 14 - 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

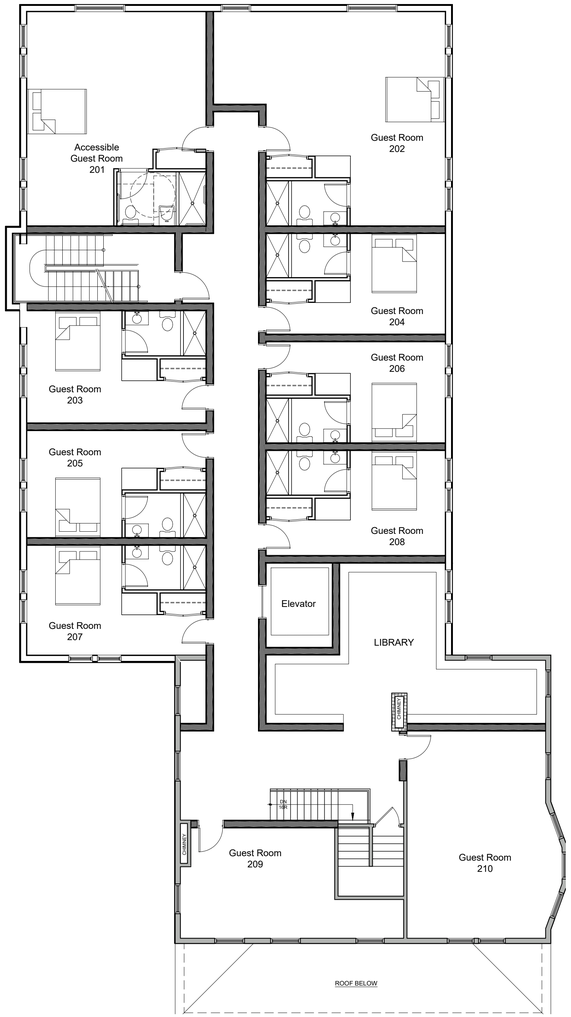
Scale: $\frac{3}{32}$" = 1'-0"

## 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

# Special Use Permit Application

**Sheet 5 of 14 - Hotel Plans & Elevations**

# 1113 Wolcott Avenue

Beacon, New York
Scale: AS NOTED
April 29, 2021

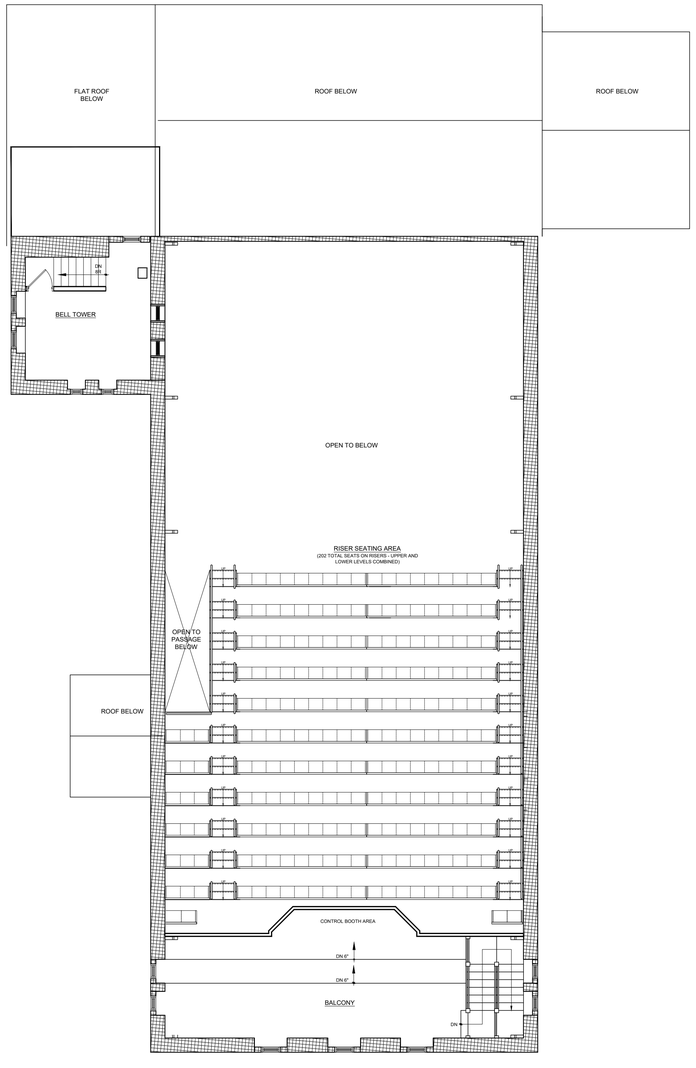
*Owner:*
**Prophecy Theater, LLC**
36 South Brett Street
Beacon, NY 12508

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

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

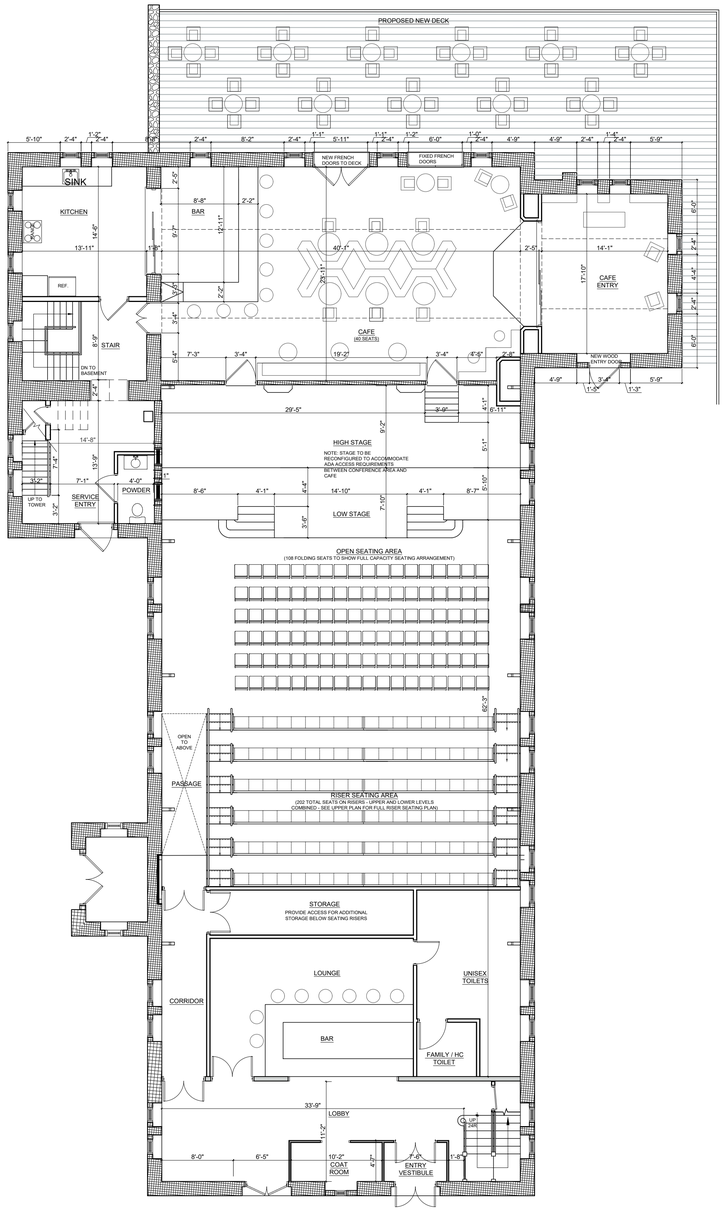
*Surveyor:*
**Robert Oswald**
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

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



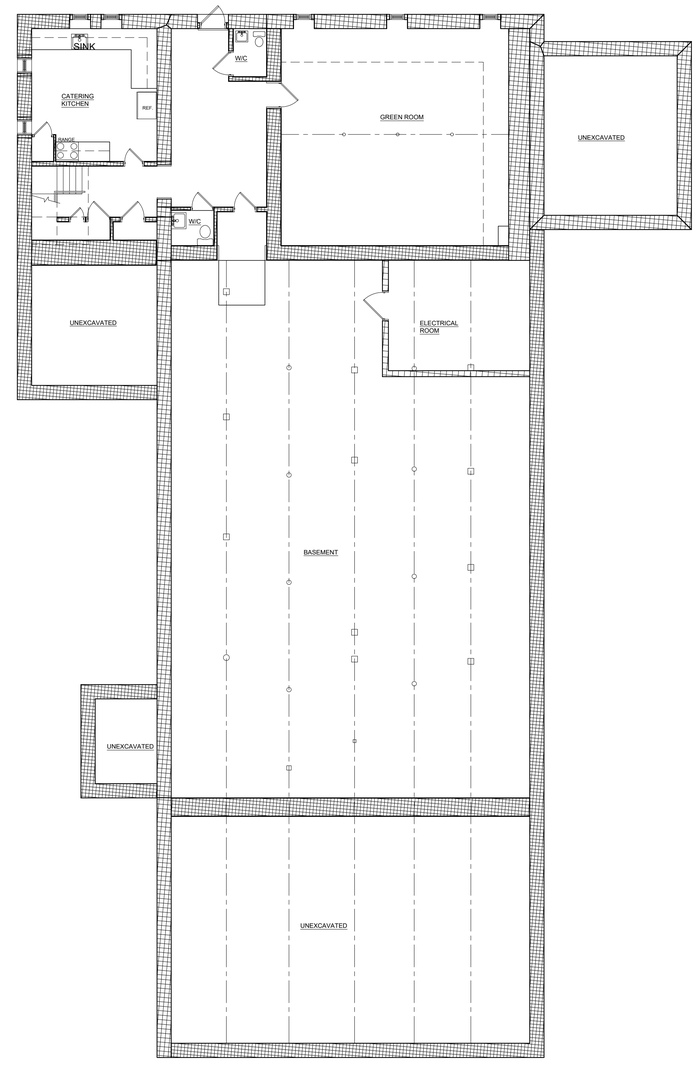

## Upper Level Plan: Conference Center

Scale: 1/8" = 1'-0"




## Main Level Plan: Conference Center

Scale: 1/8" = 1'-0"




## Basement Plan: Conference Center

Scale: 1/8" = 1'-0"

# Special Use Permit Application

**Sheet 6 of 14 - 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

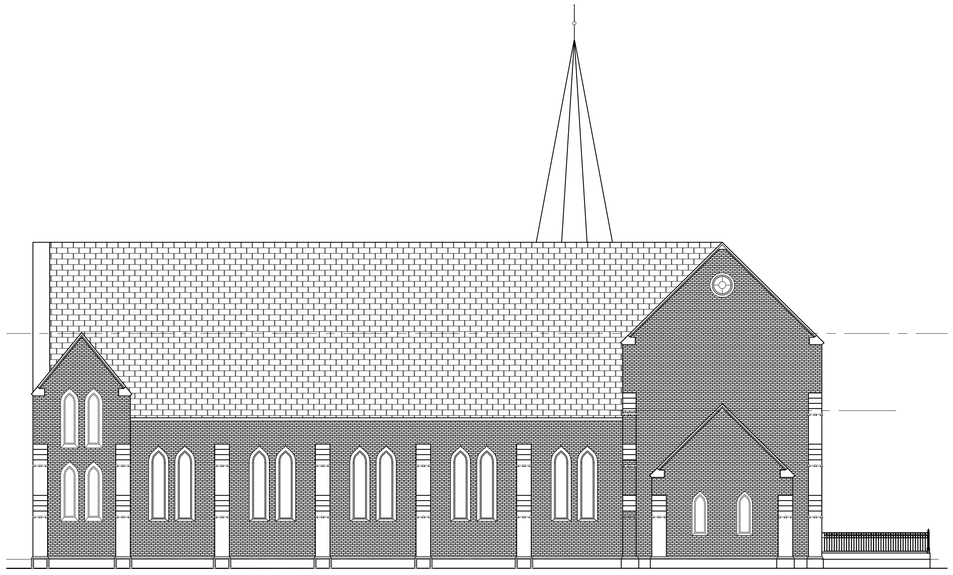
*Site / Civil Engineer:*
**Hudson Land Design**
174 Main Street
Beacon, New York 12508

*Surveyor:*
**Robert Oswald**
175 WALSH ROAD PO BOX 1
LAGRANGEVILLE, NEW YORK 12540

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

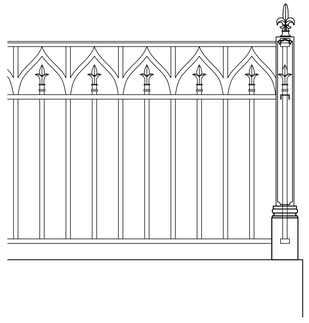
**1113 Wolcott Avenue**
Beacon, New York
Scale: 1/8" = 1'-0"
April 29, 2021

| 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 |
| 7 | 04/26/22 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| | | | |



## Elevation: Conference Center Building - North

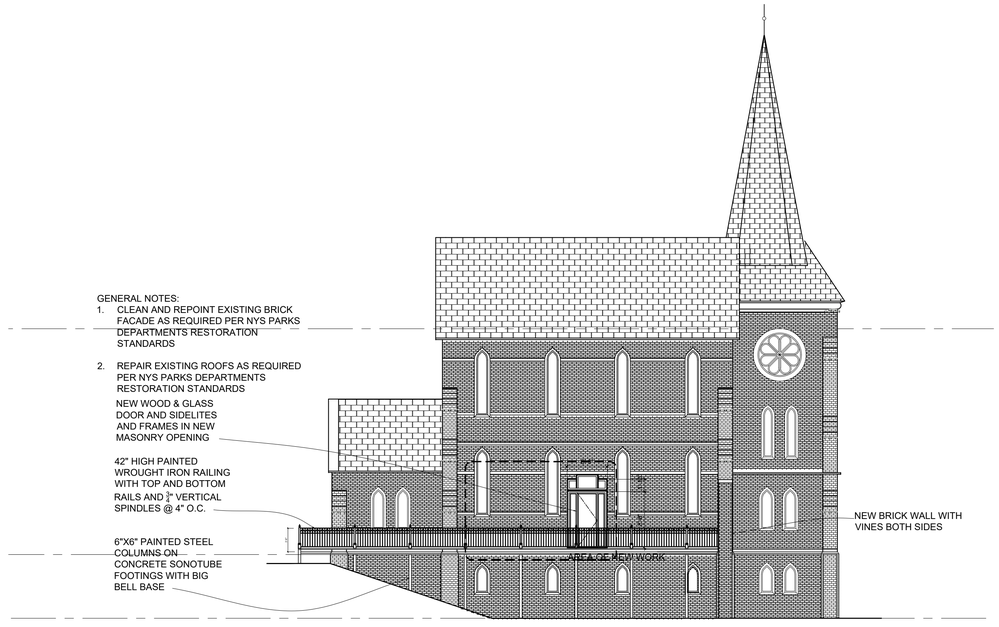
Scale: $\frac{3}{32}$" = 1'-0"



## Enlarged View: Railing

Scale: 1" = 1'-0"

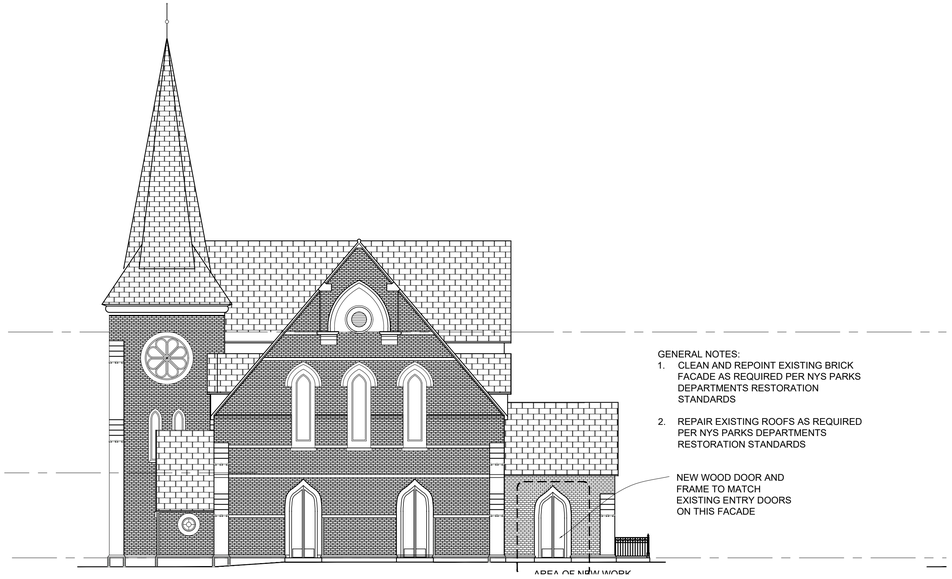
NOTE: THE RAILING CONFIGURATION WILL BE SIMILAR TO THE RAILING SHOWN, BUT MAY DIFFER IN FINAL DETAILING DEPENDING ON THE FABRICATOR SELECTED.




ELEVATION: WEST

## Elevation: Conference Center Building - West

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




## Elevation: Conference Center Building - East

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

## Elevation: Conference Center Building - South

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

# Special Use Permit Application

**Sheet 7 of 14 - Conference Center Elevations**

*Owner:*
**Prophecy Theater, LLC**
36 South Brett Street
Beacon, NY 12508

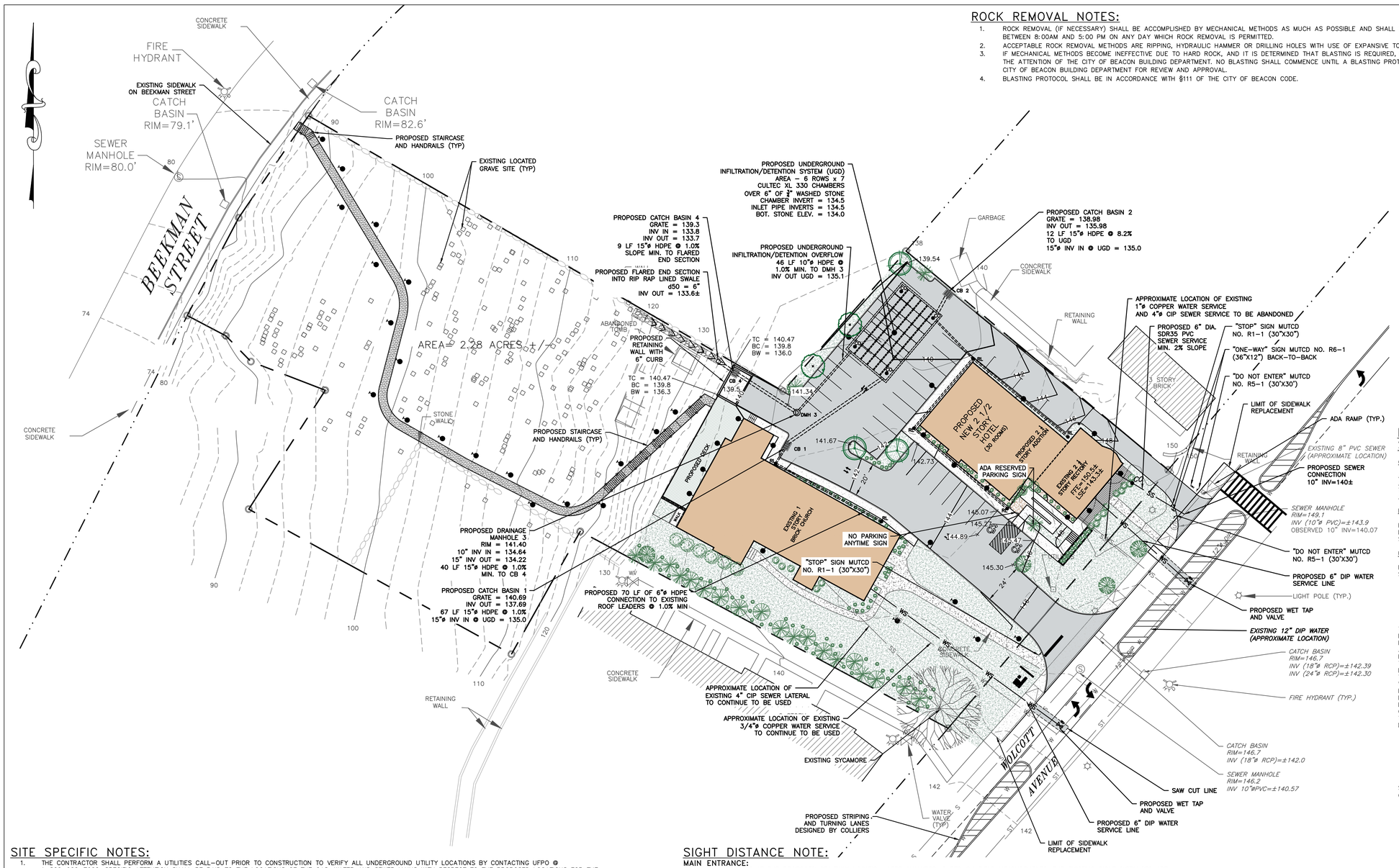
*Architect:*
**Aryeh Siegel, Architect**
84 Mason Circle
Beacon, New York 12508

*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, THROUGH THIS ACCESS, 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 MAIN 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.
2. THE PEDESTRIAN PATH THROUGH THE CEMETERY SHALL BE MAINTAINED NO KEPT CLEAR OF SNOW AND ICE DURING THE WINTER MONTHS.

| 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 | | | | |
| 6 | 4/26/22 | 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 MICHAEL A. BODENSTEIN 084466 LICENSED PROFESSIONAL ENGINEER
SEAL

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

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 14

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
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- EXISTING SEWER SERVICE LINE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- EXISTING WATER LINE
- EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- EXISTING ROOF LEADER
- EXISTING CATCH BASIN
- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- PROPOSED SEWER LINE
- PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- PROPOSED STORM WATER LINE
- PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE
- PROPOSED SILT FENCE
- 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 NECESSARY. THE INLET PROTECTION SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.

## EROSION AND SEDIMENT CONTROL 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 TEMPORARY 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 | | | | |
| 6 | 4/26/22 | 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 — GEORGE 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

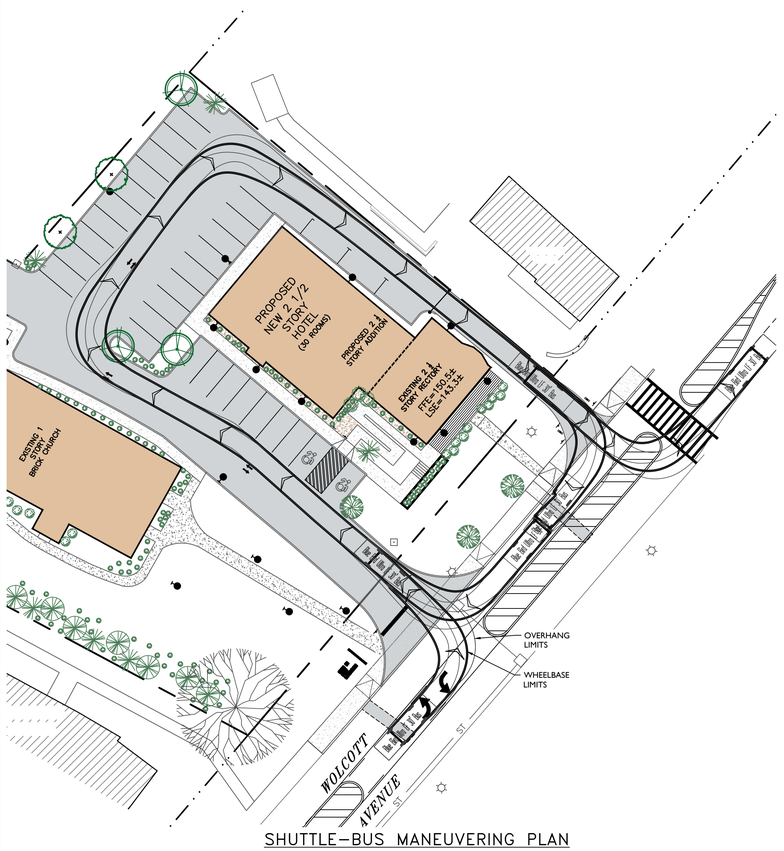
EROSION & SEDIMENT CONTROL PLAN

# 1113 WOLCOTT AVENUE

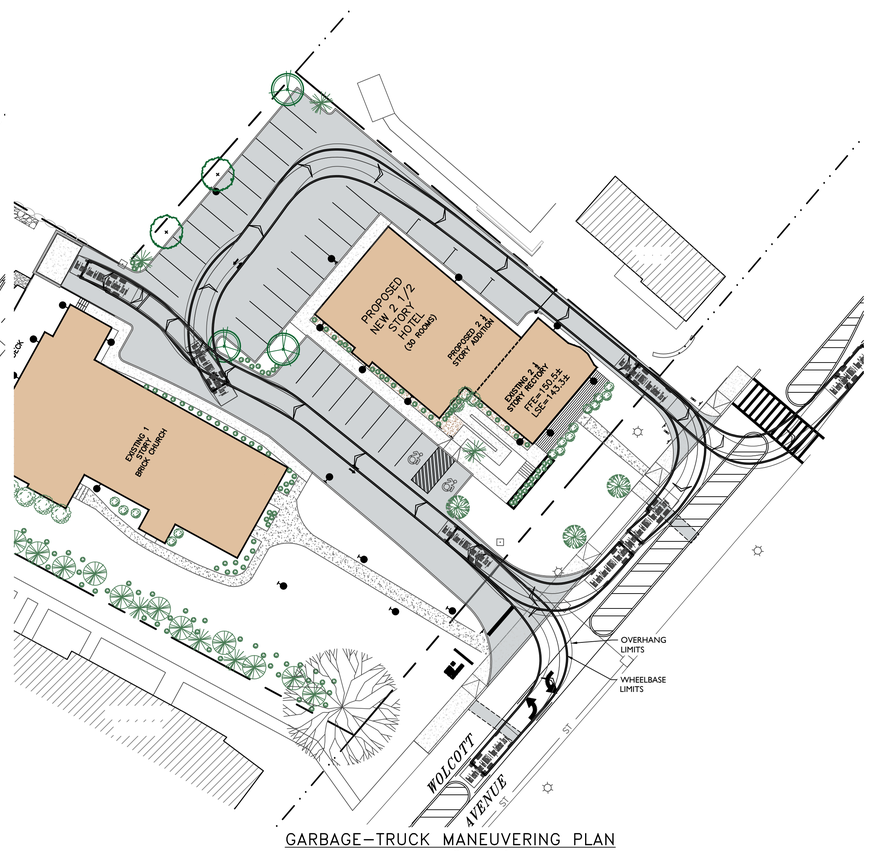
1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

| | |
|---|---|
| JOB #: | 2021:022 |
| DATE: | 6/29/2021 |
| SCALE: | 1" = 30' |
| TITLE: | EC-1 |
| SHEET: | 9 OF 14 |

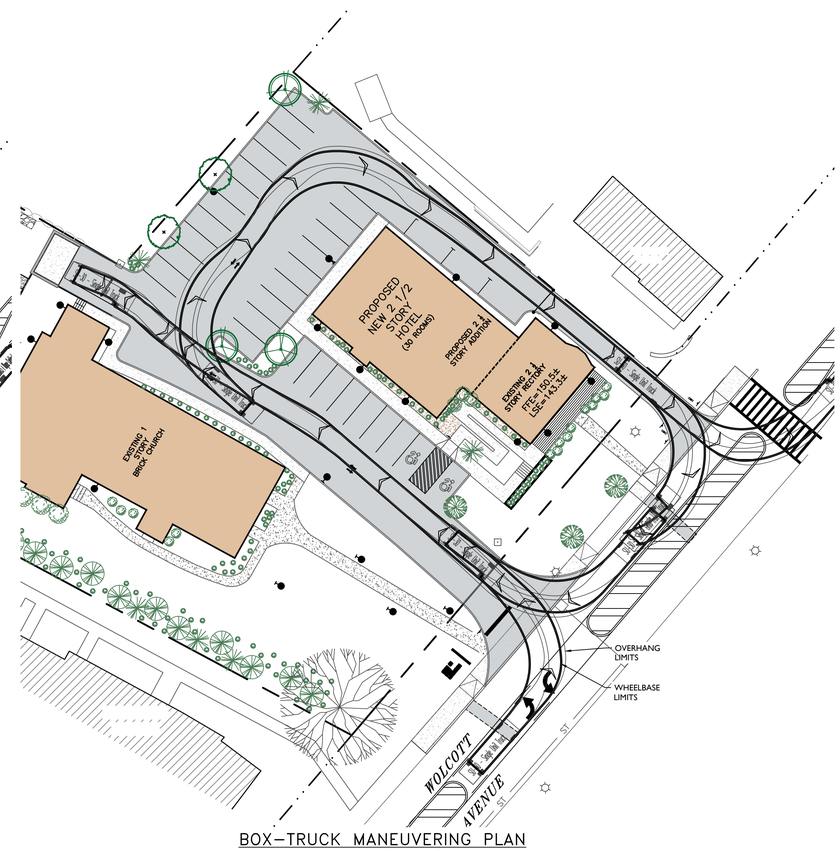
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW




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 | | | | |
| 4 | 4/26/22 | 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. BODENSTEIN
084465
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

VEHICLE TRACKING PLAN

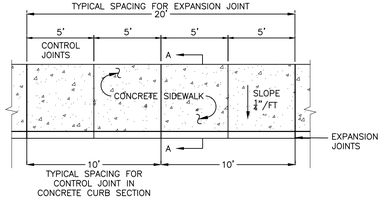
# 1113 WOLCOTT AVENUE

1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

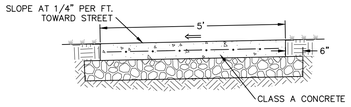
| | |
|---|---|
| JOB #: | 2021:022 |
| DATE: | 6/29/2021 |
| SCALE: | 1" = 30' |
| TITLE: | VHC-1 |
| SHEET: | 10 OF 14 |

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

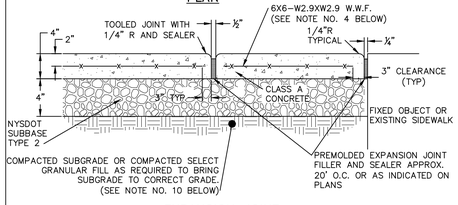
# SITE DETAILS



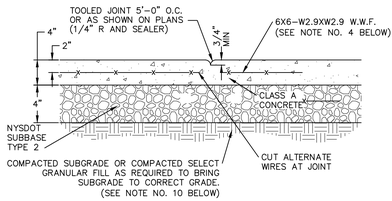

PLAN




SECTION A–A




EXPANSION JOINT

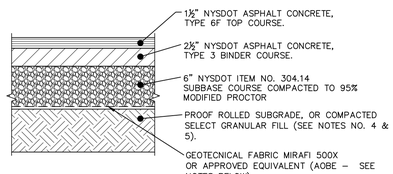



CONTROL JOINT

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.

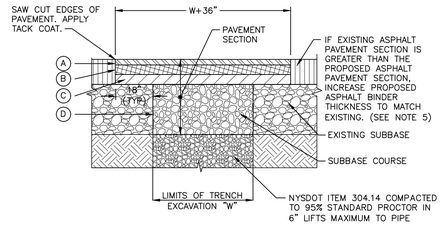
## CONCRETE SIDEWALK DETAIL
NOT TO SCALE




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



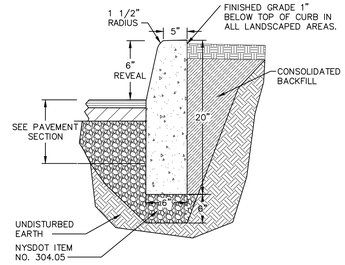

LEGEND

- (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

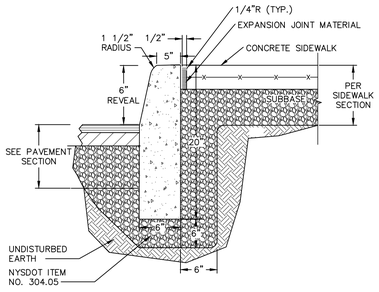
NOTES:

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




ABUTTING GRASS OR LANDSCAPE

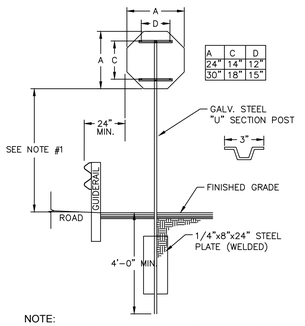



ABUTTING SIDEWALK

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.

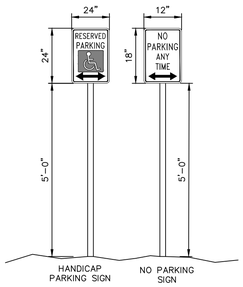
## CAST–IN–PLACE CONCRETE CURB DETAIL
NOT TO SCALE



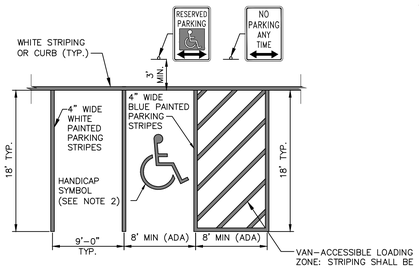

NOTE:

1. SIGN MOUNTING HEIGHT SHALL BE A MINIMUM OF 7'. MINIMUM MOUNTING HEIGHT MAY BE ADJUSTED ONLY IN ACCORDANCE WITH PROVISIONS OUTLINED IN "NYCRR, CHAPTER V–UNIFORM TRAFFIC CONTROL DEVICES."
2. SIGN POST SHALL BE IN ACCORDANCE W/ NYSDOT STANDARD SPECS SECTION 730.
3. THIS SIGN POST MAY BE SUBSTITUTED FOR THE BREAKAWAY WOOD SIGN POSTS AS DIRECTED BY THE ENGINEER (ITEM 645.81).

## SINGLE POLE SIGN DETAIL
SCALE: NOT TO SCALE




## SIGN DETAILS
NOT TO SCALE



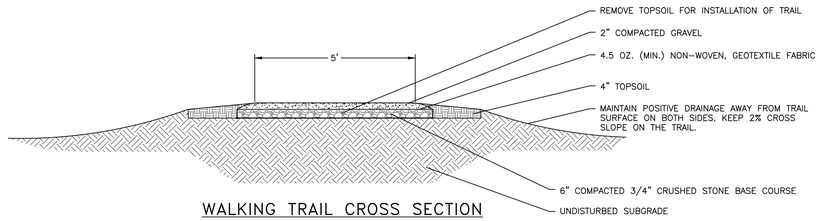

TYPICAL PARKING STRIPING

HANDICAP PARKING STRIPING

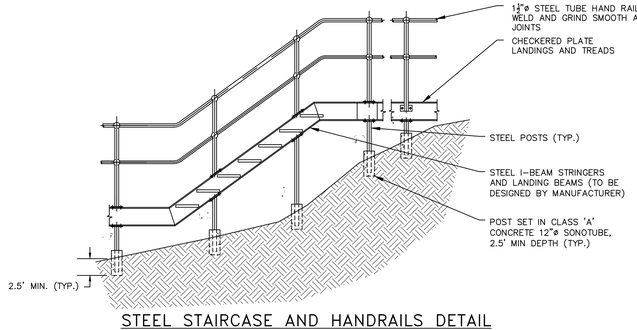
NOTES:

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.

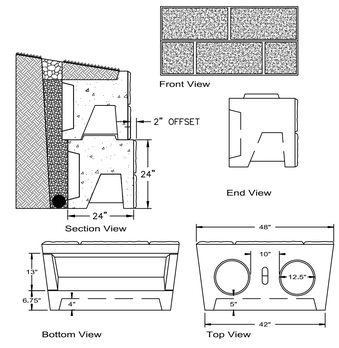
## PARKING AND STRIPING DETAIL
NOT TO SCALE



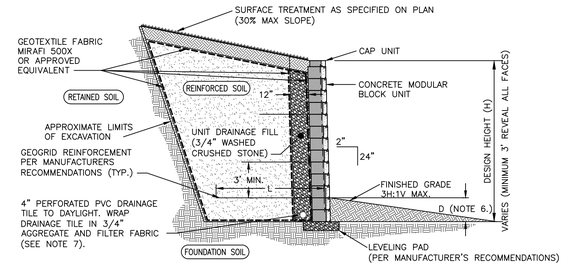

## WALKING TRAIL CROSS SECTION
NOT TO SCALE




## STEEL STAIRCASE AND HANDRAILS DETAIL
NOT TO SCALE




## WOODARD'S CONCRETE BLOCK WALL 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

| 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 | | | | |
| 6 | 4/26/22 | PER PLANNING BOARD COMMENTS | CMB | | | | |

STATE OF NEW YORK · MICHAEL A. BOSCARINO JR. · 084466 · LICENSED PROFESSIONAL ENGINEER

SEAL

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

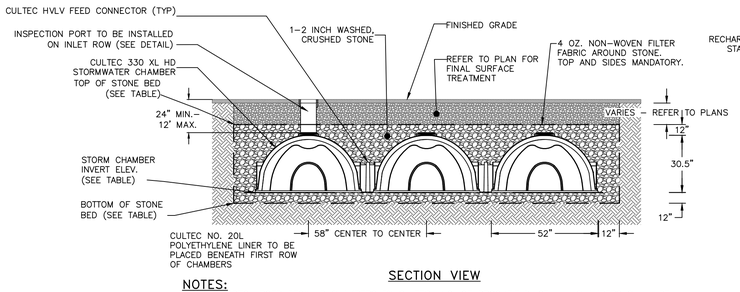
SITE CONSTRUCTION DETAILS

1113 WOLCOTT AVENUE

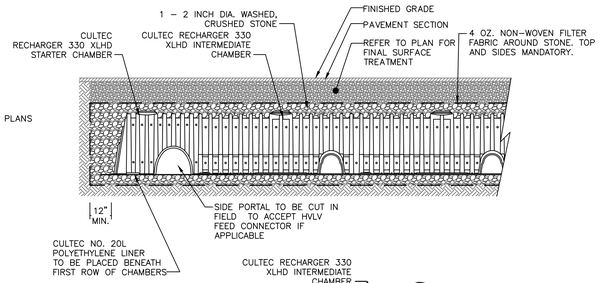
1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954–26–651901

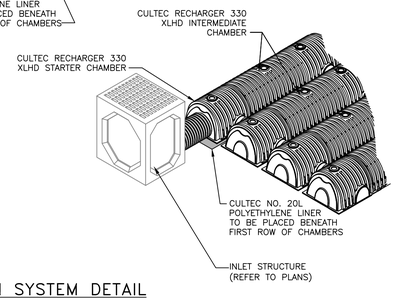
| | |
|---|---|
| JOB #: | 2021:022 |
| DATE: | 6/29/2021 |
| SCALE: | AS SHOWN |
| TITLE: | CD–1 |
| SHEET: | 11 OF 14 |

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




## SECTION VIEW



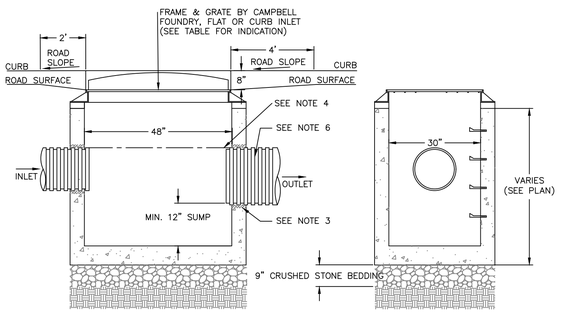




### NOTES:

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 IS NOT CONSISTENT WITH THE TEST PIT OR PERCOLATION DATA (E.G. GROUNDWATER OR BEDROCK ENCOUNTERED, SOIL PROPERTIES ARE NOT CONSISTENT, ETC.).
5. REFER TO THE INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES NOTES ON THE GRADING SHEET.
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



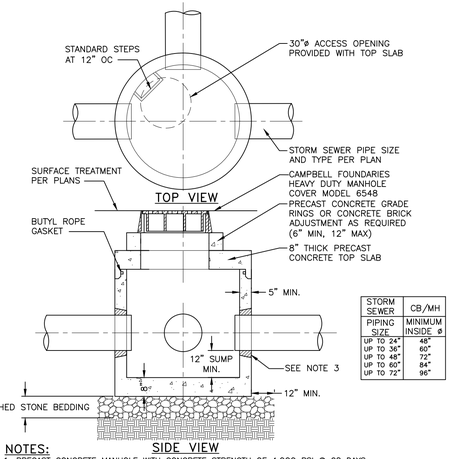

FRONT VIEW

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



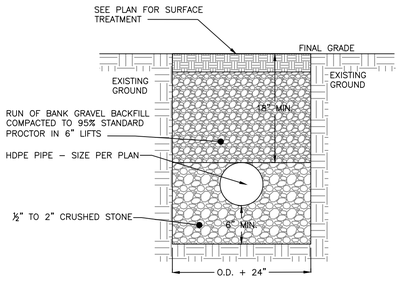

| STORM SEWER | CB/MH |
|---|---|
| PIPING SIZE | MINIMUM INSIDE ø |
| UP TO 24" | 48" |
| UP TO 36" | 60" |
| UP TO 48" | 72" |
| UP TO 60" | 84" |
| UP TO 72" | 96" |

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.

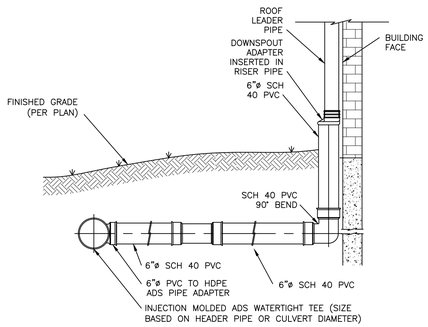
## STORMWATER MANHOLE DETAIL
NOT TO SCALE




### NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

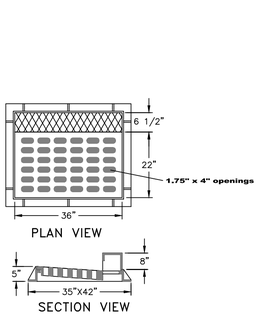
## STORMWATER PIPE IN TRENCH DETAIL
NOT TO SCALE




### 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.

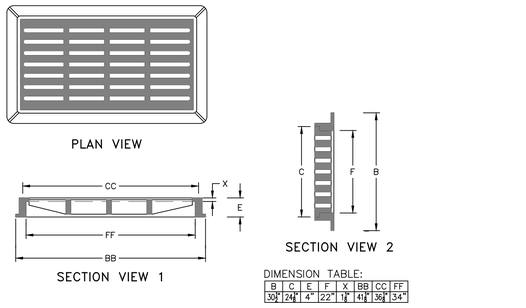
## ROOF LEADER CONNECTION DETAIL
NOT TO SCALE




### 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 |
|---|---|---|---|---|---|---|---|
| 30" | 24" | 4" | 22" | 1" | 41" | 36" | 34" |

### NOTES:

1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 3433, OR APPROVED EQUAL.
2. STMH1 AND STMH 2 RECEIVE SOLID CAST IRON COVERS.

## CAST IRON STORMWATER FLAT INLET GRATE 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 | | | | |
| 6 | 4/26/22 | PER PLANNING BOARD COMMENTS | CMB | | | | |

STATE OF NEW YORK · MICHAEL A. BODENDORF · 088469 · LICENSED PROFESSIONAL ENGINEER

SEAL

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

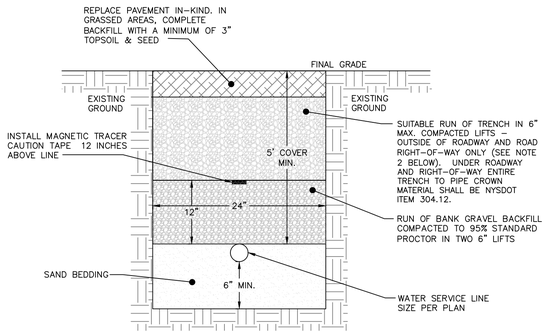
STORMWATER CONSTRUCTION DETAILS

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 14

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

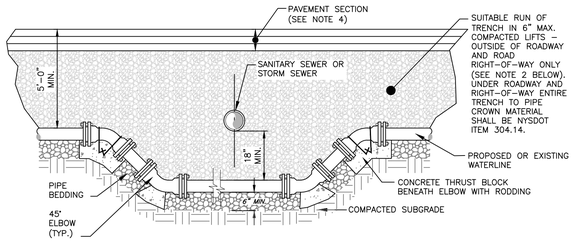



NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

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.

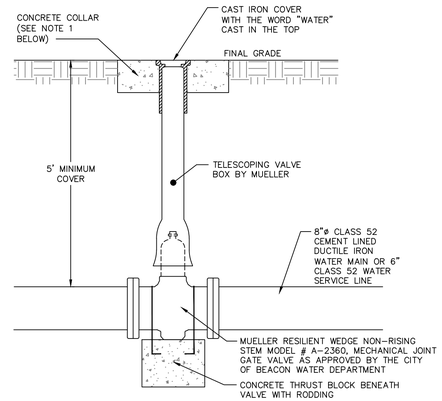
## WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE




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.

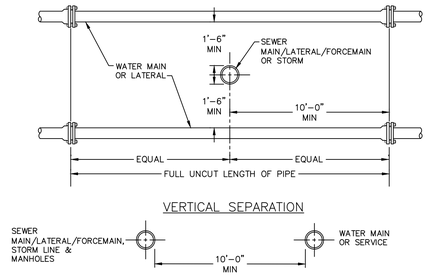
## WATER LINE OFFSET DETAIL
NOT TO SCALE




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.

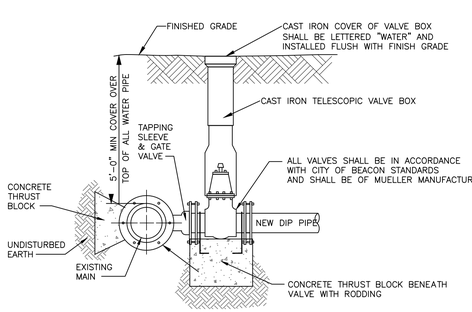
## GATE VALVE DETAIL
NOT TO SCALE




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.

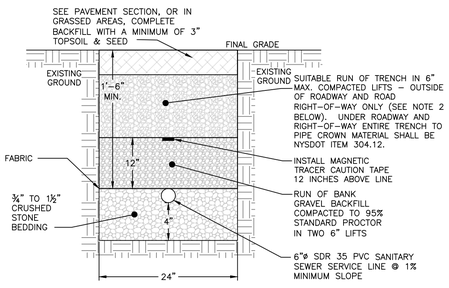
## WATER LINE SEPARATION DETAIL
NOT TO SCALE




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.

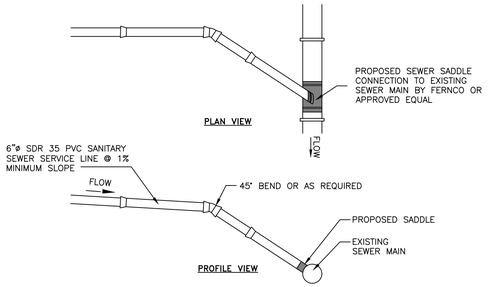
## TAPPING SLEEVE DETAIL
NOT TO SCALE




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

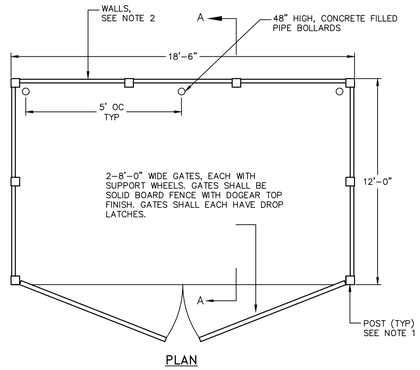
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

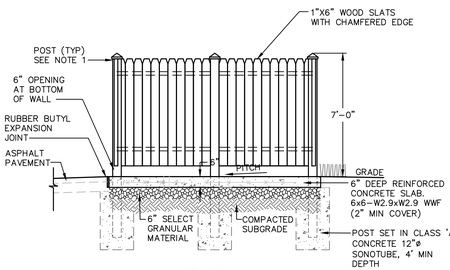
## SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE




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 | | | | |
| 6 | 4/26/22 | PER PLANNING BOARD COMMENTS | CMB | | | | |

STATE OF NEW YORK · MICHAEL A. BOEHNER · 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

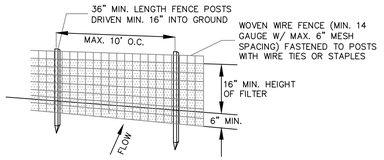
# 1113 WOLCOTT AVENUE

1113 WOLCOTT AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-26-651901

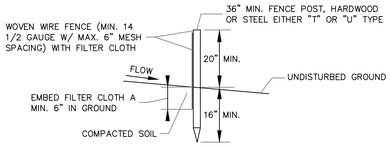
| | |
|---|---|
| JOB #: | 2021:022 |
| DATE: | 6/29/2021 |
| SCALE: | AS SHOWN |
| TITLE: | CD-3 |
| SHEET: | 13 OF 14 |

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

# EROSION AND SEDIMENT CONTROL DETAILS




PERSPECTIVE VIEW

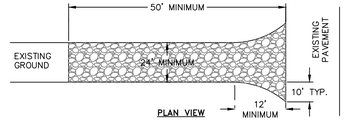



SECTION VIEW

**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




**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.

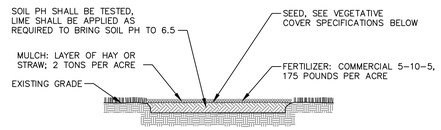
6) SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.

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




**NOTES:**

1. TOPSOIL, SEED, MULCH, AND FERTILIZE DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 14 DAYS OR MORE.
2. SEED MIXTURE FOR USE ON LAWNS IN SUNNY AREAS:

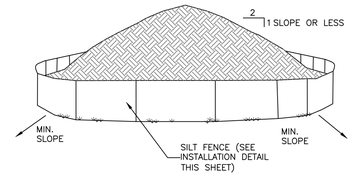
| | |
|---|---|
| 65% KENTUCKY BLUE GRASS BLEND | 114 POUNDS PER ACRE |
| 20% PERENNIAL RYEGRASS | 35 POUNDS PER ACRE |
| 15% FINE FESCUE | 26 POUNDS PER ACRE |
| | 175 POUNDS PER ACRE |

3. SEED MIXTURE FOR USE IN SHADY AREAS:

| | |
|---|---|
| 80% BLEND OF SHADE TOLERANT KENTUCKY BLUEGRASS | 138 POUNDS PER ACRE |
| 20% FINE FESCUE | 37 POUNDS PER ACRE |
| | 175 POUNDS PER ACRE |

4. SEED BETWEEN APRIL 1ST AND MAY 15TH OR AUGUST 15TH AND OCTOBER 15TH. SEEDING MAY OCCUR BETWEEN MAY 15TH AND AUGUST 15TH IF ADEQUATE IRRIGATION IS PROVIDED.
5. TOPSOIL SHALL HAVE AT LEAST 6% BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN 20%. TOPSOIL SHALL HAVE NOT LESS THAN 20% FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15% CLAY.

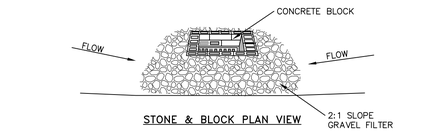
## TOPSOIL, SEED AND MULCH DETAIL
NOT TO SCALE



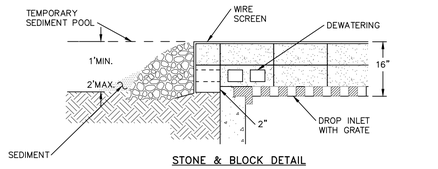

*NOTES:*

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

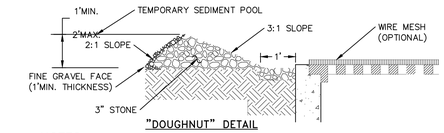
## TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE




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 | 4/26/22 | SHEET CREATED | CMB | | | | |

SEAL

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

EROSION & SEDIMENT CONTROL DETAILS

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-4
SHEET: 14 OF 14

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

**John Clarke Planning and Design** jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: May 6, 2022
Re: **1113 Wolcott Avenue Street Site Plan and Special Permit**

I have reviewed the April 26, 2022 cover letter from Cuddy+Feder, April 26, 2022 response letters from Aryeh Siegel and Hudson Land Design, April 25, 2022 response letter and Traffic and Parking Management Plan from Colliers Engineering, and a 14-sheet Site Plan set, dated April 26, 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 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 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 remains 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 there is 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 considered.

    b. The applicant is working on an off-site parking agreement for 46 spaces with the Funeral Home at the south end of Beekman Street. This is a positive initiative, but that parking lot is over 1,600 feet away and will not necessarily be an attractive alternative to instead parking on much closer residential streets, like Rombout or Stratford avenues.

    c. It is difficult to assume that many patrons will walk from Beekman Street and the Metro-North lots up the hill through the cemetery with five stair sections.

    d. The Traffic and Parking Study suggested a reduced event parking calculation with a 10% deduction for transit use and walking. Section 223-26 C(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.

e. 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.

3. For the Sheet 1 Site Plan:

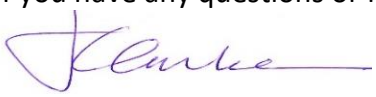
   a. The new access proposal shows a two-way main entrance and a one-way gated exit north of the hotel that would only be open to facilitate deliveries and as a one-way loop during larger events. The Board should consider making this a permanent one-way system to simplify site access and to substantially reduce the size of the driveway in front of the historic church. A one-way exit at the southern driveway would also allow safer drop-offs and pick-ups on the church side of the driveway and avoid the awkward and potentially hazardous intersection of the historic church walkway with the overly large driveway radius.

   b. In its April 5, 2022 letter, NYSDOT recommended a one-way circular system, but the applicant still proposes a confusing, inconsistent traffic pattern. Most of the time parking would be provided by an undersized dead-end lot, which is likely to get jammed whenever parking demand by smaller events or daily café customers exceeds the available hotel spaces. The café now shows 94 total seats, including the deck seating.

4. The Landscape Plan will need to be updated to include the two street trees in front of the hotel.

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.

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
Frank Filiciotto, P.E., City Traffic Consultant
Aryeh Siegel, Project Architect
Michael Bodendorf, P.E., Project Engineer

May 10, 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 #5 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) obtained the documents contained in the City of Beacon Planning Board Agenda Packet for the May 10, 2022 meeting. 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, Review #3 and Colliers' responses pertaining to those comments have been removed for clarity.

Site Plan

1. On-site vehicular circulation should be clarified. We have the following questions:
   - CM Review #4 Follow-Up Comment: 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.
   - *Colliers' 4/25/2022 Response: Stop signs and Stop bars are now proposed at both the main driveway exit lane and the northerly exit driveway location.*
   - **CM Review #5 Follow-Up Comment: A stop bar is still absent from the north site driveway.**

   - CM Review #4 Follow-Up Comment: 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.
   - *Colliers' 4/25/2022 Response: The driveway configurations have been modified to reduce the driveway openings to the greatest exit practicable while still being able to accommodate the anticipated largest vehicles accessing the site. The northerly exit only driveway opening width has been significantly reduced, as suggested, by limiting the northern radius since this driveway will not need to accommodate right turn entering vehicles.*
   - **CM Review #5 Follow-Up Comment: No further comment.**

Traffic Impact & Parking Study

1. 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.

- *Colliers' 4/25/2022 Response: See attached Traffic & Parking Sensitivity Analysis Technical Appendix.*
- **CM Review #5 Follow-Up Comment: See comments under Traffic & Parking Sensitivity Analysis Technical section of comment letter.**

2. 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?
   - *Colliers' 4/25/2022 Response: There is no specific designation for this additional off-street parking space, but if necessary, it could be designated as an employee only space to accommodate café employees. Note the applicant maintains that the Hotel will only have one employee on-site at any time.*
   - **CM Review #5 Follow-Up Comment: No further comment.**

3. 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.
   - *Colliers' 4/25/2022 Response: The Applicant is in the process of finalizing an agreement with the nearby Riverview Funeral Home located at 2 Beekman Street, near the Wolcott Avenue/Beekman Street intersection, which will allow for the use of 46 parking spaces during the on-site events. This will reduce the total need for the use of offsite public parking from 88 spaces to 42 spaces. The details of this agreement at being finalized and will be provided to the Board upon completion.*
   - **CM Review #5 Follow-Up Comment: The Riverview Funeral Home is approximately 0.3-miles from the subject site or a five-minute walk according to Google Maps. CM agrees that this is a legitimate location for off-street parking to be located. Pending a final agreement on the use of the lot, CM recommends that the Traffic & Parking Management plan incorporate this lot with signage and potentially an attendant to facilitate efficient parking within the lot.**

Review #4 Comments:
DRAFT Traffic & Parking Management Plan

1. CM Review #4 Comment: CM recommends that the entrance sign be changed to read "NO EVENT PARKING, DROP-OFF/PICK-UP ONLY."
   - *Colliers' 4/25/2022 Response: The temporary entrance signage wording has been adjusted as suggested.*
   - **CM Review #5 Follow-Up Comment: No further comment.**

2. CM Review #4 Comment: 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.
   - *Colliers' 4/25/2022 Response: Posting a third traffic attendant roadside along Route 9D would seem to cause potential queuing of vehicles along Route 9D which would be a concern of the NYSDOT. If additional attendants are required onsite to ensure efficient traffic flow, the Applicant will provide them as needed.*
   - **CM Review #5 Follow-Up Comment: CM acknowledges Colliers concern of queuing onto NYS Route 9D. However, the additional attendant would ensure that guest seeking to park on-site never enter**

**the driveway. Furthermore, this attendant could enforce prohibition of drop-offs/pickups occurring on the roadside of NYS Route 9D.**

3. CM Review #4 Comment: Cones should be placed along the parallel parking spaces on the north side of the hotel building.
    - *Colliers' 4/25/2022 Response: Cones have been added to the parallel parking spaces on the north side of hotel building.*
    - **CM Review #5 Follow-Up Comment: No further comment.**

4. CM Review #4 Comment: 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."
    - *Colliers' 4/25/2022 Response: The Applicant will agree to post temporary signage indicating "No Event Parking, Residents Only" at the driveways to River Ridge and West End Lofts developments if agreed to by those neighboring developments. In addition, if acceptable to the City, temporary "Event Parking" signs will also be posted at the Municipal Plaza and Tompkins Lots to direct patrons to these lots. These signs are now included in the Traffic & Parking Management Plan with an indication that they are subject to approval by the City of Beacon and the neighboring residential developments.*
    - **CM Review #5 Follow-Up Comment: No further comment.**

**Review #5 Comments:**

**Traffic & Parking Sensitivity Analysis**

1. **There is a discrepancy between the trip distribution shown on the Figures 12S and 13S and the trip assignments shown Figures 16S-19S. CM alerted Colliers to this discrepancy. Colliers provided CM with revised trip assignment figures, Synchro reports, and Level of Service summary tables for review. Colliers should provide those revised documents and a revised report to the Planning Board.**
2. **The number of exiting trips at the site driveway in the Friday and Saturday Event Entry scenarios do not reflect the number of exiting trips anticipated associated with the anticipated rideshare volumes. CM recommends that Colliers prepare Entry/Exit distributions specific to the arrival and departure peak hours. For instance, during the arrival peak hour 100% of exiting trips should be originating from the site driveway as these trips would be associated with the hotel patrons not attending the event and the rideshare vehicles having dropped off their passengers.**
3. **In Table 1S, the HTGR's do not reflect the trip volumes listed. The 0.99 should be 0.36 to reflect the 2.75 persons per vehicle occupancy rate.**
4. **The LOS report for the NYS Route 9D/Verplanck Ave intersection indicates that default peak hour factor (PHF) and heavy vehicle percentages (HV%) are being used. Turning movement count (TMC) data was not included as part of this study; therefore, CM reviewed the TMC data included under Appendix E of the revised TIS dated February 21, 2022 and could not find such data for the intersection. Please confirm if the PHF and HV% in the synchro report are correct.**
5. **Colliers notes that the project will require 78 off-site parking spaces based on the Sensitivity Analysis scenario. If an agreement is met with the Riverview Funeral Home to utilize the 46 off-street parking spaces, the development would require 32 parking spaces to be sourced from available public parking.**

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 5.docx

# LANC & TULLY
## ENGINEERING AND SURVEYING, P.C.

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


May 5, 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 April 26, 2022, from Cuddy & Feder to Planning Board.
  - Response correspondence dated April 26, 2022, from Aryeh Siegel, Architect.
  - Response correspondence dated April 26, 2022, from Hudson Land Design.
  - Response correspondence dated April 25, 2022, from Colliers Engineering & Design, including a Traffic & Parking Sensitivity Analysis Report as prepared by Colliers Engineering.
  - Traffic & Parking Management Plan, dated April 25, 2022, as prepared by Colliers Engineering & Design.
- Plans titled "1113 Wolcott Avenue", consisting of sheets 1 through 7 of 14, with the latest revision date of April 26, 2022, as prepared by Aryeh Siegel, Architect, along with sheets 8 thru 14 of 14, with the latest revision date of April 26, 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 "Traffic & Parking Management Plan" should be updated to reflect how those with special needs will be handled during large events, as this may require additional room for a van with a ramp, as well as extended time to unload the occupant of the van. This could lead to longer queue times, and in turn disruption to the normal traffic flow along Route 9D.

2. The offsite parking value for the Tomkins Firehouse Parking Lot in the "Traffic & Parking Management Plan" should be revised to reflect what may be available at this lot based upon the future expansion of the fire house, which would be 54 spaces as noted in the previously submitted traffic study of February 2022.

3. The Traffic Study and "Traffic & Parking Sensitivity Analysis" should be updated to reflect the required parking for the site as determined by the Beacon Building Department.

4. Sheets 2 and 4 of the plan set should remove the outlines of the driveway on the south side of the parcel since it is being removed.

5. A "Work Zone Traffic Control Plan" shall be prepared as per the NYSDOT correspondence of April 17, 2022 and made part of the overall plan set.

Sheet 1 of 13 – Site Plan:

1. The Parking & Loading Table and Note No. 1 on the sheet shall be revised to reflect the determination made by the Building Inspector as to parking required for the project.

2. The plan shall be updated to reflect the proposed gate to be installed on the northerly drive.

Sheet 2 of 13 – Full Site Plan:

1. The landscaping represented on the plan should be revised to reflect the updated landscaping and lighting shown on Sheets 1 and 4, along with the gating on the northerly drive.

2. The plan shall be revised to reflect the configuration of both access drives as they enter onto Wolcott Avenue, as presented on the other plans.

Sheet 3 of 13 – Existing Conditions & Demolition Plan:

1. The plan shall be revised to include the sidewalk that is to be removed along the front of the project.

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. As the existing water and sewer services to the rectory structure are to be abandoned, the applicant's consultant shall contact the Beacon Water & Sewer Department to determine as to how these services are to be abandoned and where. Notes and pertinent construction details shall be added to the plans for the abandonment of each service.

3. The proposed gate for the northerly access drive shall be shown and called out on the plan. A construction detail of the proposed gate shall also be provided on the plans.

Sheet 11 of 13 – Site Construction Details:

1. NYSDOT ROW Pavement Restoration Detail shall be revised to reflect the pavement cross-section as noted in the NYSDOT correspondence of April 17, 2022.

2. The Walking Trail Cross Section detail shall be updated to specify the type of gravel to be used for the surface of the trail.

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

**City of Beacon Planning Board Agenda**
**05/10/2022**

**Title:**

Continue review of application for Subdivision Approval, 2-lot residential, 146 Verplanck Avenue, submitted by James Petty.

**ATTACHMENTS**

146 Verplanck Cover Letter.pdf

146 Verplanck Short EAF.pdf

146 Verplanck Subdivision Set_Petty.pdf

Planner Comments Verplanck Av Sub 5.6.22.pdf

146 Verplanck Engineer Comments.pdf

SEAF Parts 2 and 3 - 146 Verplanck Avenue Subdivision.pdf

146 Verplanck SEQRA Negative Declaration DRAFT Resolution.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*

April 26, 2022

Mr. John Gunn, Chairman, & Members of the City of Beacon Planning Board
1 Municipal Center
Beacon, NY 12508

Re: Petty Subdivision (146 Verplanck Avenue)
Tax ID: 6054-21-028928 (±0.271 Acres Total)
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) has enclosed the following materials for the Planning Board's consideration at your next available regularly scheduled meeting:

- Preliminary Subdivision Plat and Plan Set – 6 Sheets (5 copies);
- A Short Environmental Assessment Form (5 copies); and
- Copy of the above noted items on CD.

The plans have been revised based on comment letters from the City's professional consultants. The EAF has been updated to reflect the latest proposal. The following is a point-by-point response to each of the comments within the review letters.

**Lanc & Tully's April 8, 2022 Comment Letter:**

General Comments:

1. The title on sheet 2 has been updated.
2. The title on sheet 3 has been updated.
3. So noted. No response required.

Existing Conditions & Demolition Plan (Sheet 2 of 6):

1. The plan has been updated to show the limits of curb and sidewalk to be removed to accommodate the new driveway openings. In addition, the sump pump discharge is being redirected now to proposed yard drain 1.

2. There is a key from the surveyor on the right-hand side of the viewport that provides rim and invert information. The surveyor also provided a call-out on the sanitary line.
3. HLD performed a site visit. We were unable to identify the inlet of the pipe from any other catch basin or open area. We assume it is a road underdrain, and a call-out has been added stating the same.
4. Per Ed Balicki, the water main is 6" CIP, and has been labeled as such.

Subdivision Plat (Sheet 3 of 6):

1. The future deck has been removed.

Subdivision Plan (Sheet 4 of 6):

1. The lot depth for lot 2 has been corrected.
2. Site Specific Note 9 calls to direct roof leaders to the new proposed yard drain and pipe system.
3. The water shut off valve has been shown.
4. No sewer clean-out has been proposed. The cleanout has been removed from the legend to avoid confusion.
5. The leader for the LOD has been redirected.
6. The leader for the stockpile has been redirected.
7. A drainage collection system and additional grading has been proposed. There is no standing water as a result of the proposal.
8. The sump pump discharge is now proposed to be directed to yard drain 1. A note to that effect has been added. Additional linework there will create clarity issues. We request that the note be considered sufficient.
9. As discussed at the planning board meeting, the Lot 2 garage is 1-car with a workshop. The call-out reflects this layout. We do not anticipate any maneuvering issues.
10. Steps have been added to the proposed covered porch on lot 2, and the linetype has been made thicker for plan clarity.
11. The future deck has been removed.

Construction Details (Sheet 5 of 6):

1. A tapping saddle has been shown.
2. The redundant detail has been removed.
3. The granite curb detail has been updated, and calls for matching existing (in the event that we have identified the improper NYSDOT curb type).

**John Clarke Planning and Design's April 7, 2022 Comment Letter:**

1. The titles on sheets 2 & 3 have been updated.
2. The lot depth for lot 2 has been corrected.
3. So noted. We understand the need for an area variance. The plans note that as well. We would appreciate the Planning Board's consideration of recommending a positive referral to the ZBA.
4. Two street trees have been provided, both on Lot 2. Th hedgerow is proposed to remain on Lot 1.
5. As discussed at the planning board meeting, the Lot 2 garage is 1-car with a workshop. The call-out reflects this layout. We do not anticipate any maneuvering issues.

6. A note has been added that the hedgerow shall be maintained at 3.5 feet maximum height.

At the April 2022 meeting, the Planning Board voted to circulate with intent to act as lead agency, and authorized the City professionals to prepare a draft negative declaration. We look forward to continuing discussion of the design details of the project with you and your Board members at the May 2022 meeting and will:

- request the Planning Board to consider granting a negative declaration,
- request the Planning Board to provide a positive referral to the ZBA for the proposed area variance,
- seek to have a public hearing scheduled for the June 2022 meeting, and
- request that the Planning Board authorize its consultants to prepare a draft resolution of conditional approval for consideration at the June 2022 meeting.

Should you have any questions or require additional information, please feel free to call me at 845-440-6926.

Sincerely,

Daniel G. Koehler, P.E
Principal

cc: James Petty & Julia Louise Onorato (via email)
Robert V. Oswald, L.S., Project Surveyor (via email)
Michael A. Bodendorf, P.E. (HLD File)

# *Short Environmental Assessment Form*
## *Part 1 - Project Information*

**Instructions for Completing**

**Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

**Part 1 – Project and Sponsor Information**

Name of Action or Project:

Petty Subdivision

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

146 Verplanck Avenue, Beacon NY 12508

Brief Description of Proposed Action:

The owner for the property (Mr. James Petty) wishes to subdivide the current lot at 146 Verplanck Avenue, Beacon NY 12508 into two (2) parcels. The current property is a developed lot with one (1) single-family residence and driveway along the lot's southern portion. The proposed subdivision will divide the property into a southern lot (henceforth to be known as Lot 1) and northern lot (henceforth to be known as Lot 2). Lot 1 will retain the existing residence while Lot 2 will be developed through the building of a new single-family residence. New driveways will serve each lot for access (to Verplanck Avenue), and the residence on Lot 2 will will require new connections to the City of Beacon's water and sewer services.

| Name of Applicant or Sponsor: | Telephone: (646) 883-9708 |
|---|---|
| James Petty | E-Mail: james@postscriptstudio.com |

Address:

146 Verplanck Avenue

| City/PO: | State: | Zip Code: |
|---|---|---|
| Beacon | New York | 12508 |

| | NO | YES |
|---|---|---|
| 1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2. | ☑ | ☐ |
| 2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: City of Beacon Planning Board- Subdivision Approval | ☐ | ☑ |

3. a. Total acreage of the site of the proposed action? 0.271 acres
   b. Total acreage to be physically disturbed? +/- 0.23 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.271 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☑ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☐ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

| | NO | YES | N/A |
|---|---|---|---|
| 5. Is the proposed action, | | | |
| a. A permitted use under the zoning regulations? | ☐ | ☑ | ☐ |
| b. Consistent with the adopted comprehensive plan? | ☐ | ☑ | ☐ |

| | NO | YES |
|---|---|---|
| 6. Is the proposed action consistent with the predominant character of the existing built or natural landscape? | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? | | |
| If Yes, identify: _____ | ☑ | ☐ |

| | NO | YES |
|---|---|---|
| 8. a. Will the proposed action result in a substantial increase in traffic above present levels? | ☑ | ☐ |
| b. Are public transportation services available at or near the site of the proposed action? | ☐ | ☑ |
| c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action? | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 9. Does the proposed action meet or exceed the state energy code requirements? | | |
| If the proposed action will exceed requirements, describe design features and technologies: _____ _____ | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 10. Will the proposed action connect to an existing public/private water supply? | | |
| If No, describe method for providing potable water: _____ _____ | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 11. Will the proposed action connect to existing wastewater utilities? | | |
| If No, describe method for providing wastewater treatment: _____ _____ | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? | ☑ | ☐ |
| b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? | ☑ | ☐ |
| b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? | ☑ | ☐ |
| If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ | | |

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☐ Wetland ☑ Urban ☐ Suburban

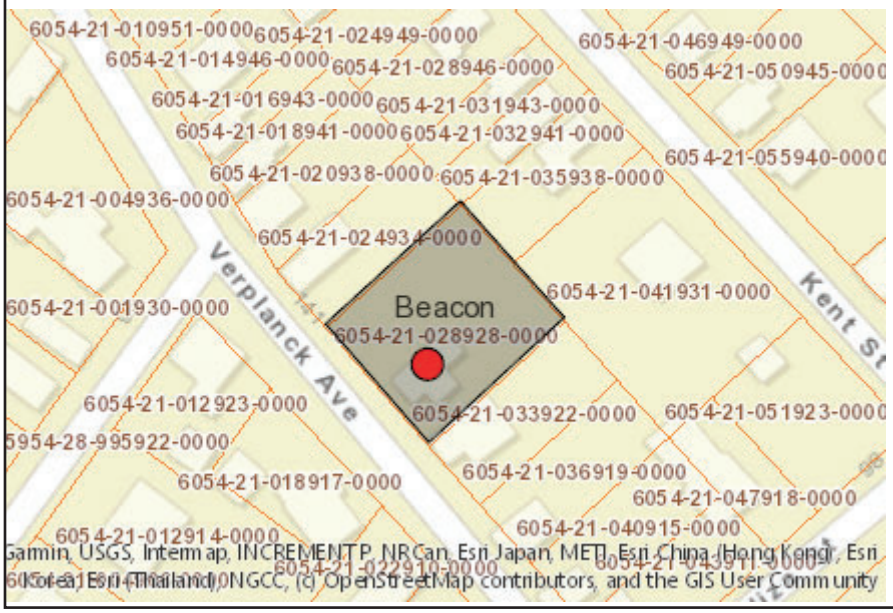
| | NO | YES |
|---|---|---|
| 15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?<br>Indiana Bat | ☐ | ☑ |
| 16. Is the project site located in the 100-year flood plan? | ☑ | ☐ |
| 17. Will the proposed action create storm water discharge, either from point or non-point sources? | ☐ | ☑ |
| If Yes,<br>a. Will storm water discharges flow to adjacent properties? | ☐ | ☑ |
| b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? | ☐ | ☑ |
| If Yes, briefly describe:<br>Stormwater flow will be directed towards the proposed stormwater conveyance system (yard drains) that discharge to an existing catch basin in Verplanck Avenue. the driveways are graded to drain toward the gutter along Verplanck Avenue. | | |
| 18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?<br>If Yes, explain the purpose and size of the impoundment: | ☑ | ☐ |
| 19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?<br>If Yes, describe: | ☑ | ☐ |
| 20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?<br>If Yes, describe:<br>The site is located within 2,000 feet of NYSDEC remediation sites B00130- Classification C (Completed), and C314118- Classification N (No Further Action at This Time). Please see attached Remediation Database Reports for sites listed | ☐ | ☑ |

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

Applicant/sponsor/name: Daniel G. Koehler, P.E. Date: Rev. April 26, 2022

Signature: _____ Title: Engineer for Applicant

PRINT FORM




**Disclaimer:** The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

| | |
|---|---|
| Part 1 / Question 7 [Critical Environmental Area] | No |
| Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites] | No |
| Part 1 / Question 12b [Archeological Sites] | Yes |
| Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies] | No |
| Part 1 / Question 15 [Threatened or Endangered Animal] | Yes |
| Part 1 / Question 15 [Threatened or Endangered Animal - Name] | Indiana Bat |
| Part 1 / Question 16 [100 Year Flood Plain] | No |
| Part 1 / Question 20 [Remediation Site] | Yes |

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

# Environmental Site Remediation Database Search Details

## Site Record

### Document Repository

Site-related documents are available for review through the DECInfo Locator on line at DECInfoLocator

## Administrative Information

**Site Name:** Brunetto Cheese
**Site Code:** B00130
**Program:** Environmental Restoration Program
Classification: C
**EPA ID Number:**

## Location

**DEC Region:** 3
**Address:** 33 North Cedar Street
**City:**Beacon (c) Zip: 12508-
**County:**Dutchess
**Latitude:** 41.50738511
**Longitude:** -73.96901823
**Site Type:**
**Estimated Size:** 1.4 Acres

## Site Owner(s) and Operator(s)

## Site Description

The City of Beacon¿s State assistance application for the Brunetto Cheese Site Environmental Restoration Project was approved by NYSDEC on February 18, 1999. The former Brunetto Cheese Facility is a 1.43 acre property located at 33 North Cedar Street in the City of Beacon, Dutchess County. The buildings that previously occupied the site were historically used for milk processing, including cheese production up until the early 1990s. The site area is serviced by municipal water and sewer service. Cleanup of the Brunetto Cheese site began in 1998 when the City contracted to have the onsite buildings demolished. This activity led to the discovery and subsequent removal, by the City, of five underground storage tanks between July and September 1998 (NYSDEC Spill No. 98-04-

763 was assigned to the site). The tanks ranged in capacity from 750 gallons to 10,000 gallons and contained fuel oil or gasoline which was found to be leaking into the surrounding soils. Following removal of the tanks, 1,327 tons of petroleum-contaminated soil were stockpiled onsite. This soil was removed from the site in September 1999 for thermal treatment. Post-excavation samples and visual observations indicated additional contaminated areas with free product present. Further excavation of these areas commenced in February 2000 as an element of the Site Investigation (SI). An additional 942 tons of petroleum-impacted soil were removed and sent offsite for thermal treatment. Based on the results of the SI, previous investigations, and the Interim Remedial Measures (contaminated soil removals) conducted at the site, a ¿no further action¿ remedy was the selected alternative for the site as detailed in the October 2000 Record of Decision. Development of this property began in 2004. In late August 2004, while excavating the property for a foundation for a new home, contaminated soils were uncovered in the southeastern portion of the property. The DEC was notified and a DEC spill contractor, was called out to address the contamination. A total of 278 tons of contaminated soil was excavated, stockpiled on-site, and taken offsite for proper treatment/ disposal. All post-excavation samples were below soil cleanup goals for unrestricted use (TAGM 4046).

## Contaminants of Concern (Including Materials Disposed)

**Contaminant Name/Type**

## Site Environmental Assessment

This property was contaminated with fuel oil and gasoline which was found to be leaking into the surrounding soils from the former on-site underground storage tanks. All tanks and contaminated soils have been removed from the site.

## Site Health Assessment

No complete exposure pathways currently exist at this site.

For more Information: E-mail Us

Refine This Search

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

# Environmental Site Remediation Database Search Details

## Site Record

### Document Repository

Site-related documents are available for review through the DECInfo Locator on line at DECInfoLocator

## Administrative Information

**Site Name:** Churchill Mills
**Site Code:** C314118
**Program:** Brownfield Cleanup Program
Classification: N *
**EPA ID Number:**

## Location

**DEC Region:** 3
**Address:** 1 East Main Street
**City:**Beacon Zip: 12508
**County:**Dutchess
**Latitude:** 41.502233333
**Longitude:** -73.9628
**Site Type:**
**Estimated Size:** 3.36 Acres

## Site Owner(s) and Operator(s)

**Current Owner Name:** EAST MAIN MILLS, LLC
**Current Owner(s) Address:** 18 EAST 22ND STREET
NEW YORK,NY, 10010

## Site Document Repository

**Name:** HOWLAND PUBLIC LIBRARY
**Address:** 313 MAIN STREET
BEACON,NY 12508

## Site Description

The Church Hill Mills Site is +/- 3.36 acres, made up of 4 parcels and is located in the City of Beacon, Dutchess County. The site is bounded by Tioranda Avenue to the northeast, East Main Street to the north, the Fishkill Creek to the east and south, and Churchill Street to the southwest. The site is

currently vacant and has previously been utilized in part for various industrial uses including hat manufacturing, aluminum anodizing, woodworking and auto parts salvaging. Contaminants which are known or suspected to affect the soil, groundwater, sedimement and/or soil gases include petroleum, SVOCs, metals and PCBs. The BCP application was approved in 2007. The remedial investigation work plan was approved in December 2007. After two schedule extensions, the Volunteer has terminated the BCA without implementing the investigation work plan.

## Site Environmental Assessment

Contaminants which are known or suspected to affect the soil, groundwater, sedimement and/or soil gases are petroleum, SVOCs, metals and PCBs.

---

* **Class N Sites:** "DEC offers this information with the caution that the amount of information provided for Class N sites is highly variable, not necessarily based on any DEC investigation, sometimes of unknown origin, and sometimes is many years old. Due to the preliminary nature of this information, significant conclusions or decisions should not be based solely upon this summary."

For more Information: E-mail Us

Refine This Search

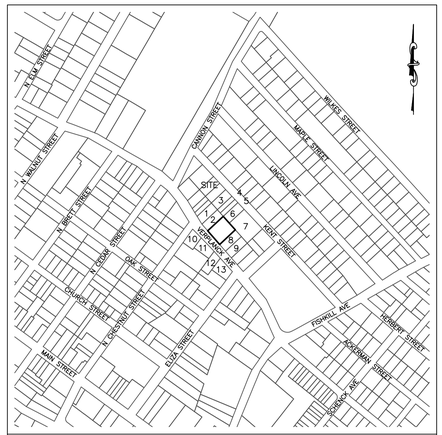
# PETTY SUBDIVISION

## RESIDENTIAL SUBDIVISION

146 VERPLANCK AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

| PROJECT INFORMATION: | |
|---|---|
| PARCEL OWNER: | JAMES PETTY, 146 VERPLANCK AVENUE, BEACON NY 12508 |
| PROJECT ENGINEER: | HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508 |
| PARCEL LOCATION: | 146 VERPLANCK AVENUE, BEACON NY 12508 |
| TAX PARCEL ID: | 6054-21-028928 |
| PARCEL AREA: | ±0.27-ACRES |
| WATER SUPPLY: | PROPOSED MUNICIPAL |
| SEWAGE DISPOSAL: | PROPOSED MUNICIPAL |

PARCEL INFORMATION:
TAX ID: 6054-21-028928
TOTAL LOT AREA: ±0.27 ACRES
ZONING DISTRICT: R1-5




SITE LOCATION MAP SCALE: 1" = 400'

| ADJOINING OWNERS (WITHIN 100 FEET): |
|---|
| PARCEL: OWNER & ADDRESS |
| 1. JOSE GALLEGO, 134 VERPLANCK AVE, BEACON NY 12508 |
| 2. CAROLINE TURNER, 158 MINUTEMAN RD, RIDGEFIELD CT 06877 |
| 3. RICHARD BONANNO, 64 KENT STREET, BEACON NY 12508 |
| 4. AMPARO TAMAYO, PO BOX 321, BEACON NY 12508 |
| 5. DI BANO INC., 121 OLD CASTLE POINT ROAD, WAPPINGERS FALLS NY 12590 |
| 6. CYNTHIA KONZEN, 52 KENT STREET, BEACON NY 12508 |
| 7. ROBERT LEITNER, 5601 HIGHWAY A1A, VERO BEACH FL 32763 |
| 8. JOHN LEINUNG, 150 VERPLANCK AVE, BEACON NY 12508 |
| 9. KIMBERLY BLANCHARD, 156 VERPLANCK AVE, BEACON NY 12508 |
| 10. JACKLYN FAUST INTERIORS LLC., 99 DUTCHESS TER, BEACON NY 12508 |
| 11. LEONARD ROMANELLI, 151 VERPLANCK AVE, BEACON NY 12508 |
| 12. DOROTHY AUGUST, 155 VERPLANCK AVE, BEACON NY 12508 |
| 13. BENIGNO ECHEVARRIA, 161 VERPLANCK AVE, BEACON NY 12508 |

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

OWNER/APPLICANT:
JAMES PETTY
146 VERPLANCK AVENUE
BEACON, NEW YORK 12508
PH: 646-883-9708

PROJECT SURVEYOR:
ROBERT V. OSWALD, L.S.
175 WALSH ROAD
LAGRANGEVILLE, NEW YORK 12540
PH: 845-226-1315

DRAWING INDEX:
SHEET 1: COVER SHEET (CV-1)
SHEET 2: EXISTING CONDITIONS & REMOVALS PLAN (XC-1)
SHEET 3: PRELIMINARY SUBDIVISION PLAT (PT-1)
SHEET 4: SUBDIVISION PLAN (SP-1)
SHEET 5: CONSTRUCTION DETAILS (CD-1)
SHEET 6: CONSTRUCTION DETAILS (CD-2)

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

_____ _____
JAMES PETTY DATE

DCDOH STANDARD NOTE:

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

_____ _____
AUTHORIZED REPRESENTATIVE OF THE COMMISSIONER OF HEALTH DATE

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 4/26/22 | PER PLANNING BOARD COMMENTS | CMB | | | | |

Dig Safely. New York Call 811 before you dig

SEAL

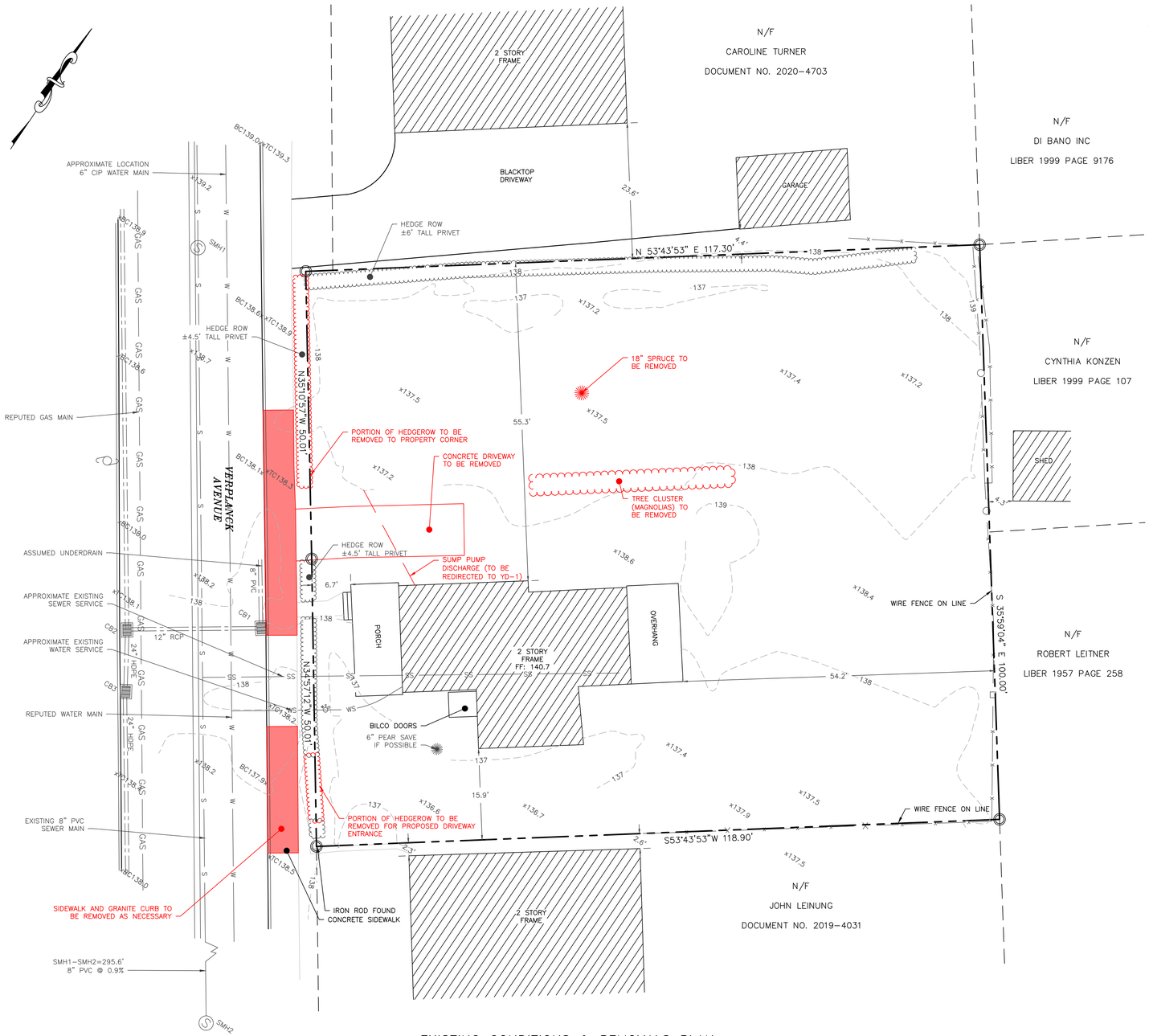
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

COVER SHEET

PETTY SUBDIVISION
REVISION TO FILED MAP NO. 208
146 VERPLANCK AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-21-028928

| | |
|---|---|
| JOB #: | 2022:004 |
| DATE: | 3/29/2022 |
| SCALE: | AS SHOWN |
| TITLE: | CV-1 |
| SHEET: | 1 OF 6 |

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




## EXISTING CONDITIONS & REMOVALS PLAN

SCALE: 1" = 10'

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )

1 inch = 10 ft.

**LEGEND:**

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- 140 EXISTING MAJOR CONTOUR
- 137 EXISTING MINOR CONTOUR
- 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 CATCH BASIN
- GAS EXISTING GAS MAIN

KEY

CB1
RIM=137.9'
INV I=136.1'
INV O=135.6'

CB2
RIM=137.7'
INV I=133.9'
INV I=135.3'
INV O=133.7'

CB3
RIM=137.8'
INV I=133.6'
INV O=133.8'

SMH1
RIM=138.9'
INV I=132.7'
INV O=132.6'

SMH2
RIM=138.9'
INV I=129.8'
INV O=129.7'

## SURVEY REFERENCE:

1. "MAP OF SURVEY FOR THE LANDS OF JAMES PETTY" DATED FEBRUARY 16, 2022 AS PREPARED BY ROBERT V. OSWALD LS. (845) 226-6436.

## SURVEY NOTES:

1. BEING THE SAME PARCELS AS DESCRIBED IN THE LIBER DOCUMENT NUMBER 2019-4044 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. BEING LOT NO. 41 & 42 AS SHOWN ON FILED MAP NO. 208.
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. CERTIFICATION 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. CERTIFICATIONS ARE 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.

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

BY: _____
*Robert V. Oswald , L.L.S.* *N.Y. State Lic. no. 50031*

## OWNER'S CONSENT:

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

_____ _____
JAMES PETTY DATE

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 4/26/22 | PER PLANNING BOARD COMMENTS | CMB | | | | |

Dig Safely. New York Call 811 before you dig

SEAL

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

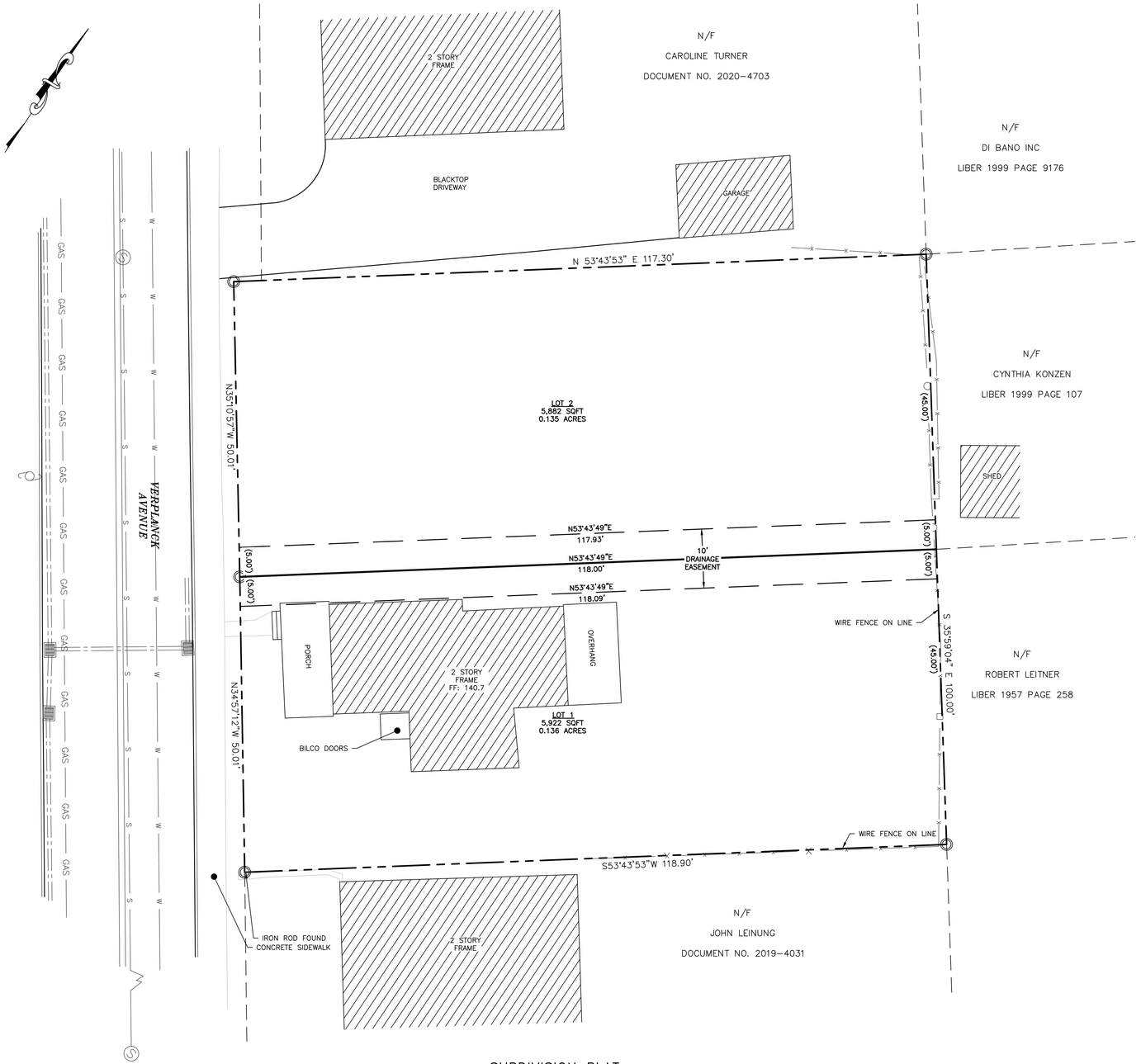
EXISTING CONDITIONS & REMOVALS PLAN

PETTY SUBDIVISION
REVISION TO FILED MAP NO. 208

146 VERPLANCK AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-21-028928

| | |
|---|---|
| JOB #: | 2022:004 |
| DATE: | 3/29/2022 |
| SCALE: | 1" = 10' |
| TITLE: | XC-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




## SUBDIVISION PLAT
SCALE: 1" = 10'

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )
1 inch = 10 ft.

**LEGEND:**

EXISTING PROPERTY LINE
ADJOINING PROPERTY LINE
PROPOSED PROPERTY LINE

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

| PARAMETER | REQUIREMENT | LOT #1 | LOT #2 |
|---|---|---|---|
| LOT AREA: | 5,000 SQUARE FEET MIN | 5,922 S.F. | 5,882 S.F. |
| LOT WIDTH: | 50 FEET MINIMUM | 50.0 FEET | 50.0 FEET |
| LOT DEPTH: | 100 FEET MINIMUM | 118.0 FEET | 117.3 FEET |

## SURVEY REFERENCE:
1. "MAP OF SURVEY FOR THE LANDS OF JAMES PETTY" DATED FEBRUARY 16, 2022 AS PREPARED BY ROBERT V. OSWALD L.S. (845) 226-6436.

## SURVEY NOTES:
1. BEING THE SAME PARCELS AS DESCRIBED IN THE LIBER DOCUMENT NUMBER 2019-4044 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. BEING LOT NO. 41 & 42 AS SHOWN ON FILED MAP NO. 208.
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. CERTIFICATION 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. CERTIFICATIONS ARE 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.

## TOTAL PARCEL AREA:
±11,804 S.F. OR ± 0.27 ACRE

## TAX MAP REFERENCE:
CITY OF BEACON 6054-21-028928

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

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

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

BY: _____
*Robert V. Oswald , L.L.S.* *N.Y. State Lic. no. 50031*

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

_____ _____
JAMES PETTY DATE

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

SIGNED THIS _____ DAY OF _____, 20_____ BY

_____ CHAIRMAN

_____ SECRETARY

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

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 4/26/22 | PER PLANNING BOARD COMMENTS | CMB | | | | |

Dig Safely. New York Call 811 before you dig

SEAL

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

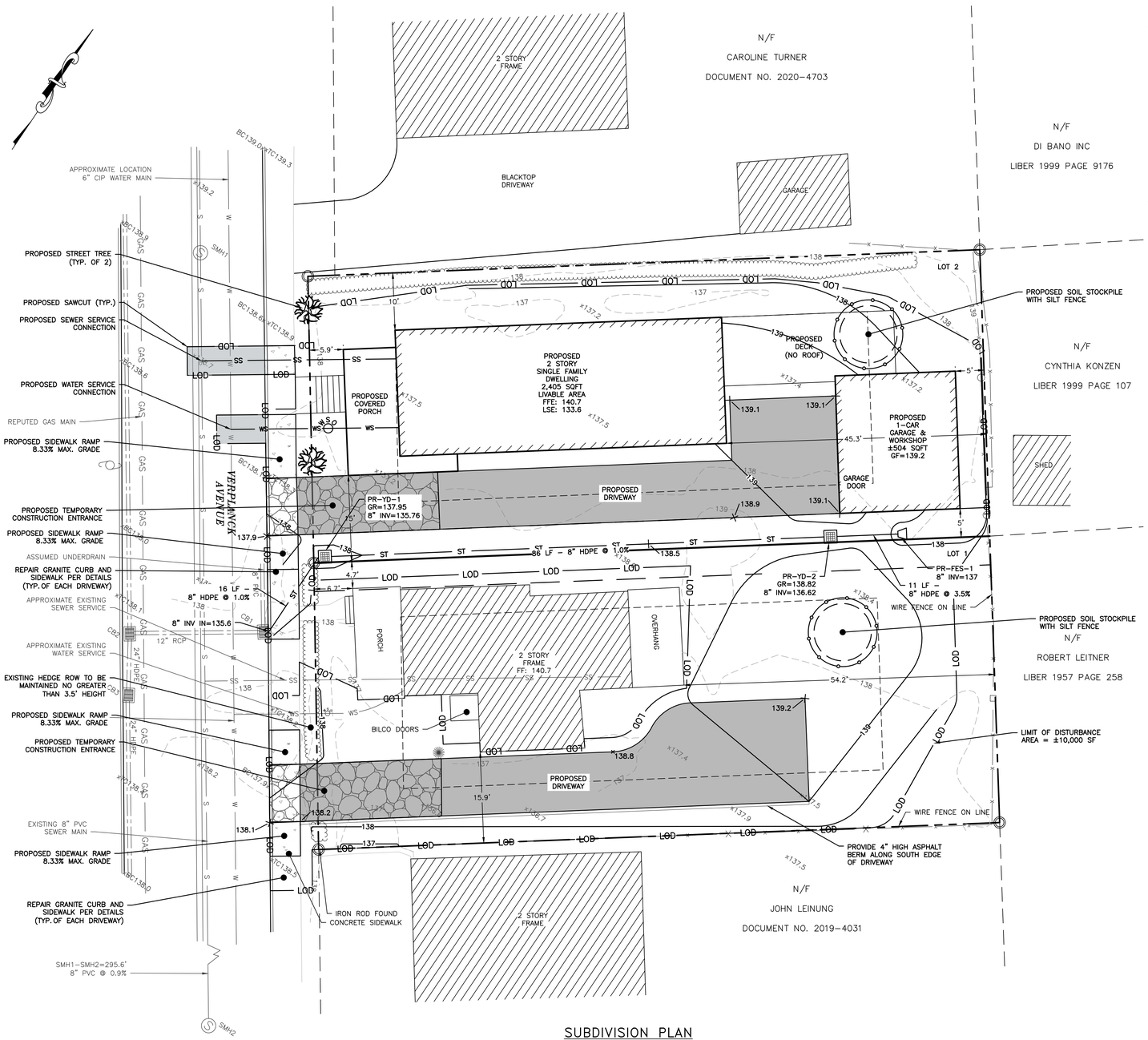
PRELIMINARY SUBDIVISION PLAT

# PETTY SUBDIVISION
REVISION TO FILED MAP NO. 208

146 VERPLANCK AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-21-028928

| | |
|---|---|
| JOB #: | 2022:004 |
| DATE: | 3/29/2022 |
| SCALE: | 1" = 10' |
| TITLE: | PT-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




## SUBDIVISION PLAN
SCALE: 1" = 10'

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )
1 inch = 10 ft.

**LEGEND:**

EXISTING PROPERTY LINE
ADJOINING PROPERTY LINE
EXISTING MAJOR CONTOUR
EXISTING MINOR CONTOUR
EXISTING OVER HEAD WIRE
EXISTING UTILITY POLE
EXISTING SEWER SERVICE LINE
EXISTING SEWER LINE
EXISTING SEWER MANHOLE
EXISTING SEWER CLEAN OUT
EXISTING WATER LINE
EXISTING WATER SERVICE LINE
EXISTING WELL
EXISTING HYDRANT
EXISTING WATER SHUT OFF VALVE
EXISTING WATER VALVE
EXISTING STORM WATER LINE
EXISTING CATCH BASIN
EXISTING GAS MAIN
PROPOSED PROPERTY LINE
PROPOSED SET BACK LINE
PROPOSED MAJOR CONTOUR
PROPOSED MINOR CONTOUR
PROPOSED EASEMENT
PROPOSED TREE LINE
PROPOSED SEWER LINE
PROPOSED SEWER SERVICE LINE
PROPOSED SEWER MANHOLE
PROPOSED SDS LATERAL
PROPOSED SDS SOLID LINE
PROPOSED STORM WATER LINE
PROPOSED ROOF LEADER LINE
PROPOSED ROOF LEADER
PROPOSED WATER LINE
PROPOSED WATER SERVICE LINE
PROPOSED WELL
PROPOSED HYDRANT
PROPOSED WATER SHUT OFF VALVE
PROPOSED WATER VALVE
PROPOSED SILT FENCE
PROPOSED LIMIT OF DISTURBANCE
PROPOSED CATCH BASIN INLET PROTECTION
PROPOSED CONSTRUCTION ENTRANCE

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

| PARAMETER | REQUIREMENT | LOT #1 | LOT #2 |
|---|---|---|---|
| LOT AREA: | 5,000 SQUARE FEET MIN | 5,922 S.F. | 5,882 S.F. |
| LOT WIDTH: | 50 FEET MINIMUM | 50.0 FEET | 50.0 FEET |
| LOT DEPTH: | 100 FEET MINIMUM | 118.0 FEET | 117.3 FEET |
| YARD SETBACKS (RESIDENTIAL USE): | | | |
| FRONT YARD: | 15 FEET MINIMUM | 6.7 FEET* | 5.9 FEET* |
| SIDE YARD: | 10 FEET MINIMUM | 4.7 FEET** | 10.0 FEET |
| REAR YARD: | 20 FEET MINIMUM | 54.2 FEET | 45.3 FEET |
| MAX. BUILDING HEIGHT: | MAX 35 FEET, 2.5 STORIES | <35 FEET | <35 FEET |
| DWELLING UNITS PER LOT: | MAX 1 | 1 | 1 |

* PER §223-13(D), THE FRONT YARD SETBACK IS TO THE COVERED PORCH. THE PROPOSED COVERED PORCH FRONT YARD IS CONSISTENT WITH THE EXISTING ALIGNMENT OF BUILDINGS WITHIN 250' PER §223-13(K), SO NO VARIANCE IS REQUIRED.
** 4.7 FEET PROVIDED WHERE 10 FEET IS REQUIRED, THEREFORE REQUIRING RELIEF OF 5.3 FEET. AN APPLICATION TO THE ZONING BOARD OF APPEALS IS REQUIRED, REQUESTING STATED RELIEF.

## SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS (IF APPLICABLE), WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE LINES.
2. THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
3. THE PROPOSED LOT SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES.
4. THE WATER SERVICE LINE AND METER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
5. THE WATER SERVICE LINE SHALL BE 3/4"ø K-COPPER.
6. THE SEWER SERVICE LINE SHALL BE 4"ø SDR 35 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN (MINIMUM OF ¼" PER FOOT SHALL BE MAINTAINED).
7. A ROAD OPENING PERMIT SHALL BE REQUIRED FOR THE INSTALLATION OF THE PROPOSED WATER AND SEWER SERVICES FOR THE NEW LOT. STREET CLOSURE FOR WATER AND SEWER SERVICE CONNECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. THE PROPOSED DRIVEWAY SHALL HAVE A STABILIZED CONSTRUCTION ENTRANCE.
9. ROOF LEADER CONNECTIONS TO BE MINIMUM 4"ø PVC OR HDPE @ 2.0% MIN. AND DIRECTED TOWARDS THE PROPOSED STORMWATER SYSTEM.
10. SUMP PUMP TO BE PROVIDED FOR FOOTING DRAIN, IF NECESSARY. THE TYPE OF PUMP AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT.
11. THE DRIVEWAY SIGHT DISTANCE MEETS OR EXCEEDS COMPLIANCE WITH THE CITY OF BEACON'S 192-9(B) CODE AND THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS. THE STATE UTILIZES THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) GUIDELINES FOR INTERSECTION SIGHT DISTANCES. FOR ROADS WITH A SPEED LIMIT OF 30 MPH, AASHTO DESIGN TABLES CALL FOR A SIGHT DISTANCE OF 290 FEET TO THE LEFT AND 335 FEET TO THE RIGHT. THE MEASURED SIGHT DISTANCE IS AS FOLLOWS:
    LOT 1: SLSD LEFT = ±667 FEET (ASSUMED TO INTERSECTION OF VERPLANCK AND FISHKILL AVE)
    SLSD RIGHT = ±544 FEET
    STOPPING SIGHT DISTANCE (SSD) WAS OBSERVED TO BE WELL IN EXCESS OF THE REQUIRED 200 FEET
    LOT 2: SLSD LEFT = ±717 FEET (ASSUMED TO INTERSECTION OF VERPLANCK AND FISHKILL AVE
    SLSD RIGHT = ±495 FEET
    STOPPING SIGHT DISTANCE (SSD) WAS OBSERVED TO BE WELL IN EXCESS OF THE REQUIRED 200 FEET WHEN APPROACHING THE PROPOSED DRIVEWAY FOR LOT 2 FROM THE LEFT.
12. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS, STORM SEWER LINES, SANITARY MANHOLES, SEWER LINES, WATERLINES, AND UNDERGROUND UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS.
13. THE SUMP PUMP IN THE BASEMENT OF LOT 1 DISCHARGES TO THE SURFACE AND SHALL BE REDIRECTED PER SHEET XC-1 TO THE STORM SEWER SYSTEM.

## GENERAL CONSTRUCTION NOTES:

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

## UTILITY NOTES:

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

## OWNER'S CONSENT:

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

_____ _____
JAMES PETTY DATE

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 4/26/22 | PER PLANNING BOARD COMMENTS | CMB | | | | |

Dig Safely. New York Call 811 before you dig

SEAL

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

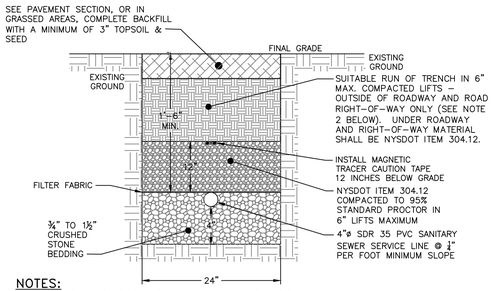
SUBDIVISION PLAN

# PETTY SUBDIVISION
REVISION TO FILED MAP NO. 208

146 VERPLANCK AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-21-028928

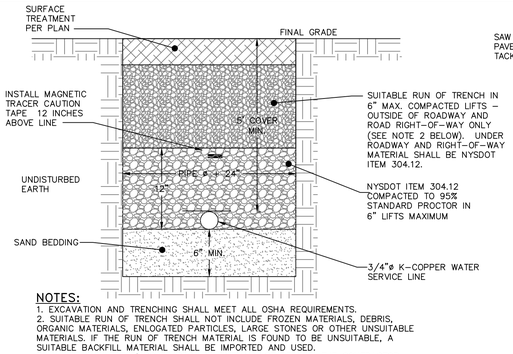
| | |
|---|---|
| JOB #: | 2022:004 |
| DATE: | 3/29/2022 |
| SCALE: | 1" = 10' |
| TITLE: | SP-1 |
| SHEET: | 4 OF 6 |

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



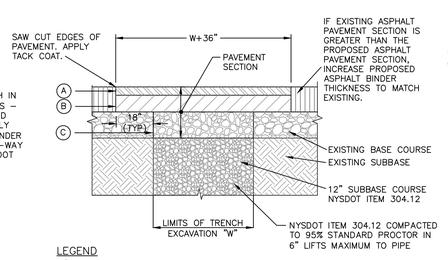

NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED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

## SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE




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

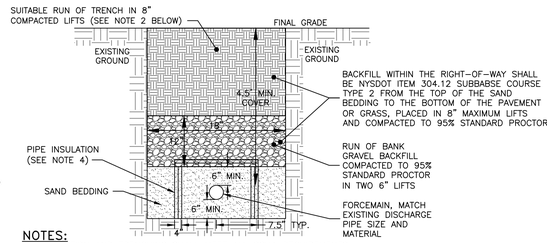
## WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE




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

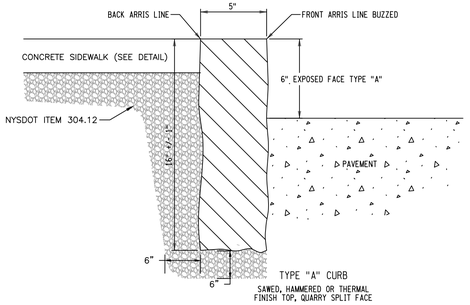
NOTES:
1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE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

## PAVEMENT RESTORATION DETAIL
NOT TO SCALE



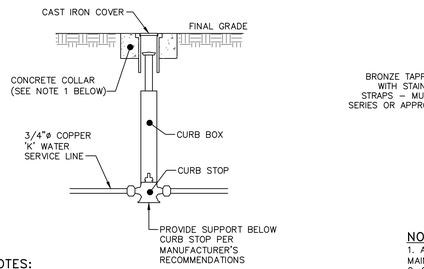

NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED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

## SUMP PUMP FORCEMAIN TRENCH DETAIL
NOT TO SCALE



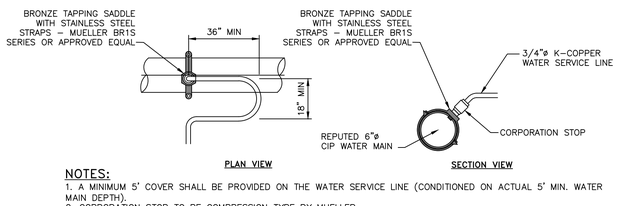

NOTES:
1. IT IS ASSUMED THAT THE GRANITE CURB IS NYSDOT TYPE A. CONTRACTOR TO VERIFY AND MATCH EXISTING GRANITE CURB.
2. AS MARKED IN THE DETAIL ABOVE, FOR TYPE A CURB, THE FRONT ARRIS LINE FOR VERTICAL–FACED AND NEAR–VERTICAL STONE AND GRANITE CURBS SHALL BE BUZZED TO REMOVE A MINIMUM OF 1/8", MAXIMUM OF 3/8" INCH ALL ALONG THE EXPOSED EDGE.

## GRANITE CURB DETAILS
NOT TO SCALE



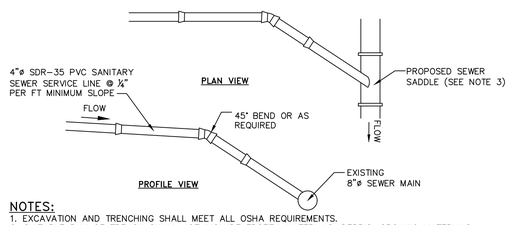

NOTES:
1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.
2. CURB STOP TO BE COMPRESSION TYPE BY MUELLER.
3. AREA AROUND CURB BOX TO BE BACKFILLED WITH GRAVELLY MATERIAL.

## WATER SHUT–OFF VALVE DETAIL
NOT TO SCALE



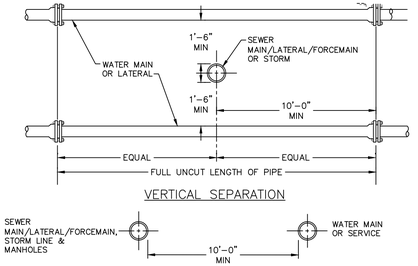

NOTES:
1. A MINIMUM 5' COVER SHALL BE PROVIDED ON THE WATER SERVICE LINE (CONDITIONED ON ACTUAL 5' MIN. WATER MAIN DEPTH).
2. CORPORATION STOP TO BE COMPRESSION TYPE BY MUELLER.
3. WATER SERVICE LINE TO HAVE A 'GOOSENECK' NEAR CORPORATION STOP.
4. CORPORATION STOP TO BE INSTALLED IN THE UPPER HALF OF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

## WATER SERVICE CONNECTION DETAIL
NOT TO SCALE




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

## SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



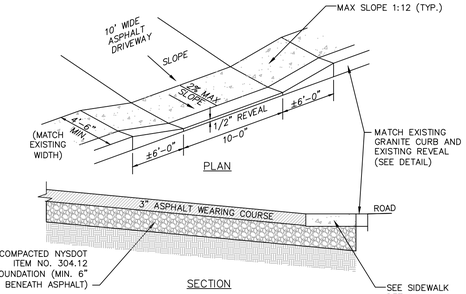

VERTICAL SEPARATION




HORIZONTAL SEPARATION

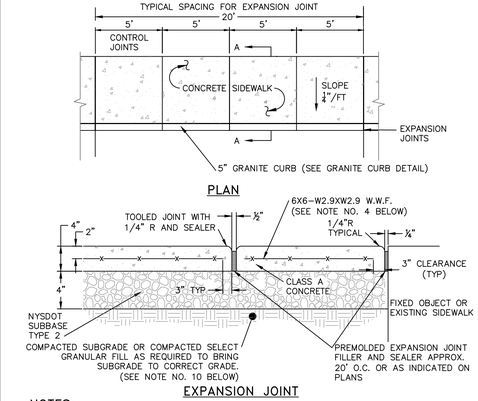
NOTE:
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

## WATER LINE SEPARATION DETAIL
NOT TO SCALE

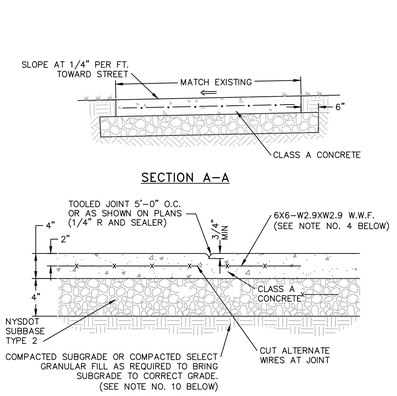



NOTE:
1. RESEED AND STABILIZE GRASS AREAS AFTER ASPHALT AND CONCRETE INSTALLATION.

## LOT 1 & 2 DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE



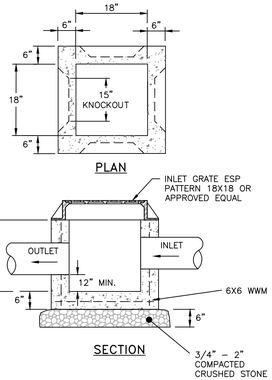

EXPANSION JOINT




CONTROL JOINT

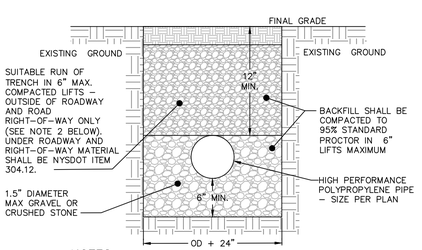
NOTES:
1. MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST REVISION.
2. ALL CONCRETE SHALL BE 4,000 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
5. ALL EXPOSED SURFACED SHALL HAVE A BROOM TEXTURED FINISH.
6. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
7. JOINTS SHALL NOT BE SAW CUT.
8. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFEBOND" SB–7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
9. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD.
10. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMATION WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11. ALL WORK SHALL CONFORM WITH SECTION 608–SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
12. CONCRETE SHALL BE SEALED WITH A SALT RESISTANT SEALER.

## CONCRETE SIDEWALK DETAIL
NOT TO SCALE



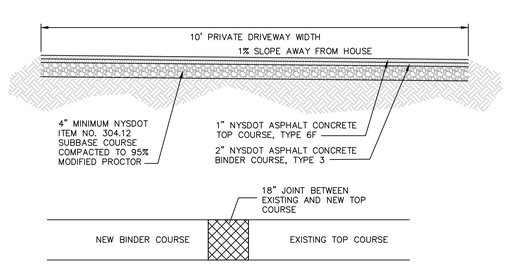

NOTES:
1. YARD INLET BASINS SHALL BE PRE CAST REINFORCED CONCRETE SHALL HAVE A MINIMUM 28–DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND SHALL BE IN CONFORMANCE WITH ASTM 478–68. WALLS AND BASE SHALL BE ONE PIECE CONSTRUCTION. YARD INLET BASIN SHOWN BY EXPANDED SUPPLY PRODUCTS (ESP), 3330 ROUTE 9, COLD SPRING,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

## PRE–CAST CONCRETE YARD INLET DETAIL
NOT TO SCALE




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

## STORM LINE TRENCH DETAIL
NOT TO SCALE




## PAVED DRIVEWAY SECTION DETAIL
NOT TO SCALE

NOTES:
1. MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST REVISION.
2. ALL CONCRETE SHALL BE 4,000 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
5. ALL EXPOSED SURFACED SHALL HAVE A BROOM TEXTURED FINISH.
6. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
7. JOINTS SHALL NOT BE SAW CUT.
8. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFEBOND" SB–7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
9. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD.
10. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMATION WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11. ALL WORK SHALL CONFORM WITH SECTION 608–SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
12. CONCRETE SHALL BE SEALED WITH A SALT RESISTANT SEALER.

## CONCRETE SIDEWALK DETAIL
NOT TO SCALE

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.

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

_____ JAMES PETTY

_____ DATE

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 4/26/22 | PER PLANNING BOARD COMMENTS | CMB | | | | |

Dig Safely. New York. Call 811 before you dig

STATE OF NEW YORK · DANIEL G. KOEPPEL · 082716 · LICENSED PROFESSIONAL ENGINEER

SEAL

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

CONSTRUCTION DETAILS

PETTY SUBDIVISION
REVISION TO FILED MAP NO. 208
146 VERPLANCK AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054–21–028928

| | |
|---|---|
| JOB #: | 2022:004 |
| DATE: | 3/29/2022 |
| SCALE: | AS SHOWN |
| TITLE: | CD–1 |
| SHEET: | 5 OF 6 |

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

## EROSION AND SEDIMENT CONTROL NOTES:

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

## INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

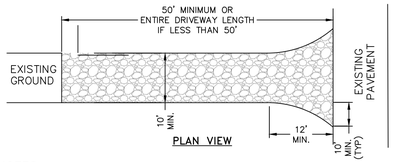
PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

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

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

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

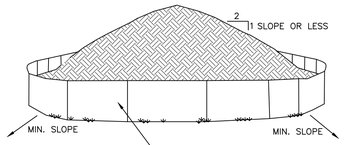
DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORKS. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS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




PLAN VIEW

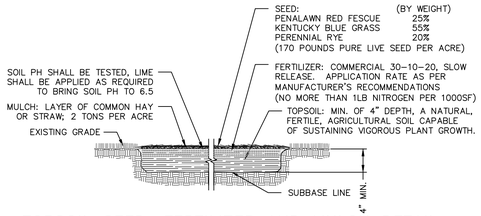
NOTES:
1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS - NOT LESS THAN SIX (6) INCHES.
3. WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
4. GEOTEXTILE - WILL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

### STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

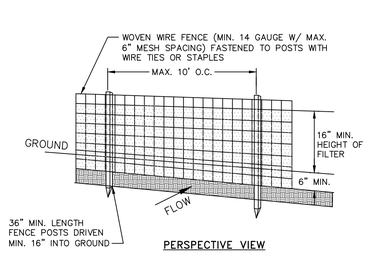



NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

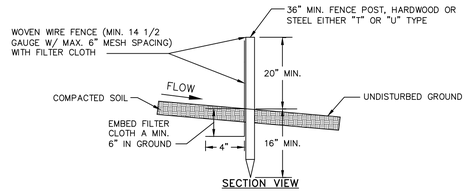
### TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE




### TOPSOIL SEED, FERTILIZER AND MULCH DETAIL
NOT TO SCALE



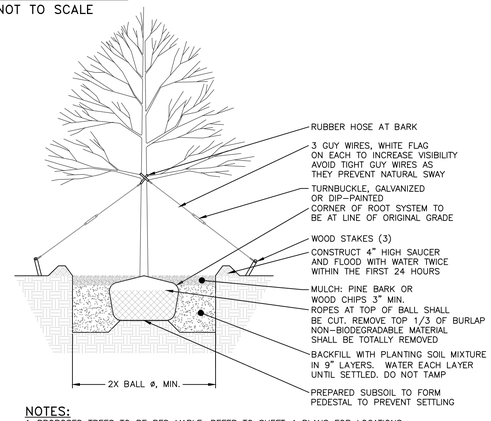

PERSPECTIVE VIEW




SECTION VIEW

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

### SILT FENCE DETAIL
NOT TO SCALE




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

### TREE PLANTING DETAIL
NOT TO SCALE

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

_____ _____
JAMES PETTY DATE

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 4/26/22 | PER PLANNING BOARD COMMENTS | CMB | | | | |

Dig Safely. New York Call 811 before you dig

SEAL

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

CONSTRUCTION DETAILS

PETTY SUBDIVISION
REVISION TO FILED MAP NO. 208
146 VERPLANCK AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-21-028928

| | |
|---|---|
| JOB #: | 2022:004 |
| DATE: | 3/29/2022 |
| SCALE: | AS SHOWN |
| TITLE: | CD-2 |
| SHEET: | 6 OF 6 |

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

**John Clarke Planning and Design** jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: May 6, 2022
Re: **146 Verplanck Avenue Subdivision**

I have reviewed the cover letter from Hudson Land Design, revised Short EAF Part 1, and a 6-sheet Subdivision Plan set, all dated April 26, 2022.

**Proposal**

The applicant is proposing to subdivide a 0.27-arcre parcel with one existing house into two lots for the construction of an additional house. Parcel 1 would have 5,922 square feet and Parcel 2 would contain 5,882 square feet. The parcel is in the R1-5 zoning district.

**Comments and Recommendations**

1. The proposed subdivision leaves Lot 1 with a 4.7-foot side yard, where 10 feet is required. The applicant will need an area variance. The Board should provide a recommendation to the ZBA.

2. All my other previous comments have been addressed.

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

John Clarke, Beacon Planning Consultant

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

# LANC & TULLY
## ENGINEERING AND SURVEYING, P.C.

John J. O'Rourke, P.E., Principal
David E. Higgins, P.E., Principal
John Queenan, P.E., Principal

Rodney C. Knowlton, L.S., Principal
Jerry A. Woods, L.S., Principal

John D. Russo, P.E., Principal
John Lanc, P.E., L.S.
Arthur R. Tully, P.E.


May 4, 2022

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

RE: 146 Verplanck – 2 Lot Subdivision
Tax No. 6054-21-028928
City of Beacon

Dear Mr. Gunn:

My office has received the following in regard to the above 2-lot subdivision application:

- Cover letter dated April 26, 2022, as submitted by Hudson Land Design.
- Short Environmental Assessment Form dated April 26, 2022.
- Plan set titled "Petty Subdivision", last revised April 26, 2022, and consisting of Sheets 1 through 6 of 6, as prepared by Hudson Land Design.

The proposed project entails the subdivision of a 0.27± acre parcel located at 146 Verplanck Avenue into 2 lots, with proposed Lot 1 being 0.136± acres (5,922 square feet) in size with an existing single-family residence, and proposed Lot 2 being 0.135± acres (5,882 square feet) in size to allow for the construction of an additional single-family residence. The project is located in the R1-5 Zone. Based on our review of the above plans, we would like to offer the following comments:

General Comments:

1. A construction cost estimate should be prepared for the work within the road right-of-way to allow for the establishment of a performance bond.

Existing Conditions & Demolition Plan (Sheet 2 of 6):

1. The pipe invert information provided for CB-3 should be verified, as the data notes that pipe out to be higher than the pipe coming into the structure.

Subdivision Plan (Sheet 4 of 6):

1. Although Note No. 9 has been added to the plan stating that roof leaders are to be directed towards the proposed stormwater system, we would recommend that any roof leaders on the north side of the existing residence be tied directly to the proposed stormwater collection system, along with any roof leaders proposed on the south side of the proposed residence and garage on Lot 2.

Construction Details (Sheet 5 of 6):

1. The "Granite Curb" detail shall reflect the requirements of Section 609-3.02 of the NYSDOT Standard Specifications for "Setting Precast Concrete Curb or Stone Curb". The detail shall be expanded upon to reflect the requirements of bedding and backing behind the curb.

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

**Agency Use Only [If applicable]**

**Project:** 146 Verplanck Avenue

**Date:** 5/10/22

# *Short Environmental Assessment Form*
# *Part 2 - Impact Assessment*

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

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

PRINT FORM

Agency Use Only [If applicable]

Project: 146 Verplanck Avenue

Date: 5/10/22

## *Short Environmental Assessment Form*
## *Part 3 Determination of Significance*

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

See attached.

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

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

| | |
|---|---|
| City of Beacon Planning Board | 5/10/22 |
| Name of Lead Agency | Date |
| John Gunn | Chairman |
| Print or Type Name of Responsible Officer in Lead Agency | Title of Responsible Officer |
| Signature of Responsible Officer in Lead Agency | Signature of Preparer (if different from Responsible Officer) |

PRINT FORM

**ATTACHMENT TO**
**NEGATIVE DECLARATION**
**REASONS SUPPORTING DETERMINATION**

**APPLICATION FOR SUBDIVISION APPROVAL**
**FOR 146 VERPLANCK AVENUE**

Parcel No. 6054-21-028928

## CONCLUSIONS

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

Project Description:

The Proposed Action is the subdivision of a 0.27-acre parcel with one existing house into two lots for the construction of an additional house. Parcel 1 will have 5,922 square feet (0.136 acres) and Parcel 2 will have 5,882 square feet (0.135 acres). Parcel 1 is proposed to have a 4.7 foot side yard setback for the existing house where a side yard setback of 10 feet is required which will require an area variance from the City of Beacon Zoning Board of Appeals. The property is located at 146 Verplanck Avenue in the R1-5 Zoning District on property known and designated on the Tax Map as Parcel No. **6054-21-028928** (the "Property").

The Proposed Action is an Unlisted action. The Planning Board circulated its Notice of Intent to act as Lead Agency and received no objections. On May 10, 2022, the Planning Board declared itself Lead Agency and proceeded to review the application pursuant to SEQRA.

Summary of Rationale for Negative Declaration

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

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

  The project site is located in the R1-5 Zoning District and is currently improved with a single family dwelling. The Proposed Action would involve the subdivision of the existing lot and the construction of one new single family dwelling with typical grading and site work associated with such construction. There are no wetlands, water bodies, very steep slopes or

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

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

  There are no unique geological features on the Property.

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

  Residential land uses are generally not associated with the discharge of contaminants into aquifers or other groundwater sources. There will be no bulk storage of petroleum or chemicals on-site. The Project includes the implementation of erosion and sediment controls, including a stormwater collection system. The Project does not include or require wastewater discharged to groundwater. The Project will be connected to the existing public water distribution and sanitary sewer systems. Adequate water supply and sewer capacity exist for these additional flows.

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

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

  According to the Short EAF the Property is not located within a regulated flood plain and there are no wetlands. The Project includes the implementation of erosion and sediment controls, including a stormwater collection system. For these reasons and those stated above, the Proposed Action will not have a significant adverse impact on drainage flows or patterns, or surface water runoff.

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

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

from construction vehicles throughout occasional periods during construction of the proposed project. This is a temporary, construction-related, unavoidable impact that is not significant.

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

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

The Short EAF indicates that the Property may contain or serve as habitat for the Indiana Bat. The Project proposes the removal of at least one tree to accommodate construction of the new single family dwelling and associated improvements. Tree removal at the Project Site will take place between October 1 and March 31 during the bat hibernation period to avoid the removal of trees which may be utilized by Indiana Bats as roosting trees.

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

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

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

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

The Proposed Action will not result in the obstruction, elimination or significant screening of one or more officially designated scenic views, or visible from any publicly accessible vantage points either seasonally nor year around.

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

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

The subdivision of the Property into two lots for the construction of one new single family home in an existing residential neighborhood will not have a significant adverse impact on historic or archeological resources. There are no historic resources in the immediate vicinity of the Site and the nature of the area as a developed suburban neighborhood makes impacts to archeological resources unlikely and not significant.

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

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

  The area of the Proposed Action is not designated as open space by the City of Beacon. The Proposed Action will not result in the loss of a current or future recreational resource, eliminate significant open space, or result in loss of an area now used informally by the community as an open space resource. A recreation set aside or fee may be required which will be used for the future need for park and recreational opportunities in the City of Beacon.

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

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

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

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

  The construction of one single family home will not result in a significant adverse traffic impact.

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

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

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

  The Proposed Action is not anticipated to generate any noxious odors. Outdoor lighting will be consistent with typical residential lighting. Noise impacts associated with the proposed Project will be limited to temporary impacts generated during construction. Temporary noise impacts associated with construction will be mitigated by limiting construction activities to the hours between 7:00 a.m. and 7:00 p.m. It is not anticipated that blasting will be necessary during the proposed construction. If blasting does become necessary, it will be performed in accordance with all applicable state and local requirements. In addition, there will be no significant noise impacts post-construction.

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

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

  Residential land uses are generally not associated with significant adverse impacts on human health from exposure to new or existing sources of contaminants. Although the EAF Mapper Summary Report identified DEC Remediation Sites B00130 (33 North Cedar Street) and C314118 (1 East Main Street) as being located within 2,000 feet of the Property, review of reports from DEC's Environmental Site Remediation Database reveal that Site B00130 has been closed out and Site C314118 requires no further action at this time.

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

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

  The Proposed Action is generally consistent with the Comprehensive Plan and City Zoning Code, will not have a significant impact on municipal services, and is consistent with the character of the existing neighborhood.

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

Adopted: May 10, 2022
Beacon, New York

Motion by _____, seconded by _____:

| | | | |
|---|---|---|---|
| Kevin Byrne | Voting: | Len Warner | Voting: |
| J.C. Calderon | Voting: | Randall Williams | Voting: |
| Karen Quiana | Voting: | John Gunn, Chairman | Voting: |
| Jill Reynolds | Voting: | | |

**City of Beacon Planning Board Agenda**
**05/10/2022**

**Title:**

Continue review of application for Special Use Permit and Site Plan Approval, indoor and outdoor event space, 4 Hanna Lane, submitted by Jason Hughes.

**ATTACHMENTS**

4 Hanna Lane Architect Response Letter.pdf

4 Hanna Lane Cover Sheet.pdf

4 Hanna Lane Project Narrative.pdf

4 Hanna Lane Sheet 1 Site Plan.pdf

4 Hanna Lane Sheet 2 Existing Conditions.pdf

4 Hanna Lane Sheet 3 Overall Site Plan.pdf

4 Hanna Lane Sheet 4 Lighting Plan.pdf

4 Hanna Lane Sheet 5 Building Plan.pdf

Planner Comments Hanna lane 5.6.22.pdf

4 Hanna Lane Engineer Comments.pdf

ARYEH SIEGEL
ARCHITECT

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

**Re: 4 Hanna Lane – The Yard**
*Site Plan Application – Responses to Comments*

April 26, 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 April 7. 2022. Please refer to Hudson Land Design's response letter regarding Lanc & Tully's letter dated April 8, 2022.

**John Clarke Planning and Design Comment Responses:**

1. Comment acknowledged. The sheets have been updated to reflect that this is a Site Plan Application, and not a Special Use Application.

2. A project narrative has been included with this submission addressing events, hours, noise, and traffic. The Applicant does not believe there is an issue with identified hazardous waste on the subject site, but there may be on an adjacent site.

3. Details for the fence, gate, and food service container have been added. There is no permanent stage proposed, and the drawings have been revised to indicate that there is a potential performing area, but no permanent stage.

4. The food service container complies with required setbacks. Dimensions have been added to the site plan.

5. Comment acknowledged. Parking information for the overall site has been added to the plans as well.

6. For the long lot along Hanna Lane:
    a The owner is in communication with the adjacent property owner regarding permission to stripe the parking
    b A sidewalk will be extended between the adjacent parking and the front of the Workshop / Event Building

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

c The owner is in communication with the adjacent property owner regarding permission to landscape the northern end of the lot to provide screening from Fishkill Avenue
d The owner is in communication with the adjacent property owner regarding permission to add lighting to the parking lot

7. The proposed light fixture labels have been corrected. The color temperature and CRI are shown, and meet the requirements in Section 223-14B

**Lanc & Tully Comment Responses:**

**General Comments**

1. A project narrative has been included with this submission addressing events, hours, noise, and traffic.

2. The site plan now indicates the main access for vehicles entering the site for events. Additional information is included in the narrative regarding how event traffic will be handled.

3. The existing building is not sprinklered. Occupancy will be limited by the Building Inspector.

4. An I & & Study was performed for the site previously. The Applicant will locate the I & I Study and provide a copy to the Planning Board.

5. The sheet numbering has been corrected, and an additional sheet has been added to show the overall site plan at a larger scale.

**Sheet 1 – Site Plan**

1. A sheet has been added to show the overall site plan with all existing and demonstrated parking spaces.

2. A separate parking table has been added to the overall site plan sheet to show the parking requirement for the other parcels.

3. The trailer is for overflow workshop storage. It is now labeled as such on the site plan. The trailer and surrounding fence have been previously approved by the building inspector.

4. The sidewalk has been extended to the parking area

5. The site plan indicates existing traffic signage. The Applicant is not currently proposing to add more signage.

**Sheet 2 – Existing Conditions Plan**

1. The dimension line scaling has been corrected.

2. The overall site plan has been moved to a separate sheet and shown at a larger scale.

**Sheet 4 – Lighting Plan**

1. Lighting is shown along the building to light the way to the parking areas and public ways.

2. The lighting in the parking lot is proposed. The lighting fixture type is indicated at each proposed fixture and the fixture specification is shown on the plan.

3. Construction details for the pole mounted lighting are shown on the lighting plan sheet.

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

Sincerely,

Aryeh Siegel
*Aryeh Siegel, Architect*

**ARYEH SIEGEL**
ARCHITECT

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

**Re: The Yard – 4 Hanna Lane**
*Special Use Permit Application*

April 26, 2022

Dear Etha,

Please find enclosed:

- (5) sets of Sheets 1 through 5, dated 4/26/22
- (5) copies of the Comment Response Letter
- (5) copies of the Project Narrative
- CD-ROM

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

Sincerely,

Aryeh Siegel
*Aryeh Siegel, Architect*

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

# Project Narrative

## 4 Hanna Lane - The Yard

April 26, 2022

**Owner's Background Statement**

From my arrival in Beacon in 2006 until I visited the property as a prospective buyer in 2013, I had never set foot in Tallix. Despite its central location, it didn't feel like part of the growing community around my growing family. We purchased 4, 12, and 16 Hanna Lane in April 2013. When Hudson Hills Montessori School opened at 12 Hanna Lane in September 2013, Tallix began to feel more open to the surrounding community. Parents walked or biked their kids to and from school. Many hung out in the playground after school while their kids played.
At the same time, my new company (with my partner, Luc Stampleman), LNJ Tech Services, began to grow within my building at 4 Hanna Lane. Our background is in entertainmentindustry technology, logistics, fabrication, and production, and we've applied those skills to a variety of industries since launching LNJ full-time in 2015. We've built and installed scenery and handled lighting for Off-Broadway plays, worked with performance artists on their technical needs for the Whitney Museum and other art and cultural institutions, created custom lighting installations for hundreds of weddings and parties at the Roundhouse and other regional venues, and fabricated a wide variety of one-of-a-kind pieces in a wide variety of materials for commercial, retail, restaurant, cultural, and residential clients.

In 2016, my wife and I hosted a gala fundraiser for Hudson Valley Seed (now Land to Learn) inside and outside the warehouse at 4 Hanna Lane, and we also hosted Firefly Fest on our property in Tallix for a number of years. Although Carley and I were the hosts, LNJ was critical in planning, logistics, and execution, before, during, and after each event. It quickly became clear that all of the skills that we use in our client work qualified us to produce and present our own events.

When covid hit, nearly all of our contracted events were cancelled, and LNJ shifted our work to supporting the community. We helped Fareground receive, store, and distribute food, and we helped Beacon 4 Black Lives with the technical needs and logistics for their marches throughout summer and fall of 2020. For logistical reasons, a couple of smaller marches ended at 4 Hanna Lane, and although not as spacious as Memorial Park, people appreciated the energy of the yard outside our warehouse. That led to a socially-distanced dance party fundraiser for B4BL, and then people asked us for more covid-safe events. Since that first dance party we've hosted outdoor holiday markets and concerts, as well as community-oriented get-togethers and artist/artisan networking events. For all of these, we've worked with the City of Beacon Building Department for all required permits (Noise, Tent, etc.) and approvals.

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

The parking lot at 4-16 Hanna Lane has withstood at least 20 years of traffic surges, and I personally witnessed most morning and afternoon school rushes from 2013 to 2020, at which times the lot would fill (and then empty) quickly. At present, Star of Bethlehem Baptist Church is renting space in 12 Hanna Lane, and they have a heavy parking load only on Sunday mornings. While I know that Yard events will necessarily see an uptick in traffic, it will be neither unprecedented nor unmanageable. For our own events in 2021, all social media promotions encouraged walking/biking/car-pooling, and staff was placed at entry points to ensure smooth crowd-loading logistics. Because of our central location, few of our events saw our lot entirely full.

It seems clear that there is a market for an indoor/outdoor event space in walking distance to most of Beacon, and The Yard at LNJ is uniquely suited for this use. Our indoor space needs work to become code-compliant for occupancy above 49, and we have a mezzanine that will require ADA-accessibility modifications. We've already received a permit to add required emergency exit doors, and our path to a Certificate of Occupancy as a venue for the general public once that work is complete hinges upon your approval of our Site Plan application.

Thank you for your time and attention, and I hope to see you at a show at The Yard,
Jason Hughes
Managing Member, EJC III LLC
Managing Member, LNJ LLC
4 Hanna Lane
Beacon, NY 12508

**Interior Space**

A portion of the existing Gallery / Workshop Building is proposed to be separated off from the Workshop space for use as an event space for performances with an occupancy for up to 99 people. There is a mezzanine level above the main level.

**Exterior Space**

The existing lawns and concrete pads outside of the Gallery / Workshop Building will be used as an exterior event venue. The space can host a variety of events, ranging from concerts to weddings and rehearsal dinners to artisan markets. Concert events will be scheduled and controlled to avoid excess sound outside of the property. There will be an area set aside to stage performances, but there will not be a permanent stage structure or covered stage built.

A modified shipping container will house the food service for events. Water supply and waste water will be trenched from the existing Gallery / Workshop building.

A storage container for Event Space use will be placed on the adjacent lot controlled by the Applicant. The storage container will be screened with fencing to match existing horizontal wood fencing on the property, as previously approved by the Building Inspector.

Temporary toilets will be provided as needed for events. There are also toilets, including a handicapped accessible toilet, at the interior Event Space.

Noise control is imperative in a mixed-use area, and the founders of LNJ bring their combined 55 years of live event production experience to bear when decisions are made regarding outdoor events. For the three concerts in 2021, a Noise Permit was obtained each time from the Building Department and Beacon Police. For those concerts, there were three different stage/audience configurations, and while it was noted that one configuration would only be appropriate for small, acoustic acts, none of the setups resulted in noise complaints. Every Yard event moving forward must take the same factors into account that have led to success thus far, while remaining open to evolution to meet the evolving needs of the community, without whose support the Yard cannot succeed.

**Parking**

There are 34 parking spaces proposed on the property or the adjacent property controlled by the Applicant. There are also an additional 49 spaces on the adjacent property owned by Tallix Condominiums that are available to be leased on a per event basis when they are required. These spaces are not required for day to day use by Tallix Condominiums, and a formal agreement will be submitted to the City for review and approval by the City Attorney. There is adequate parking on the overall site for all of the uses. The proposed leased spaces are not normally used, especially at times when events are likely to take place on the subject parcel.

**Traffic**

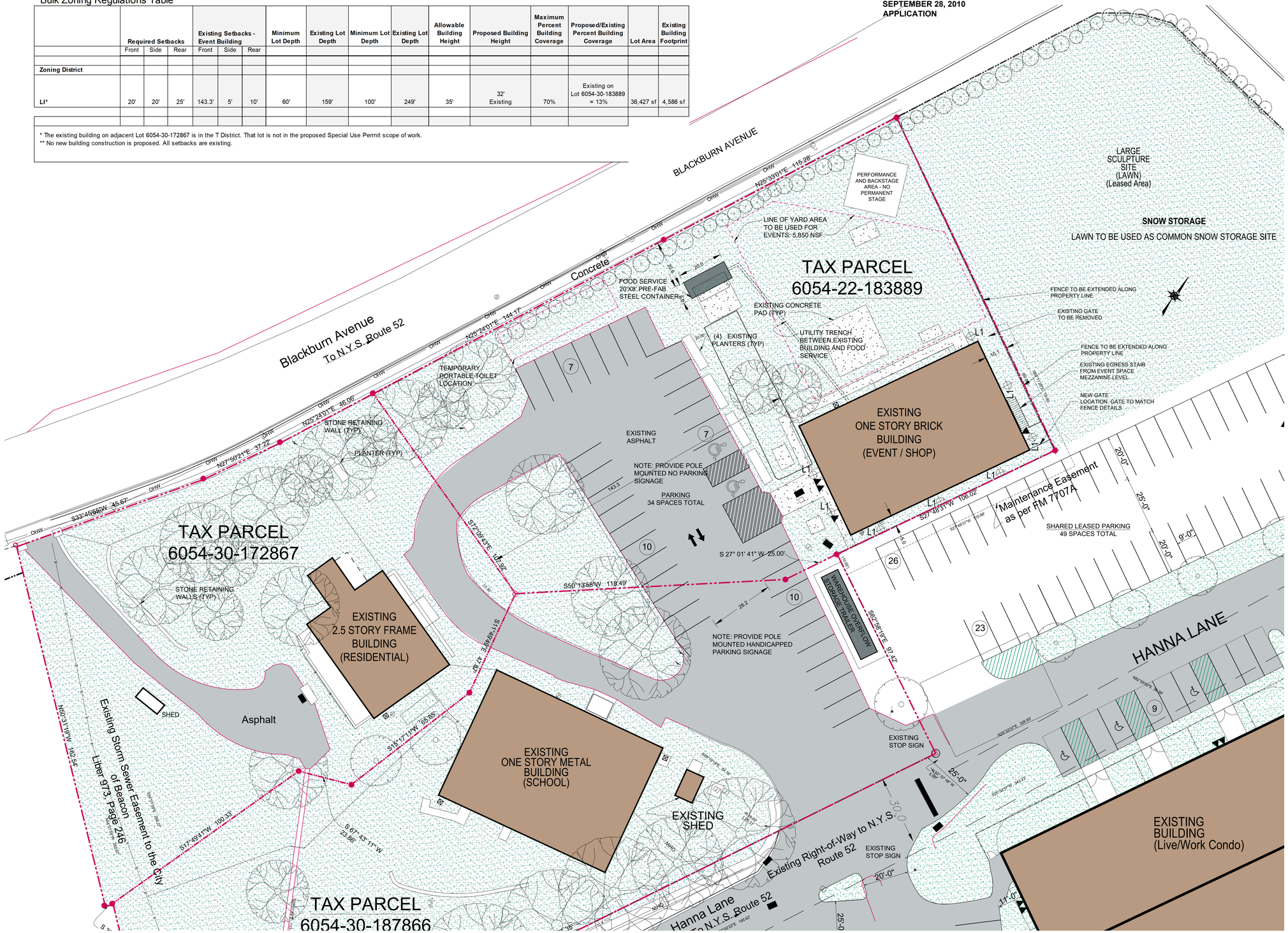
Traffic will enter and exit through the existing driveway from Fishkill Avenue (Route 52). During events, staff will direct visitors to parking spaces. Existing stop signs help to calm traffic and maintain pedestrian safety.

## Bulk Zoning Regulations Table

| | Required Setbacks | | | Existing Setbacks - Event Building | | | Minimum Lot Depth | Existing Lot Depth | Minimum Lot Depth | Existing Lot Depth | Allowable Building Height | Proposed Building Height | Maximum Percent Building Coverage | Proposed/Existing Percent Building Coverage | Lot Area | Existing Building Footprint |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Front | Side | Rear | Front | Side | Rear | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| **Zoning District** | | | | | | | | | | | | | | | | |
| **LI*** | 20' | 20' | 25' | 143.3' | 5' | 10' | 60' | 159' | 100' | 249' | 35' | 32' Existing | 70% | Existing on Lot 6054-30-183889 = 13% | 36,427 sf | 4,586 sf |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

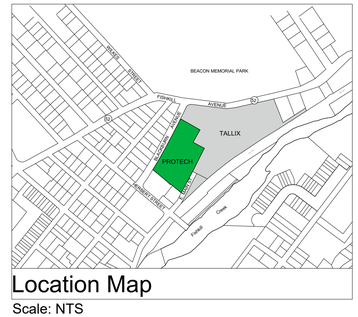
* The existing building on adjacent Lot 6054-30-172867 is in the T District. That lot is not in the proposed Special Use Permit scope of work.
** No new building construction is proposed. All setbacks are existing.

**AREA OF WORK FOR SEPTEMBER 28, 2010 APPLICATION**




## Site Plan

Scale: 1" = 20'




## Location Map

Scale: NTS

### Zoning Summary

| | |
|---|---|
| Zoning District: | LI (Light Industrial) |
| Tax Map No.: | 6054-30-183889 |
| Lot Area: | 36,427 sf (0.84 acres) |
| Building Footprint: | 4,586 sf (Existing Building) |
| Historical Overlay District: | No |
| Parking Overlay District: | No |
| Existing Use: | Shop |
| Proposed Use: | Mixed-Use: Shop & Event Space |

### Parking & Loading

| | | |
|---|---|---|
| **Event Space Building Main Floor** *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* | 120 Seats | 30 spaces |
| **Event Space Building Mezzanine** *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* | 1,060 nsf | 11 spaces Note that the mezzanine is a non-simultaneous use with the Main Floor event use |
| | | |
| | | |
| **Outside Event Area** *1 space for each 200 square feet* | 5,850 sf | To be determined |
| | | |
| ***Total Required Parking Spaces*** | | ***30 + Outdoor*** |
| **Total Proposed Parking Spaces** | | **83 spaces proposed See Note 1 below** |

**Notes:**

1. There are 34 parking spaces proposed on the property controlled by the Applicant. There are 49 parking spaces available to the applicant on a shared basis with the adjacent property owner as required by the capacity of proposed events, for a total of 83 parking spaces. The Applicant will provide documentation, acceptable to the City of Beacon, demonstrating the proposed shared use and availability of the proposed shared spaces
2. There are a total of 158 striped and/or demonstrated parking spaces on the adjacent parcels controlled by Tallix Condominiums.
3. The Event Space Building mezzanine space will not be used at the same time as the Event Space Building Main Floor. Therefore, the maximum required number of parking spaces for the Event Space Building is 30 spaces, based on the Main Floor.
4. Hours of operation vary according to proposed events
5. No signage is proposed as part of this application
6. Landscaping is existing, and no additional landscaping is proposed as part of this application
7. The Applicant is in communication with the owners of the Tallix Condominium property regarding a lease for parking spaces on the adjacent property, as well as striping, lighting, and landscaping on the adjacent property.

| REVISIONS: | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 04/26/22 | REVISE PER PLANNING BOARD COMMENTS | AJS |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

### Index of Drawings


| | |
|---|---|
| Sheet 1 of 5 | Site Plan |
| Sheet 2 of 5 | Existing Conditions & Demolition Plan |
| Sheet 3 of 5 | Overall Site Plan |
| Sheet 4 of 5 | Lighting Plan |
| Sheet 5 of 5 | Floor Plans |


# Site Plan Application

**Sheet 1 of 5 - Site Plan**


*Owner:*
**EJC III, LLC**
4 Hanna Lane
Beacon, NY 12508

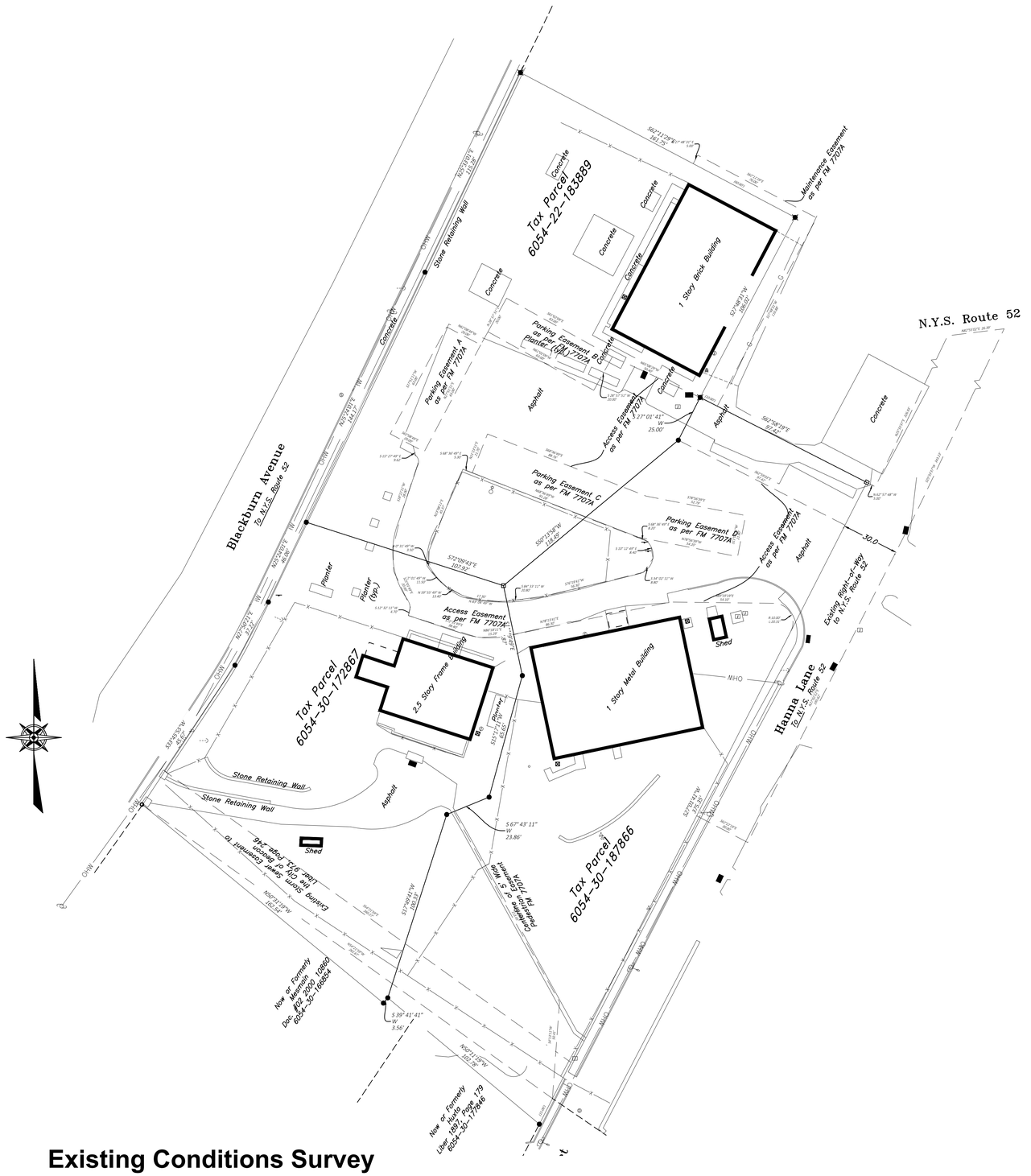
*Architect:*
**Aryeh Siegel, Architect**
84 Mason Circle
Beacon, New York 12508

*Surveyor:*
**MJ Engineering And Land Surveying, P.C**
1533 Crescent Road
Clifton Park, NY 12065

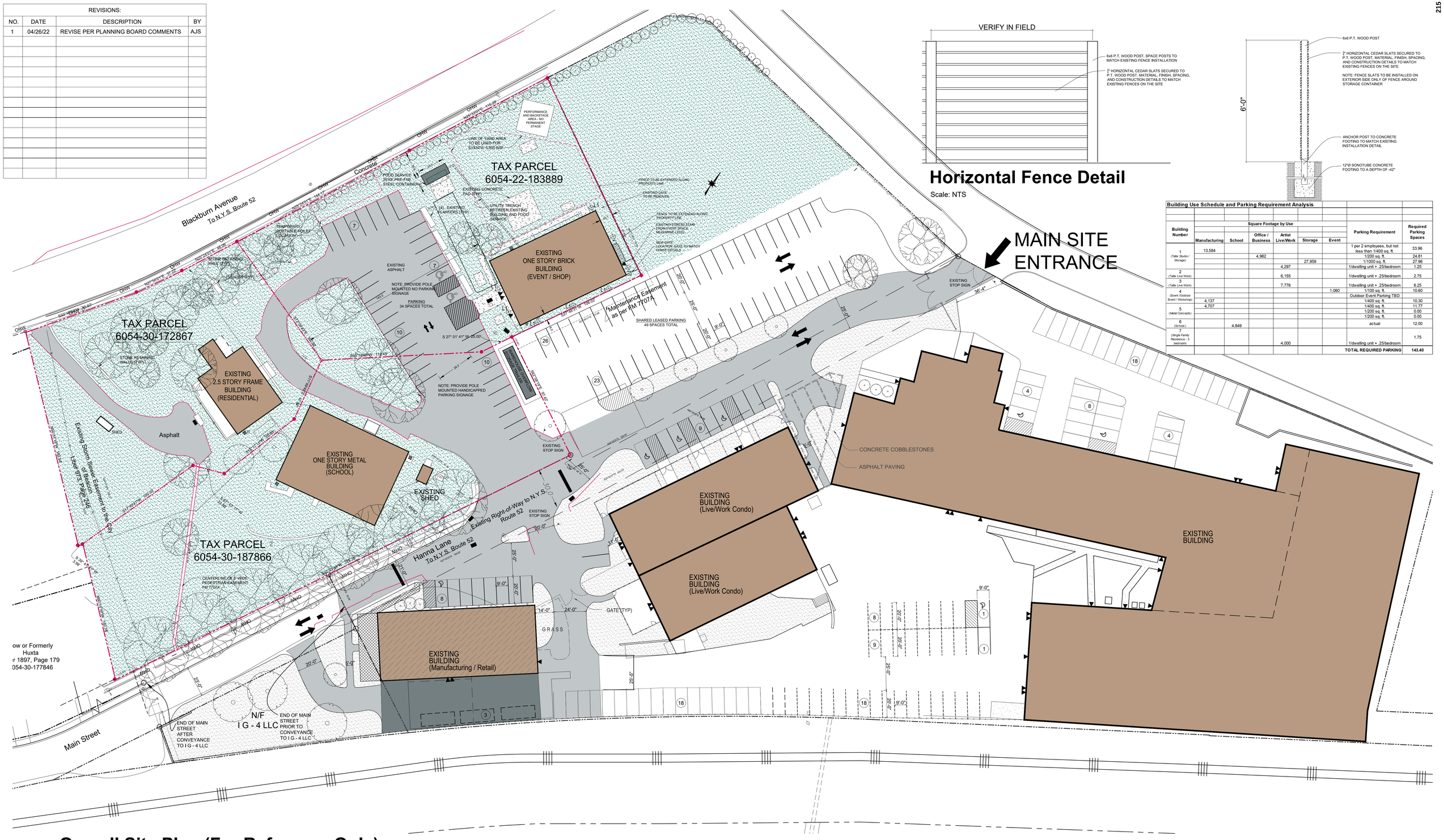

## The Yard - Event Space

Beacon, New York
March 29, 2022

| REVISIONS: | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 04/26/22 | REVISE PER PLANNING BOARD COMMENTS | AJS |


Blackburn Avenue
To N.Y.S. Route 52
N.Y.S. Route 52
Hanna Lane
To N.Y.S. Route 52
Existing Right-of-Way to N.Y.S. Route 52
Tax Parcel 6054-22-183889
Tax Parcel 6054-30-172867
Tax Parcel 6054-30-187866
Now or Formerly Mansion 1080 Doc. #22 2700 6054-30-166854
Now or Formerly Hudson Bank 179 Liber 1957 6054-30-171846
1 Story Brick Building
2.5 Story Frame Building
1 Story Metal Building
Shed
Shed
Concrete
Asphalt
Stone Retaining Wall
Planter
Planter (typ.)
Parking Easement A as per FM 7707A
Parking Easement B as per FM 7707A
Parking Easement C as per FM 7707A
Parking Easement D as per FM 7707A
Access Easement as per FM 7707A
Maintenance Easement as per FM 7707A
Existing Storm Sewer Easement to the City of Beacon Liber 974, Page 218
Combined 5' Wide Possession Path "PP2A"
S62°11'29"E 167.75'
S27°48'31"W 150.00'
S62°58'19"E 97.47'
S27°01'41"W 25.00'
S27°09'43"E 107.70'
S20°13'56"W 118.09'
N62°11'29"W 167.75'
N27°48'31"E 150.00'
N62°58'19"W 97.47'
S67°43'11"W 33.86'
S39°41'41"W 3.56'
N50°16'19"W 101.78'
N62°10'07"E 44.17'
S27°09'31"W 23.47'
N62°10'07"E 44.06'
S39°55'53"W 42.52'
N27°09'31"E 23.47'
S31°17'17"E 65.05'
N31°17'17"W 65.05'
S62°10'07"W 44.17'
S62°10'07"W 44.06'
N62°10'07"E 44.17'
N62°10'07"E 44.06'
S39°55'53"W 42.52'
N39°55'53"E 42.52'
N27°09'31"E 23.47'
S27°09'31"W 23.47'
N62°10'07"E 44.17'
N62°10'07"E 44.06'
S62°10'07"W 44.17'
S62°10'07"W 44.06

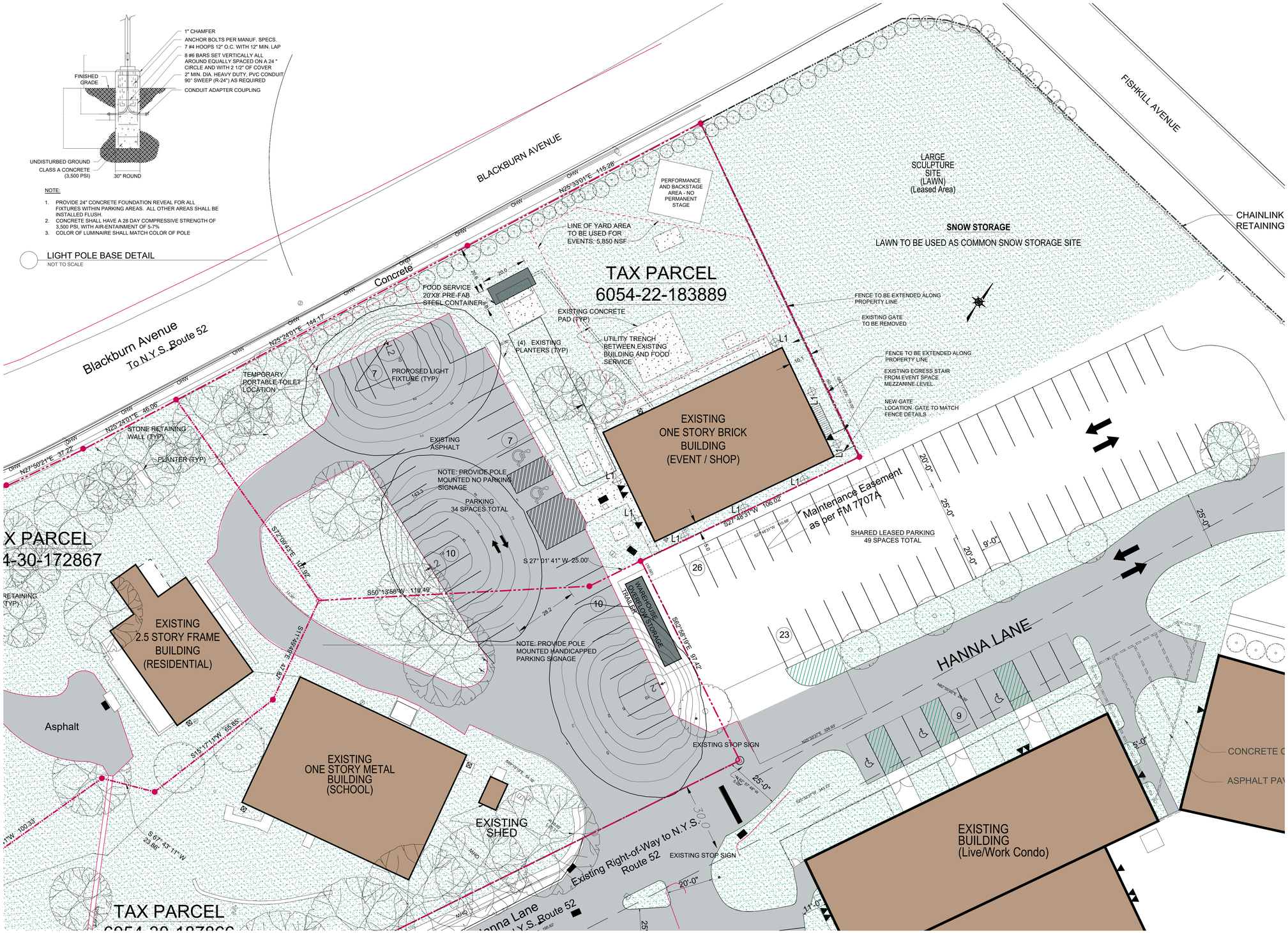
| REVISIONS: | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 04/26/22 | REVISE PER PLANNING BOARD COMMENTS | AJS |


Blackburn Avenue
To N.Y.S. Boule 52
TAX PARCEL
6054-22-183889
TAX PARCEL
6054-30-172867
TAX PARCEL
6054-30-187866
EXISTING
ONE STORY BRICK
BUILDING
(EVENT / SHOP)
EXISTING
2.5 STORY FRAME
BUILDING
(RESIDENTIAL)
EXISTING
ONE STORY METAL
BUILDING
(SCHOOL)
EXISTING
BUILDING
(Manufacturing / Retail)
EXISTING
BUILDING
(Live/Work Condo)
EXISTING
BUILDING
(Live/Work Condo)
EXISTING
BUILDING
EXISTING
SHED
SHED
Asphalt
EXISTING
ASPHALT
PARKING
34 SPACES TOTAL
SHARED LEASED PARKING
49 SPACES TOTAL
Maintenance Easement
as per FM 7707A
Existing Storm Sewer Easement to the City of Beacon Liber 973 Page 245
Existing Right-of-Way to N.Y.S. Route 52
Hanna Lane
To N.Y.S. Boute 52
Main Street
MAIN SITE
ENTRANCE
EXISTING
STOP SIGN
EXISTING
STOP SIGN
FOOD SERVICE
20'X8' PRE-FAB
STEEL CONTAINER
EXISTING CONCRETE
PAD (TYP)
(4) EXISTING
PLANTERS (TYP)
UTILITY TRENCH
BETWEEN EXISTING
BUILDING AND FOOD
SERVICE
TEMPORARY
PORTABLE TOILET
LOCATION
STONE RETAINING
WALLS (TYP)
FLAGPOLE (TYP)
PERFORMANCE
AND BACKSTAGE
AREA - MULTI
PERMANENT
STAGE
LINE OF YARD AREA
TO BE USED FOR
EVENTS (9,900 SQF.)
FENCE TO BE EXTENDED ALONG
PROPERTY LINE
EXISTING GATE
TO BE REMOVED
FENCE TO BE EXTENDED ALONG
PROPERTY LINE
EXISTING CONCRETE STAIR
FROM EVENT SPACE
MEZZANINE (TYP)
MAN-GATE
LOCATION - GATE TO MATCH
FENCE DETAILS
NOTE: PROVIDE POLE
MOUNTED NO PARKING
SIGNAGE
NOTE: PROVIDE POLE
MOUNTED HANDICAPPED
PARKING SIGNAGE
HANDICAPPED SPACES
(TYP)
CONCRETE COBBLESTONES
ASPHALT PAVING
GRASS
GATE (TYP)
CENTERLINE OF 20' WIDE
PEDESTRIAN EASEMENT
FM7707A
ow or Formerly
Huxta
r 1897, Page 179
054-30-177846
END OF MAIN
STREET
AFTER
CONVEYANCE
TO I G - 4 LLC
N/F
I G - 4 LLC
END OF MAIN
STREET
PRIOR TO
CONVEYANCE
TO I G - 4 LLC
EXISTING
STOP SIGN
EXISTING
STOP SIGN
EXISTING
STOP SIGN

NOTE:

1. PROVIDE 24" CONCRETE FOUNDATION REVEAL FOR ALL FIXTURES WITHIN PARKING AREAS. ALL OTHER AREAS SHALL BE INSTALLED FLUSH.
2. CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI, WITH AIR-ENTAINMENT OF 5-7%
3. COLOR OF LUMINAIRE SHALL MATCH COLOR OF POLE

LIGHT POLE BASE DETAIL
NOT TO SCALE




## Site Plan

Scale: 1" = 20'

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.

POLE MOUNTED LIGHT (L2)

SELUX LIGHTING "BETA PENDANT" POLE MOUNTED LED FIXTURE. MODEL #BPC-L-R2-1-H100-BK-120-HS-PC WITH LOW GLARE CUTOFF SHIELD, COLOR: BLACK. COLOR TEMPERATURE: 2700 K. CRI 95. PHOTOCELL & MANUAL CONTROL. OR APPROVED EQUAL. MOUNTING HEIGHT ON A35 SERIES BLACK ALUMINUM POLE = 12 FEET

WALL MOUNTED HOUSE LIGHT (L1)

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

| REVISIONS: | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 04/26/22 | REVISE PER PLANNING BOARD COMMENTS | AJS |

# Site Plan Application

**Sheet 4 of 5 - Lighting Plan**

*Owner:*
**EJC III, LLC**
4 Hanna Lane
Beacon, NY 12508

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

*Surveyor:*
**MJ Engineering And Land Surveying, P.C**
1533 Crescent Road
Clifton Park, NY 12065

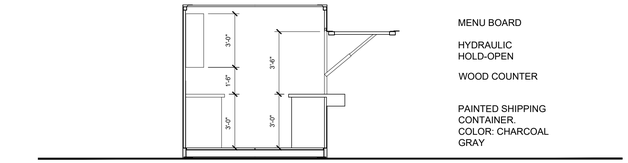
## The Yard - Event Space

Beacon, New York
March 29, 2022

| REVISIONS: | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 04/26/22 | REVISE PER PLANNING BOARD COMMENTS | AJS |

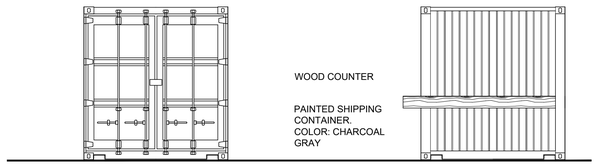
## Shipping Container Food Service Examples

FOOD SERVICE CONTAINER TO BE CUSTOM FABRICATED FROM A 20' LONG SHIPPING CONTAINER ACCORDING TO OWNER'S REQUIREMENTS. THE ABOVE IMAGES ARE EXAMPLES ONLY, TO EXPLAIN THE PROPOSED CONCEPT. DESIGN IS SUBJECT TO OWNER REQUIREMENTS



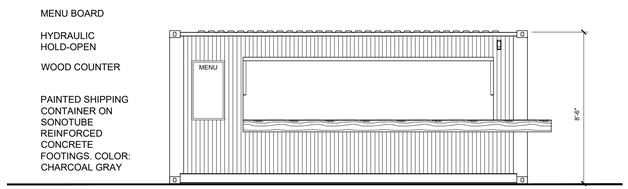

## Section: Food Service Container

Scale: $\frac{1}{4}$" = 1'-0"



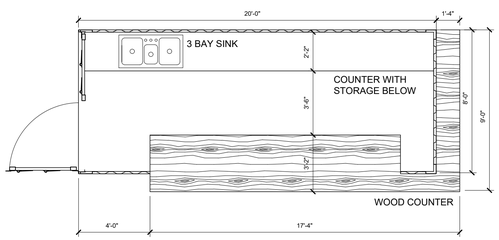

## Side Elevations: Food Service Container

Scale: $\frac{1}{4}$" = 1'-0"



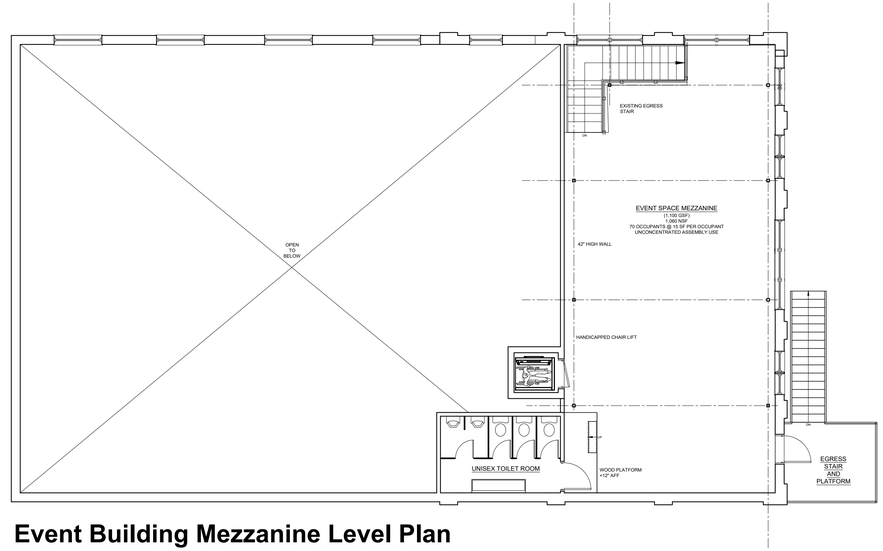

## Front Elevation: Food Service Container

Scale: $\frac{1}{4}$" = 1'-0"



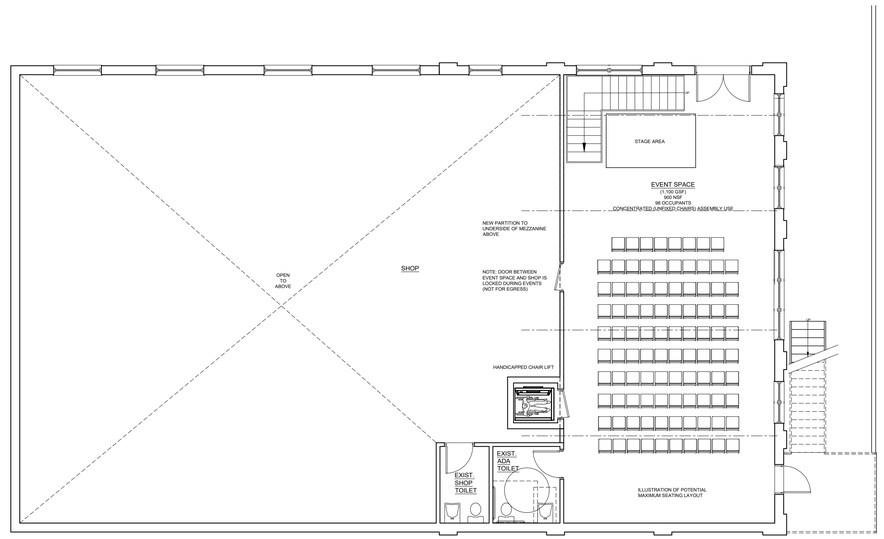

## Floor Plan: Food Service Container

Scale: $\frac{1}{4}$" = 1'-0"




## Event Building Mezzanine Level Plan

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




## Event Building Main Level Plan

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

# Site Plan Application

**Sheet 5 of 5 - Building Plans**

*Owner:*
**EJC III, LLC**
4 Hanna Lane
Beacon, NY 12508

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

*Surveyor:*
**MJ Engineering And Land Surveying, P.C**
1533 Crescent Road
Clifton Park, NY 12065

## 4 Hanna Lane - The Yard - Event Space

Beacon, New York
March 29, 2022

**John Clarke Planning and Design** jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: May 6, 2022
Re: **4 Hanna Lane, The Yard Event Space Site Plan**

I have reviewed a response letter and Project Narrative from Aryeh Siegel and a 5-sheet Site Plan Application set, all dated April 26, 2022.

**Proposal**

The applicant is proposing to convert an existing building to an indoor and outdoor event space. The 0.84-acre parcel is in the Light Industrial (LI) district.

**Comments and Recommendations**

1. The Site Plan should provide information on the proposed hours of operations, including evening limits on outdoor events where noise may be a concern.

2. The indoor occupancy needs to be clarified, since the Project Narrative cites up to 99 people, while the Sheet 1 Parking Table includes 120 seats and the Sheet 5 floor plan shows 98 seats.

3. The required parking according to Section 223-26F appears to be 1 space per each 4 indoor seats, plus 1 space for each 100 square feet of outdoor assembly area, unless the Building Inspector recommends a different calculation or the applicant justifies a lower amount based on non-simultaneous use.

4. The Project Narrative mentions that past events encouraged walking to the site, but Fishkill Avenue does not have a sidewalk on this side of the street or a crosswalk. There is also no designated walkway from the Fishkill Avenue entrance to the building or a complete walkway from the Main Street gate to the building. The Board and applicant should consider site improvements to ensure safe walking from the entrances.

5. For the long lot along Hanna Lane:

    a. Parking on an adjacent property will need a formal agreement acceptable to the City.

    b. The spaces should be striped at 18 feet long with a 24-foot aisle. Any surplus asphalt can then be used as a walkway on the building side of the parking lot.

    c. The northern end of the lot should be landscaped to provide screening from Fishkill Avenue.

    d. If to be used in the evening, the lot will need additional lighting.

6. The EAF should be revised to complete Question 20 on remediation of hazardous waste.

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

John Clarke, Beacon City Planning Consultant

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

# LANC & TULLY
ENGINEERING AND SURVEYING, P.C.

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


May 4, 2022

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

RE: 4 Hanna Lane – Special Use Permit
Tax No. 6054-30-183889
City of Beacon

Dear Mr. Gunn:

My office has received the following in regard to a Special Use Permit for 4 Hanna Lane:

- Correspondence dated April 26, 2022, from Aryeh Siegel, Architect.
- Project Narrative, dated April 26, 2022, as prepared by Aryeh Siegel.
- Plan set titled "Site Plan Application – The Yard Event Space", consisting of 5 sheets, all with the latest revision date of April 26, 2022, as prepared by Aryeh Siegel, Architect.

The proposed project entails the re-use of an existing building on Hanna Lane for assembly of indoor and outdoor events. The site is located in the LI Zone. Based on our review of the above documents and plans, we would like to offer the following comments:

General Comments:

1. The applicant's consultant should conduct an Inflow & Infiltration study of the existing site and building and provide certification to the City of Beacon that the site currently has no illegal cross-connections between the existing site and the City's sanitary sewer system. Possible cross-connections that should be looked at would be roof-leaders, sump pumps, existing site drains, etc. If any cross-connections are found, a report should be submitted as to the findings, the volume of I&I being introduced into the sanitary sewer collection system, and the proposed remediation for the cross-connection(s) found. The plans should also clearly show the proposed remediation as outlined in the report. A note should also be added to the plans granting the City of Beacon Building Department access to verify where the existing roof leaders and sump pump(s), if present, drain to. ***Applicant notes that a study was previously conducted of the site and that a copy of that report will be submitted.***

Site Plan (Sheet 1 of 5):

1. The "Stop" sign located on the north side of the access drive into the 4 Hanna Lane site shall be relocated to the south side so that it is visible vehicles leaving the parking lot and entering on to Hanna Lane.

2. Where the sidewalk has been extended out to the parking lot on the right side of the building, the grass hatching should be removed from the sidewalk. A construction detail shall be provided on the plans for the sidewalk.

3. The plan now shows water and sewer being extended from the existing building to the "Food Service" steel container. The plans shall be updated to reflect the proper separation distanced between the proposed water and sewer service extensions in accordance with NYS Department of Health Requirements. The plans shall also include trench details for these utilities along with the pipe sizing and material for each service. A shut-off valve shall be installed on the water service out to the food service area, either inside the existing building or on the exterior.

4. Signage shall be shown on the plan for the accessible parking stalls, along with the relative construction details for the signage. Leaders should run from the notes on the plans with regards to these signs to the actual sign locations.

5. What type of fencing is to be extended along the property line? If it is the "Horizontal Fence Detail" as shown on Sheet 3, it should be noted as such. If it will be different, then the plan shall note what type of fencing is to be installed and provide a construction detail for it.

6. Parking required for the outside event area should be addressed in the parking table. Presently the table states "To Be Determined".

7. Note No. 7 on Sheet 1 of 5 states that the applicant is currently in communication with owners of Tallix with regards to leasing of the additional parking located on the adjacent parcel, as well as the proposed work on that parcel. A copy of the agreement shall be submitted to the Planning Board Attorney prior to approvals being granted for the project.

8. In accordance with Paragraph 1028.5 of the 2020 New York State Fire Code, the egress stairs on the rear of the building shall provide "a direct and unobstructed access to a public way." The plans shall be revised to show the required access. This access would also have to be maintained to remove any accumulation of snow and/or ice in accordance with Section 1031 of the 2020 NYS Fire Code.

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

**City of Beacon Planning Board Agenda**
**05/10/2022**

**Title:**

Review application for Subdivision Approval, 2-lot residential, 46 Judson Street, submitted by 46 Judson Street LLC.

**ATTACHMENTS**

Judson Subdivision Application.pdf

Judson Subdivision EAF.pdf

Judson Subdivision Sheet 1.pdf

Judson Subdivision Sheet 2.pdf

Judson Subdivision Sheet 3.pdf

Planner Comments Judson St Sub 5.6.22.pdf

46 Judson Engineer Comments.pdf

# APPLICATION FOR SUBDIVISION APPROVAL

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

## IDENTIFICATION OF APPLICANT

Name: 46 Judson Street LLC

Address: 8 Churchill Street

Beacon, NY 12508

Signature: [signature] Managing Member

Date: 4/26/2022

Phone: 617-688-6998

*(For Official Use Only)*

| | Date | Initials |
|---|---|---|
| Preliminary Application Rec'd | 4.26.22 | AC |
| Application Fee: | | |
| Public Hearing | | |
| Preliminary Plat Approved: | | |
| Final Plat Approved: | | |
| Recreation Fee: | | |
| Performance Bond: | | |

## IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: Badey & Watson, Surveying & Engineering, D.P.C.

Address: 3063 Route 9

Cold Spring, NY 10516

Phone: 845-265-9217 ext.214

Fax: 845-265-4428

Email address: gwatson@badey-watson.com

## IDENTIFICATION OF SUBJECT PROPERTY:

Subdivision name or identifying title:

Subdivision Plat prepared for 46 Judson Street LLC

Street which property abuts: Judson Street and Union Street

Current Tax Map Designation: Section 6054 Block 47 Lot(s) 290539

Property (~~does~~) (does not) connect directly into a (State) (County) highway.

Land in subdivision (~~is~~) (is not) within 500 feet of a Municipal boundary.

Total area of property is 15,000 Sq. Ft.

## ITEMS TO ACCOMPANY THIS APPLICATION

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

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

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

# APPLICATION PROCESSING RESTRICTION LAW

## Affidavit of Property Owner

Property Owner: 46 Judson Street LLC

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

Paula Dowd

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

See attached list

Applicant Address: 8 Churchill Street, Beacon, NY 12508

Project Address: 46 Judson Street, Beacon, NY 12508

Project Tax Grid # 6054-47-290539

Type of Application Subdivision

Please note that the property owner is the applicant. "Applicant" is defined as any individual who owns at least five percent (5%) interest in a corporation or partnership or other business.

I, Paula Dowd, the undersigned managing member of the owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.

1. No violations are pending for ANY parcel owned by me situated within the City of Beacon ✓
2. Violations are pending on a parcel or parcels owned by me situated within the City of Beacon
3. ALL tax payments due to the City of Beacon are current ✓
4. Tax delinquencies exist on a parcel or parcels owned by me within the City of Beacon
5. Special Assessments are outstanding on a parcel or parcels owned by me in the City of Beacon
6. ALL Special Assessments due to the City of Beacon on any parcel owned by me are current ✓

Signature of Managing Member of Owner

Paula Dowd, Managing Member

Title if owner is corporation

| Office Use Only: | NO | YES | Initial |
|---|---|---|---|
| Applicant has violations pending for ANY parcel owned within the City of Beacon (Building Dept.) | X | | AC |
| ALL taxes are current for properties in the City of Beacon are current (Tax Dept.) | | X | AC |
| ALL Special Assessments, i.e. water, sewer, fines, etc. are current (Water Billing) | | X | AC |

**CITY OF BEACON**
**PRELIMINARY SUBDIVISION PLAT**
**AND CONSTRUCTION PLANS SPECIFICATION FORM**

**Name of Application:** Subdivision Plat prepared for 46 Judson Street LLC

| PRELIMINARY SUBDIVISION PLAT | YES | NO |
|---|---|---|
| The preliminary plat shall be clearly marked "Preliminary Plat", shall be drawn to a convenient scale but not less than 1" = 100', and shall contain the following information: | ✓ | |
| Proposed subdivision name or identifying title, name, and address of property owner and subdivider (if other than owner), name and address of the surveyor and/or engineer preparing the plan, scale, approximate true North point, and date. | ✓ | |
| The approximate location and dimensions of all property lines, the total acreage of the proposed subdivision, the location of any zoning, special district or municipal boundary lines affecting the subdivision, and the names of owners of record of properties adjoining and directly across the street from proposed subdivision. | ✓ | |
| The location of all existing structures and pertinent features, including railroads, water bodies, water courses, wetlands, rock outcroppings, wooded areas, major trees, and stone walls, that may influence the design of the subdivision, plus accurate topography at a vertical contour interval of not more than two (2) feet. The topographic data shall be determined by field survey unless the Planning Board specifically waives this requirement and/or permits the substitution of topographic information obtained from other sources determined satisfactory for the particular case. | ✓ | |
| The location and status of existing streets or private roads, easements and rights-of-way (if any), proposals for the layout of new streets or private roads (including widths and approximate curve radii) and any proposed easements, rights-of-way and/or reservations. | ✓ | |
| The names of existing streets or private roads and proposed names for new streets or private roads. | ✓ | |
| The proposed arrangement of lots, including identifying numbers and approximate area and dimensions of each. | ✓ | |
| Location, size and nature of any area proposed to be reserved for park purposes. | | ✓ |
| A site location sketch, at a scale of one inch equals 400 feet, showing the general situation within 1,000 feet of the applicant's property with respect to surrounding properties, streets and private roads. | ✓ | |
| Where the preliminary plat includes only a portion of an applicant's contiguous holding, the applicant shall also indicate, on a sketch at a scale of not less than one inch equals 200 feet, the probable future street or private road system, lot arrangement and location of park and other reservations for the remaining portion of the tract. Such sketch shall be for the purpose of guiding the Planning Board in reviewing the proposed preliminary plat and shall include topographic data with a vertical contour interval of not more than five feet plus any other information determined necessary by the Planning Board. | | ✓ N.A. |
| Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board. | | |

| PRELIMINARY CONSTRUCTION PLANS | YES | NO |
|---|---|---|
| The preliminary construction plans shall be drawn at the same scale as the preliminary plat and shall include the following information: | ✓ | |
| Location and sizes of any existing water, sewer storm drainage and other utility lines and structures within and nearby the proposed subdivision. | ✓ | |
| The proposed system for the provision of water supply and fire protection facilities, sewage disposal, stormwater drainage, and other utility services. | ✓ | |
| Proposed street or private road profiles and cross-sections showing the approximate grade of proposed streets or private roads, the relationship of existing to proposed grades, and the proposed grades, and the proposed vertical curvature along the center line of all new streets or private roads. | ✓ | |
| Location of all existing and proposed monuments and other subdivision improvements. | ✓ | |
| Such additional information as may be required by this chapter, the Zoning chapter, or the Planning Board. | | |

**CITY OF BEACON**
**FINAL SUBDIVISION PLAT**
**AND CONSTRUCTION PLANS SPECIFICATION FORM**

**Name of Application:** _____

| FINAL SUBDIVISION PLAT | YES | NO |
|---|---|---|
| The final subdivision plat shall be drawn clearly and legibly on transparent tracing cloth with black waterproof ink, at a scale no smaller than one inch equals 100 feet but preferably at a scale of one inch equals 50 feet. The sheet size shall not exceed 36 inches by 48 inches. If the size of proposed subdivision required a drawing larger than this, two or more sheets may be submitted, with match lines clearly indicated, and an index map shall be prepared on the same size sheet. | | |
| The final plat shall contain the following information: | | |
| Proposed subdivision name or identifying title, name, and address of owner of record and of subdivider (if other than owner), certification and seal of the registered engineer or licensed land surveyor who prepared the plat, names of the owners of record of adjoining properties and of properties directly across the street or private road, graphic scale, approximate true North point, and date. | | |
| The location and dimensions of all boundary lines of the proposed subdivision, and all existing and proposed streets, private roads, lot lines, easements and rights-of-way, with sufficient data to readily determine the location, bearing and length of all such lines and to reproduce such lines upon the ground. | | |
| The names of all existing and proposed streets and private roads. | | |
| The locations of all water bodies and watercourses. | | |
| The location of all existing buildings, including identification of all buildings to be removed as a condition of plat approval. | | |
| The total acreage included in the entire subdivision, and the identification number and acreage of all lots and land reservations within the proposed subdivision. | | |
| Location of all existing and proposed monuments. | | |
| A site location map, at a scale of one inch equals 400 feet, showing the location of the subject property with respect to neighboring properties, streets and private roads. | | |
| Notations explaining any drainage, sight slope, street widening, park area or other reservations or easements, including any self-imposed restrictions or covenants. | | |
| Endorsement of approval by the Dutchess County Health Department. | | |
| Plan for the provisional delivery of mail, as approved by the local postmaster. | | |
| Endorsement of the owner as follows:<br>"~~Approved for filing:~~<br>Owner _____ Date 4/25/2023" | | |

| FINAL SUBDIVISION PLAT *(continued)* | YES | NO |
|---|---|---|
| Form for endorsement by Planning Board Chairman as follows:<br><br>"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.<br><br>Signed this _____ day of _____, 20_____, by<br>_____, Chairman<br>_____, Secretary<br><br>In absence of the Chairman or Secretary, the Acting Chairman or Acting Secretary Respectively may sign in this place. | | |
| Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board. | | |
| Stormwater pollution prevention plan. A stormwater pollution prevention plan consistent with the requirements of Chapter 190 and with the terms of preliminary plan approval shall be required for final subdivision plat approval. The SWPPP shall meet the performance and design criteria and standards in Chapter 190, Article II. The approved final subdivision plat shall be consistent with the provisions of Chapter 190. | | |

| FINAL CONSTRUCTION PLANS | YES | NO |
|---|---|---|
| Final construction plans and profiles shall be prepared for all proposed streets, private roads and other required improvements. Plans shall be drawn at the same scale as the final plat and on the same size sheets, but not on the same sheets. The following information shall be shown: | | |
| Plans and profiles showing the location and a typical cross-section of street and/or private road pavements including curbs and gutters, sidewalks, manholes and catch basins; the location of street or private road trees, lighting and signs; the location, size and invert elevations of existing and proposed sanitary sewers, stormwater drains and fire hydrants; the location and size of all water, gas or other underground utilities or structures; and the location and design of any other required improvements. | | |
| Profiles showing existing and proposed elevations along the center line of all streets and private roads. Where a proposed street or private road intersects an existing street or private road, the elevation along the center line of the existing street or private road within 100 feet of intersection, shall be shown. All elevations must be referred to established U.S. Government of approved local benchmarks, where they exist within ½ mile of the boundary of the subdivision. | | |
| The Planning Board may require, where steep slopes exist, cross-sections showing existing and proposed elevations of all new streets and private roads every 100 feet at five points on a line at right angles to the center line of the street or private road, said elevation points to be at the center line of the street or private road, each property line, and points 30 feet inside each property line. | | |
| Location, size, elevation and other appropriate description of any existing facilities which will be connected to proposed facilities and utilities within the subdivision. | | |

| **FINAL CONSTRUCTION PLANS** ***(continued)*** | | |
|---|---|---|
| Where the design of the subdivision requires the regarding of land, the regarding of land, the regraded contours shall be shown along with estimates of the quantity of material to be added or removed and the proposed measures to be implemented by the subdivider to rehabilitate the disturbed area or areas. | | |
| Title of all sheets, name, address, signature and seal of licensed engineer preparing the construction plans, the date prepared, including revisions dates if any, approximate true North point, scale, and consecutive numbering as sheet _____ of _____. | | |
| A notation of approval, on all sheets as follows<br><br>"Approved by:<br><br>_____ _____<br>Owner Date<br><br>and<br><br>_____ _____<br>Planning Board Chairman Date" | | |
| Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board. | | |

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

Applicant/Sponsor Name: 46 Judson Street LLC - Paula Dowd, Managing Member

Signature:

Date: 4/25/2022

| FOR OFFICE USE ONLY |
| --- |
| Application # |

**CITY OF BEACON**
**1 Municipal Plaza, Beacon, NY**
**Telephone (845) 838-5000 · http://cityofbeacon.org/**

# ENTITY DISCLOSURE FORM

(This form must accompany every land use application and every application for a building permit or certificate of occupancy submitted by any entity)

Disclosure of the names and addresses of all persons or entities owning any interest or controlling position of any Limited Liability Company, Partnership, Limited Partnership, Joint Venture, Corporation or other business entity (hereinafter referred to as the "Entity") filing a land-use application with the City is required pursuant to Section 223-61.4 of the City Code of the City of Beacon. If any Member of the Entity is not a natural person, then the names and addresses as well as all other information sought herein must be supplied about the non-natural person member of that Entity, including names, addresses and Formation filing documents. Applicants shall submit supplemental sheets for any additional information that does not fit within the below sections, identifying the Section being supplemented.

**SECTION A.**

**IF AFFIANT IS A PARTNERSHIP, JOINT VENTURE OR OTHER BUSINESS ENTITY, EXCEPT A CORPORATION:**

| Name of Entity | Address of Entity |
| --- | --- |
| 46 Judson Street LLC | 8 Churchill Street, Beacon NY 12566 |
| Place where such business entity was created<br>New York State | Official Registrar's or Clerk's office where the documents and papers creating entity were filed<br>New York State Department of State<br>DOS ID 6372409 |
| Date such business entity or partnership was created<br>January 11, 2022 | Telephone Contact Information<br>617-688-6998 |

**IF AFFIANT IS A CORPORATION:**

| Name of Entity | Telephone Contact Information |
| --- | --- |
| Principal Place of Business of Entity | Place and Date of incorporation |
| Method of Incorporation | Official place where the documents and papers of incorporation were filed |

**SECTION B.** List all persons, officers, limited or general partners, directors, members, shareholders, managers, and any others with any interest, mortgage, encumbrance or other interest (recorded or unrecorded) in or with the above referenced

Entity. List all persons to whom corporate stock has been pledged, mortgaged or encumbered and with whom any agreement has been made to pledge, mortgage or encumber said stock. Use a supplemental sheet to list additional persons.

| Name | Resident Address | Resident Telephone Number | Nature and Extent of Interest |
|---|---|---|---|
| Paula Dowd | 8 Churchill St, Beacon, NY | 617-688-6998 | Member |
| Dorothy Berwin | 8 Churchill St, Beacon, NY | 617-688-6998 | Member and Mortgagee |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**SECTION C.** List all owners of record of the subject property or any part thereof.

| Name | Residence or Business Address | Telephone Number | Date and Manner title was acquired | Date and place where the deed or document of conveyance was recorded or filed. |
|---|---|---|---|---|
| 46 Judson Street LLC | 8 Churchill St, Beacon, NY | 617-688-6998 | Deed from Nicholas J Hockler dated February 21, 2022 | Recorded in the Dutchess County Clerk's office on March 14, 2022 as Document No. 02-2022-50983 |
| | | | | |
| | | | | |
| | | | | |

**SECTION D.** Is any owner, of record or otherwise, an officer, director, stockholder, agent or employee of any person listed in Section B-C?

☐ YES ☑ NO

| Name | Employer | Position |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

**SECTION E.** Is any party identified in Sections A- C an officer, elected or appointed, or employee of the City of Beacon or related, by marriage or otherwise, to a City Council member, planning board member, zoning board of appeals member or employee of the City of Beacon ?

☐ YES ☑ NO

**YES** **NO**

If yes, list every Board, Department, Office, agency or other position with the City of Beacon with which a party has a position, unpaid or paid, or relationship and identify the agency, title, and date of hire.

| Agency | Title | Date of Hire, Date Elected, or Date Appointed | Position or Nature of Relationship |
|---|---|---|---|
| N.A. | | | |
| | | | |
| | | | |

**SECTION F.** Was any person referred to in Sections A-D known by any other name within five (5) years preceding the date of the application?

☐ **YES** ☑ **NO**

| Current Name | Other Names |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |
| | |

**SECTION G.** List the names and addresses of each person, business entity, partnership and corporation in the chain of title of the subject premises for the five (5) years next preceding the date of the application.

| Name | Address |
|---|---|
| Nicholas J Hockler | 95 West Road, Pine Bush, NY 12566 |
| Joseph N Hockler | Deceased |

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

**SECTION H.** If the applicant is not a record owner of the subject property, describe the applicant's interest in the subject property and the relationship the applicant has to the record owner(s) of the subject property.

N.A.

**SECTION I.** If the applicant is a contract vendee, a duplicate original or photocopy of the full and complete contract of purchase, including all riders, modification and amendments thereto, shall be submitted with the application. Any sensitive or confidential information may be redacted from the contract prior to production. N.A.

**SECTION J.** N.A.

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

| | |
|---|---|
| Name of the Corporation | Telephone Contact Information |
| Principal Business Address | Place and Date of Incorporation |
| Method of Incorporation | Official place where the documents and papers of incorporation were filed |

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

| **Name** | **Residence or business address** | **Telephone number** |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

3. Have any shares of the stock of the corporation or of any stockholder been pledged, mortgaged or encumbered?

☐ YES ☐ NO

If so, please list the name and address of each person having, holding, owning or claiming any such interest.

| Name | Address |
|---|---|
| | |
| | |
| | |
| | |

**SECTION K**. Have the present owners entered into a contract for the sale of all or any part of the subject property and, if in the affirmative, please provide a duplicate original or photocopy of the fully and complete contract of sale, including all riders, modifications and amendments thereto.

☐ YES ☑ NO

I, Paula Dowd being first duly sworn, according to law, deposes and says that I am (Title) Managing Member, and active and qualified member of 46 Judson Street LLC, a business duly authorized by law to do business in the State of New York, and that the statements made herein are true, accurate, and complete.

(Print) Paula Dowd

(Signature) _____

# *Short Environmental Assessment Form*
## *Part 1 - Project Information*

**Instructions for Completing**

**Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

| **Part 1 – Project and Sponsor Information** | | |
|---|---|---|
| Name of Action or Project:<br>46 Judson Street LLC Subdivision | | |
| Project Location (describe, and attach a location map):<br>46 Judson Street, City of Beacon (See Location Map on Plat) | | |
| Brief Description of Proposed Action:<br>Approval of a 2 Lot Subdivision of Property | | |
| Name of Applicant or Sponsor:<br>46 Judson Street LLC | Telephone: 617-688-6998<br>E-Mail: paulamdowd@gmail.com | |
| Address:<br>8 Churchill Street | | |
| City/PO:<br>Beacon | State:<br>NY | Zip Code:<br>12508 |

| | NO | YES |
|---|---|---|
| 1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2. | ☑ | ☐ |
| 2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: Dutchess County Department of Health | ☐ | ☑ |

| | |
|---|---|
| 3. a. Total acreage of the site of the proposed action? | 0.344 acres |
| b. Total acreage to be physically disturbed? | 0.344 acres |
| c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? | 0.344 acres |

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☑ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☐ Residential (suburban)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
☐ Parkland

| | NO | YES | N/A |
|---|---|---|---|
| 5. Is the proposed action, | | | |
| a. A permitted use under the zoning regulations? | ☐ | ☑ | ☐ |
| b. Consistent with the adopted comprehensive plan? | ☐ | ☑ | ☐ |

| | NO | YES |
|---|---|---|
| 6. Is the proposed action consistent with the predominant character of the existing built or natural landscape? | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? | | |
| If Yes, identify: _____ | ☑ | ☐ |

| | NO | YES |
|---|---|---|
| 8. a. Will the proposed action result in a substantial increase in traffic above present levels? | ☑ | ☐ |
| b. Are public transportation services available at or near the site of the proposed action? | ☑ | ☐ |
| c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action? | ☑ | ☐ |

| | NO | YES |
|---|---|---|
| 9. Does the proposed action meet or exceed the state energy code requirements? | | |
| If the proposed action will exceed requirements, describe design features and technologies: | | |
| Vacant lot will be improved with a new house that will meet energy code requirements. | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 10. Will the proposed action connect to an existing public/private water supply? | | |
| If No, describe method for providing potable water: _____ | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 11. Will the proposed action connect to existing wastewater utilities? | | |
| If No, describe method for providing wastewater treatment: _____ | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? | ☑ | ☐ |
| b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? | ☑ | ☐ |
| b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? | ☑ | ☐ |
| If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ | | |

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☐ Wetland ☑ Urban ☐ Suburban

| | NO | YES |
|---|---|---|
| 15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?<br>Timber Rattlesnake | ☐ | ☑ |
| 16. Is the project site located in the 100-year flood plan? | ☑ | ☐ |
| 17. Will the proposed action create storm water discharge, either from point or non-point sources?<br>If Yes, | ☑ | ☐ |
| a. Will storm water discharges flow to adjacent properties? | ☐ | ☐ |
| b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?<br>If Yes, briefly describe:<br>_____<br>_____ | ☐ | ☐ |
| 18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?<br>If Yes, explain the purpose and size of the impoundment: _____<br>_____ | ☑ | ☐ |
| 19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?<br>If Yes, describe: _____<br>_____ | ☑ | ☐ |
| 20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?<br>If Yes, describe: _____<br>_____ | ☑ | ☐ |

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

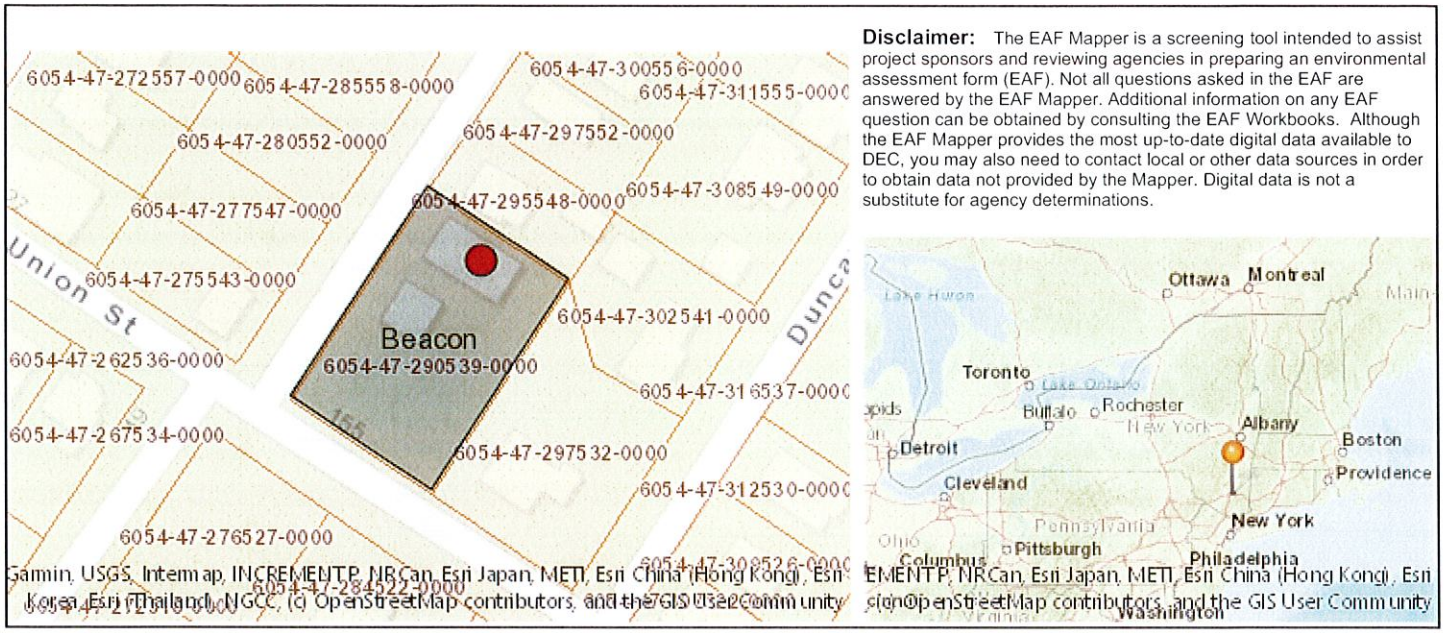
Applicant/sponsor/name: 46 Judson Street LLC Date: April 25, 2022

Signature: _____ Title: Surveyor for Applicant

PRINT FORM

# EAF Mapper Summary Report

Monday, April 25, 2022 2:48 PM



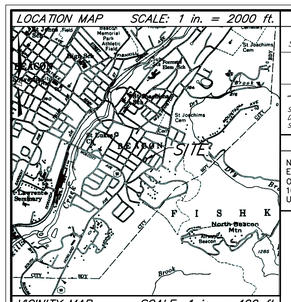

**Disclaimer:** The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

| | |
|---|---|
| Part 1 / Question 7 [Critical Environmental Area] | No |
| Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites] | No |
| Part 1 / Question 12b [Archeological Sites] | Yes |
| Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies] | No |
| Part 1 / Question 15 [Threatened or Endangered Animal] | Yes |
| Part 1 / Question 15 [Threatened or Endangered Animal - Name] | Timber Rattlesnake |
| Part 1 / Question 16 [100 Year Flood Plain] | No |
| Part 1 / Question 20 [Remediation Site] | No |

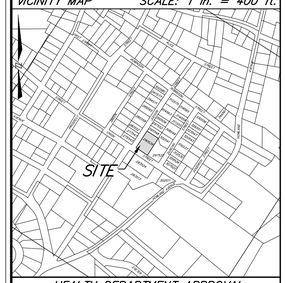
GEOGRAPHIC INDEX 41-29-49.3 -73-57-26.7

241

## LOCATION MAP SCALE: 1 in. = 2000 ft.




## VICINITY MAP SCALE: 1 in. = 400 ft.




## SOILS LEGEND

| Map Symbol | Hydrologic Group | Soil Name |
|---|---|---|
| SrB | C | Stockbridge–Urban land complex, 3 to 8 percent slopes |

——— = Soil delineation (boundary) lines

*Soils classifications and delineated lines have been derived from U.S. Department of Agriculture, Natural Resources Conservation Service "Soil Survey of Dutchess County, New York" compiled 1999*

## UNDERGROUND WARNING -- CODE RULE 753

NEW YORK STATE INDUSTRIAL CODE 753 REQUIRES EXCAVATORS TO CALL THE DIG SAFELY NEW YORK ORGANIZATION (DIAL 811) AT LEAST 2, BUT NO MORE THAN 10 WORKING DAYS PRIOR TO AN EXCAVATION. NON-MEMBER UTILITIES MUST BE CONTACTED SEPARATELY.

## HEALTH DEPARTMENT APPROVAL

*This plan does not constitute a Realty Subdivision as defined by Article XI, Title II Section 1115, of the Public Health Law of the State of New York, and Article XI of the Dutchess County Sanitary Code.*

*Permission is hereby granted for the filing of this map with the clerk of Dutchess County. Approval for arrangements for water supply and/or sewage disposal is neither sought nor granted.*

_____

*Authorized Representative of the Commissioner of Health*

## PLANNING BOARD APPROVAL

*"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 _____, 2022, by*
*_____, Chairman*
*_____, Secretary*

*In absence of the Chairman or Secretary, the Acting Chairman or Acting Secretary Respectively may sign in this place*

## NOTES

1. *Unauthorized alteration or addition to a document prepared by a licensed Land Surveyor, or licensed Professional Engineer is a violation of Section 7209, Sub-Division 2 of the New York State Education Law.*
2. *The topographic data hereon was compiled from an actual field survey conducted by Badey & Watson on January 20, 2022.*
3. *The vertical datum hereon is North American Vertical Datum of 1988 (NAVD 1988).*
4. *No NYSDEC or Federal Wetlands were found onsite.*
5. *The Federal Emergency Management Agency (FEMA) has determined that this property lies within Flood Hazard Zone X as indicated hereon. The Zone boundaries were taken from Flood Insurance Rate Maps (FIRM)Community Map No. 3602720537E with an effective date of May 2, 2012.*

## REVISIONS

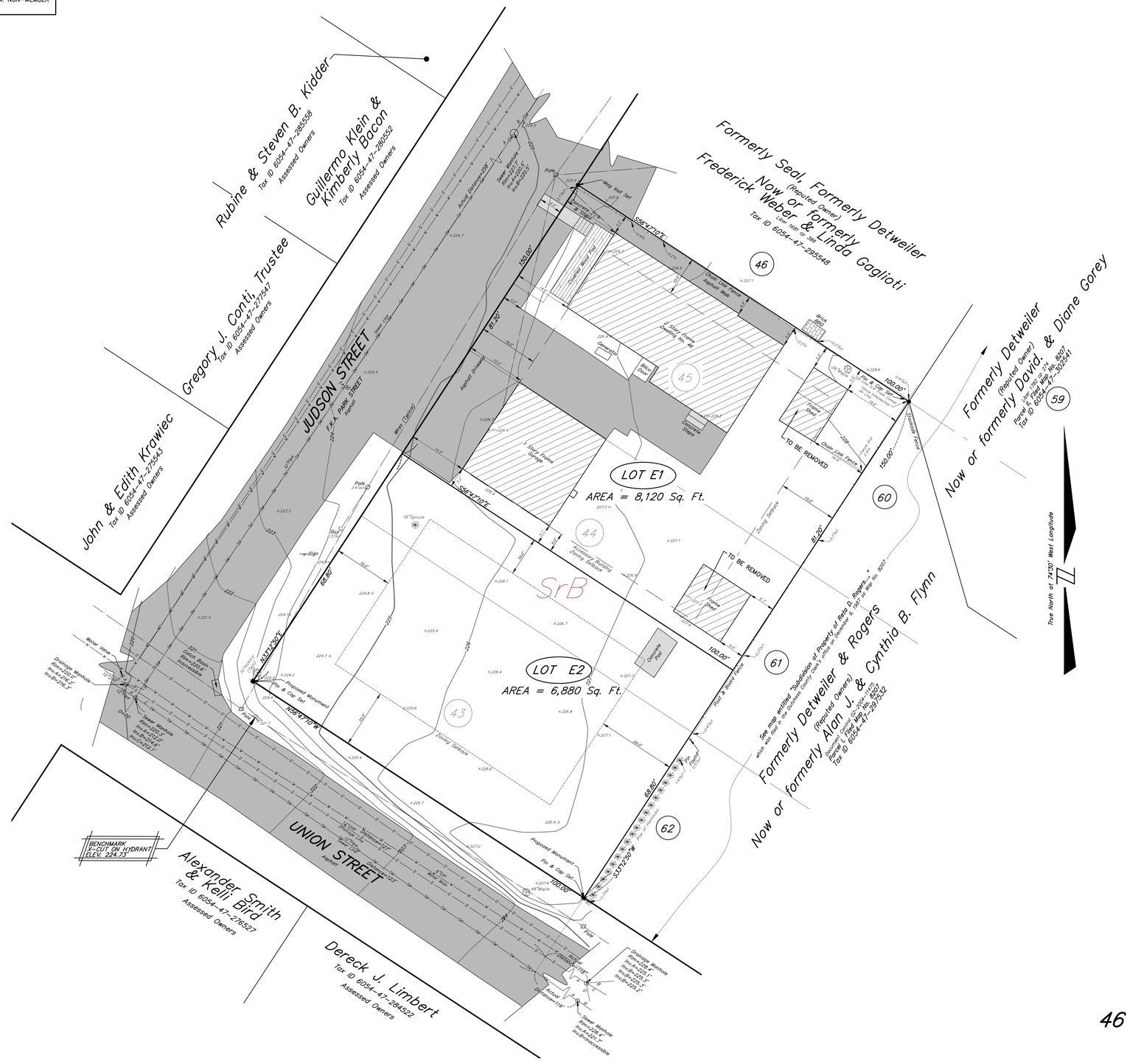
| See Title | R01 | Original Drawing. |
|---|---|---|

## LEGEND

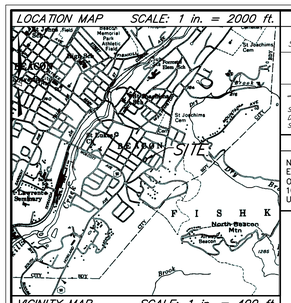
—350— CONTOUR LINE
CPP CORRUGATED PLASTIC PIPE
362.8 SPOT ELEVATION
FF=362.8 FIRST FLOOR ELEVATION
FF=362.8 FIRST FLOOR SILL ELEVATION
SUBTERRANEAN
—G— GAS LINE (PLATE PROVIDED)

## SURVEYED & PREPARED BY

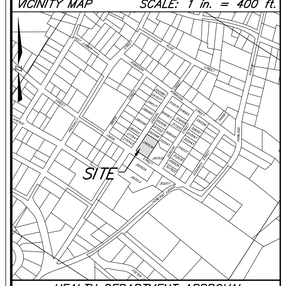
BADEY & WATSON
Surveying & Engineering, D.P.C.
3063 Route 9
Cold Spring, NY 10516
www.Badey-Watson.com
845.265.9217
877.3.141593 (Toll Free)


Rubine & Steven B. Kidder
Tax ID 6054-47-285538
Assessed Owners
Guillermo Klein & Kimberly Bacon
Tax ID 6054-47-280552
Assessed Owners
Gregory J. Conti, Trustee
Tax ID 6054-47-277547
Assessed Owners
John & Edith Krowiec
Tax ID 6054-47-275543
Assessed Owners
Alexander Smith & Kelli Bird
Tax ID 6054-47-276527
Assessed Owners
Dereck J. Limbert
Tax ID 6054-47-284522
Assessed Owners
Formerly Seal, Formerly Detweiler (Reputed Owner) Now or formerly Frederick Weber & Linda Gaglioti
See Instr. 16 pg 388
Tax ID 6054-47-285548
Formerly Detweiler (Reputed Owner) Now or formerly David. & Diane Gorey
Parcel Surveyed by Badey & Watson on 8/2017
Tax ID 6054-47-302541
Formerly Detweiler (Reputed Owner) Now or formerly Alon J. & Cynthia B. Flynn
Parcel Surveyed by Badey & Watson on 8/2017
Tax ID 6054-47-297532
See map entitled "Subdivision of Property of Reta D. Rogers" which was filed in the Dutchess County Clerk's Office on December 9, 1987 as Map No. 6207
Formerly Detweiler & Rogers (Reputed Owners)
Parcel Surveyed by Badey & Watson on 8/2017
Tax ID 6054-47-297532
Now or formerly Alon J. & Cynthia B. Flynn
JUDSON STREET
F.K.A. PARK STREET
Asphalt
UNION STREET
Asphalt
LOT E1
AREA = 8,120 Sq. Ft.
LOT E2
AREA = 6,880 Sq. Ft.
SrB
46
45
44
43
60
61
62
59
S66°47'10"E 150.00'
S23°12'50"W 68.60'
N66°47'10"W 150.00'
N23°12'50"E 68.60'
S66°47'10"E 150.00'
S23°12'50"W 100.00'
N66°47'10"W 150.00'
N23°12'50"E 100.00'
81.20'
81.20'
Asphalt Driveway
Wood Frame Garage
Shed
Concrete Slab
Wood Frame Dwelling No. 46
Concrete Slab
Concrete Steps
Brick Step
Asphalt Drive
Chain Link Fence
Wood Frame Dwelling No. 45
Concrete Slab
Concrete Steps
Brick Step
Asphalt Drive
Chain Link Fence
TO BE REMOVED
Wood Frame Garage
TO BE REMOVED
Concrete Slab
Wood Frame Dwelling No. 61
Front Stoop
Front Stoop
Accessory Building Setback
Zoning Setback
Zoning Setback
Zoning Setback
Proposed Monument
Pin & Cap Set
Proposed Monument
Pin & Cap Set
Found Pin & Cap
Found Pin & Cap
Found Pin & Cap

LOCATION MAP SCALE: 1 in. = 2000 ft.




VICINITY MAP SCALE: 1 in. = 400 ft.




## HEALTH DEPARTMENT APPROVAL

*This plan does not constitute a Realty Subdivision as defined by Article XI, Title II Section 1115, of the Public Health Law of the State of New York, and Article XI of the Dutchess County Sanitary Code.*

*Permission is hereby granted for the filing of this map with the clerk of Dutchess County. Approval for arrangements for water supply and/or sewage disposal is neither sought nor granted.*

_____
*Authorized Representative of the Commissioner of Health*

## PLANNING BOARD APPROVAL

*"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 _____, 2022, by*
*_____, Chairman*
*_____, Secretary*

*In absence of the Chairman or Secretary, the Acting Chairman or Acting Secretary Respectively may sign in this place*

## NOTES

1. Unauthorized alteration or addition to a document prepared by a licensed Land Surveyor or licensed Professional Engineer is a violation of Section 7209, Sub-Division 2 of the New York State Education Law.
2. The topographic data hereon was compiled from an actual field survey conducted by Badey & Watson on January 20, 2022.
3. The vertical datum hereon is North American Vertical Datum of 1988 (NAVD 1988).
4. No NYSDEC or Federal Wetlands were found onsite.
5. The Federal Emergency Management Agency (FEMA) has determined that this property lies within Flood Hazard Zone X as indicated hereon. The Zone boundaries were taken from Flood Insurance Rate Maps (FIRM)Community Map No. 36027C0577E with an effective date of May 2, 2012.

## REVISIONS

| See Title | R01 | Original Drawing. |
|---|---|---|

## LEGEND

| | |
|---|---|
| —350— | CONTOUR LINE |
| CPP | CORRUGATED PLASTIC PIPE |
| 362.9 | SPOT ELEVATION |
| FF=362.5 | FIRST FLOOR ELEVATION |
| FF=362.9 | FIRST FLOOR SILL ELEVATION |
| SUBTERRANEAN | |
| G | GAS LINE (PLATE PROVIDED) |

## SOILS LEGEND

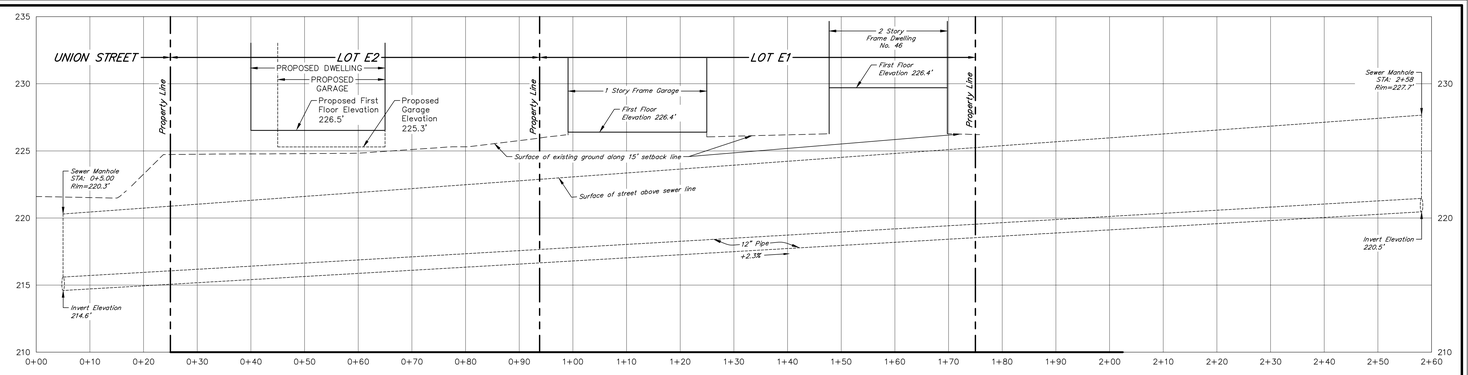
| Map Symbol | Hydrologic Group | Soil Name |
|---|---|---|
| SrB | C | Stockbridge-Urban land complex, 3 to 8 percent slopes |

_____ = Soil delineation (boundary) lines

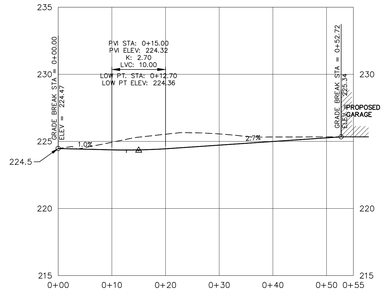
*Soils classifications and delineated lines have been derived from U.S. Department of Agriculture, Natural Resources Conservation Service "Soil Survey of Dutchess County, New York" compiled 1999*

## UNDERGROUND WARNING -- CODE RULE 753

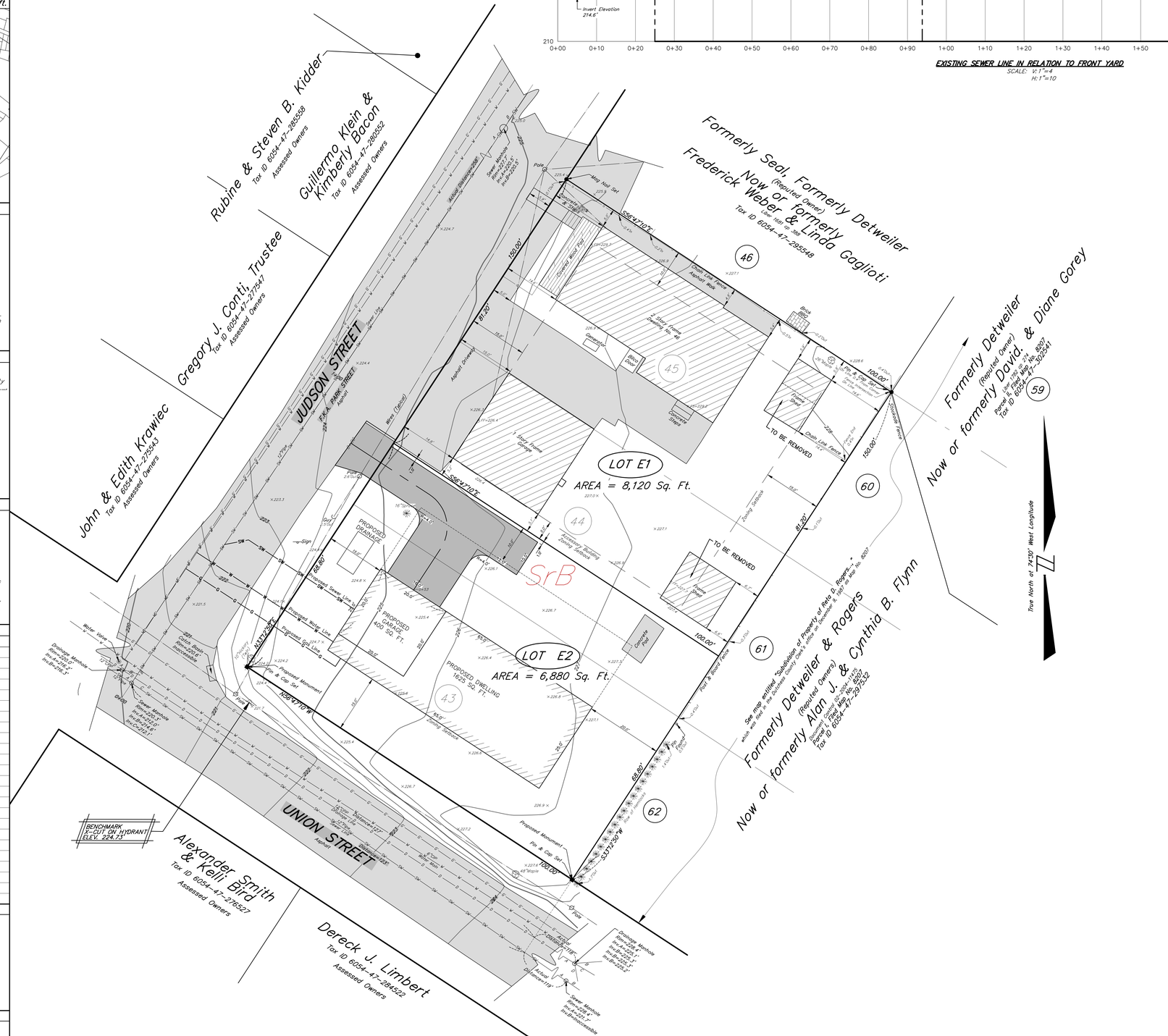
NEW YORK STATE INDUSTRIAL CODE 753 REQUIRES EXCAVATORS TO CALL THE DIG SAFELY NEW YORK ORGANIZATION (DIAL 811) AT LEAST 2, BUT NO MORE THAN 10 WORKING DAYS PRIOR TO AN EXCAVATION. NON-MEMBER UTILITIES MUST BE CONTACTED SEPARATELY.




**EXISTING SEWER LINE IN RELATION TO FRONT YARD**
SCALE: V:1"=4
H:1"=10




**DRIVEWAY**
SCALE: V:1"=4
H:1"=10




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

| SURVEYOR | ENGINEER | OWNER & APPLICANT | OWNER'S APPROVAL | PROPERTY DATA | ZONING REQUIREMENTS (R1-5) |
|---|---|---|---|---|---|
| License No. 50389 | License No. | 46 Judson Street LLC<br>8 Churchill Street<br>Beacon, New York | *The undersigned, owner(s) of the property hereon, states that they are familiar with this map, its contents and its legends and hereby consents to the filing of this map.*<br>*Signed this ____ day of _____, 2022.*<br>*46 JUDSON STREET LLC*<br>*by*_____<br>*Paula Dowd, Member* | *Tax Map Designation: 6054-47-290539*<br>*Zoning District: R1-5 Total*<br>*Area: 15,000 Sq. Ft.* | *Min. Lot Area : 5,000 Sq. Ft.*<br>*Min. Lot Width : 50 Ft.*<br>*Min. Lot Depth : 100 Ft.*<br>*Min. Setback from Front Yard : 15 Ft.*<br>*Min. Setback from Rear Yard : 20 Ft.*<br>*Min. Setback from Side Yard : 10 Ft.*<br>*Max. Building Height : 35 ft./2½ Stories*<br>*Max. Lot Coverage : -*<br>*Min. Accessory Building : 5 Ft.* |

## SURVEYED & PREPARED BY

BADEY & WATSON
Surveying & Engineering, D.P.C.
3063 Route 9
Cold Spring, NY 10516
www.Badey-Watson.com
845.265.9217
877.3.141593 (Toll Free)

# PRELIMINARY

*IMPROVEMENT PLAN*
*PREPARED FOR*
## 46 JUDSON STREET LLC
*SITUATE IN THE*
## CITY OF BEACON
*DUTCHESS COUNTY*
*NEW YORK*

*SCALE 1 in. = 10 ft.* *APRIL 15, 2022*

*We hereby certify that this map is based on a survey completed by us on January 20, 2022, that this map was completed on April 15, 2022 and that the 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, Inc. For latest issue date see revision box.*

BADEY & WATSON
Surveying & Engineering, D.P.C.
*by*
*NEW YORK STATE LICENSED LAND SURVEYOR*
*LICENSE No. 50389*

PRINTED
April 26, 2022
BADEY & WATSON
Surveying & Engineering, D.P.C.

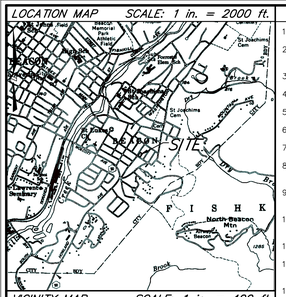
*FILE No. 75-9022*

*Drawing Name: S826242__R01_V17 Layout: SHEET2 W.O. No. 26242 Checked by JMR Spell checked by JFT Drawn by JFT Closed by GJW On 02-02-22 T.M. : 6054-47-290539*

GEOGRAPHIC INDEX 41-29-49.3 -73-57-26.7

243

## LOCATION MAP SCALE: 1 in. = 2000 ft.


Beacon
Fishkill
Wappinger
Dutchess County Airport
Matteawan
Mount Beacon
Mount Beacon Park
Mount Beacon Incline Railway
Fishkill Creek
Brett Hill
Sunset Hill
Overlook Mountain
Breakneck Ridge
Breakneck Mtn
Bannerman Castle
Pollepel Island
Newburgh-Beacon Bridge
Metro-North Railroad
Interstate 84
Interstate 87
Route 9D
Route 52
Route 9
Route 32
Route 376
Route 82
Route 55
Route 300
Route 17K
Route 17
Route 208
Route 94
Route 207
Route 416
Route 17M
Route 84
Route 6
Route 211
Route 284
Route 23
Route 23A
Route 23B
Route 42
Route 44
Route 199
Route 299
Route 44/55
Route 9W
Route 28
Route 213
Route 209
Route 32A
Route 9G
Route 212
Route 308
Route 213

**John Clarke Planning and Design** jclarkeplandesign@gmail.com
845.797.4152

To: John Gunn, Chair, and the City of Beacon Planning Board
Date: May 6, 2022
Re: **46 Judson Street Subdivision**

I have reviewed the April 25, 2022 Subdivision Application, April 25, 2022 Short EAF Part 1, and a 3-sheet Preliminary Subdivision Plan set, dated April 15, 2022.

**Proposal**

The applicant is proposing to subdivide a 15,000 square foot parcel with one existing house into two lots for the construction of an additional house. Parcel E1 would have 8,120 square feet and Parcel E2 would have 6,880 square feet. The proposed parcels are in the R1-5 zoning district.

**Comments and Recommendations**

1. The Zoning Requirements tables should include columns for both lots, documenting compliance with the various dimensional standards.

2. Section 223-26 C(1) requires that no off-street parking facility shall be placed within five feet of the side property line. The proposed driveway could be shifted to the south, but that would affect an already tight distance to an existing utility pole and the large spruce tree. Another more preferable option would be to have the driveway off of Union Street with the garage attached to the rear of the house. This would avoid having the garage on the front corner portion of the new house and would be consistent with other houses along Judson Street.

3. The Board may request one or two additional street trees along the frontage to provide environmental and traffic calming benefits.

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
Glenn Watson, L.S., Badey and Watson Surveying and Engineering, D.P.C.

# 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.


May 6, 2022

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

RE: 46 Judson St. – 2 Lot Subdivision
Tax No. 6054-21-028928
City of Beacon

Dear Mr. Gunn:

My office has received the following in regard to a 2-lot subdivision of the parcel located at 46 Judson Street:

- Application for Subdivision Approval, Individual Disclosure Form, and entity Disclosure Form.
- Short Environmental Assessment Form dated April 25, 2022.
- Plan titled "Preliminary Plan prepared for 46 Judson Street LLC", dated April 15, 2022, as prepared by Badey & Watson.
- Plan titled "Improvement Plan prepared for 46 Judson Street LLC", dated April 15, 2022, as prepared by Badey & Watson.
- Plan titled "Details prepared for 46 Judson Street LLC", dated April 15, 2022, as prepared by Badey & Watson.

The proposed project entails the subdivision of a 15,000 square foot parcel located at 46 Judson Street into 2 lots, with proposed Lot 1 being 8,120 square feet in size with an existing single-family residence, and proposed Lot 2 being 6,880 square feet in size to allow for the construction of an additional single-family residence. The project is located in the R1-5 Zone. Based on our review of the above plans, we would like to offer the following comments:

General Comments:

1. The "Improvement" and "Details" plans shall be numbered as Sheet 1 of 2 and Sheet 2 of 2, as the two sheets form the plan set.

2. The Bulk Tables on the plans shall be updated to reflect what is proposed/existing on each of the two lots.

3. The applicant's consultant should conduct an Inflow & Infiltration study of the existing site and building and provide certification to the City of Beacon that the site currently has no illegal cross-connections between the existing site and the City's sanitary sewer system. Possible cross-connections that should be looked at would be roof-leaders, sump pumps, existing site drains, etc. If any cross-connections are found, a report should be submitted as to the findings, the volume of I&I being introduced into the sanitary sewer collection system, and the proposed remediation for the cross-connection(s) found. The plans should also clearly show the proposed remediation as outlined in the report. A note should also be added to the plans granting the City of Beacon Building Department access to verify where the existing roof leaders and sump pump(s), if present, drain to.

4. An existing concrete pad is shown on Lot 2. What is the disposition of this concrete pad? If it is to be removed, it should be noted as such on the plans.

5. An Erosion & Sediment Control Plan shall be prepared for the project.

Preliminary Plat:

1. Section 195-25, Paragraph "E", requires a sight easement be provided all street or private road corners. The plat shall be updated to reflect a sight easement across the corner of Lot 2 at the intersection of Judson and Union.

Improvements Plan:

1. The size and material of the water main located on Judson Street shall be noted on the plan.

2. The material of the sewer line on Judson Street shall be noted on the plan.

3. The garage floor and first floor elevation of the residence proposed on Lot 2 shall be provided on the plan.

4. The lowest sewerable elevation (LSE) for Lot 2 shall be provided on the plan.

5. The location of proposed roof leaders and where they will discharge to shall be provided on the plan for Lot 2.

6. It is unclear as to what the rectangular box labeled "Proposed Drainage" at the front of Lot 2 represents. This should be further detailed out as to what is proposed at this location.

7. The location of the sewer lateral connection to the existing sewer main on Judson Street shall be shown on the profile.

8. The location of the curb stop for the water service to Lot 2 shall be shown on the plan.

9. Any walks or stairs for access into the proposed residence on Lot 2 shall be shown on the plan.

10. If a front porch is proposed on Lot 2, the proposed residence will need to be shifted to ensure compliance.

11. Is the proposed residence on Lot 2 to be a slab on grade or will it have a basement? If a basement is proposed, the elevation of the basement shall be noted on the plan.

12. Proposed grading on Lot 2 shall be shown on the plans. In accordance with the 2020 NYS Residential Code, Chapter 4, Paragraph R401.3, "Lots shall be graded to drain surface water away from foundation walls. The grade shall fall not fewer than 6 inches within the first 10 feet."

13. Section 223-26, Paragraph C(1) of the City's Code states "In any residence district, no off-street parking facility shall be developed in any required front yard or in any required side or rear yard to a street line or in any other side of rear yard within five feet of the lot line." Based upon this, the location of the proposed driveway for Lot 2 would need to be shifted further from the proposed lot line, as well as the existing pavement on Lot 1 being cut back from the proposed lot line.

Details Plan:

1. The sanitary sewer and water line trench details shall be revised to note that backfill within the City's road right-of-way shall be NYSDOT Item 304.12, Type 2 - Item 4, for the entire trench depth, compacted in 6" lifts to 95% modified proctor.

2. A pavement construction detail shall be added for the proposed driveway on Lot 2.

3. The water service connection detail reflects the use of a 2" water service line? Typical service line connections to the water system for a residence are ¾" and 1". Is there a need for a 2" water service line? If so, explain the need for the 2" service. Line

4. The water service connection shall note the use of a water tapping saddle for connection of the corporation to the existing water main. The applicant's engineer shall contact the Beacon Water & Sewer Department to verify the make and model of tapping saddle required for the connection.

5. The water service detail shall note that the corporation valve and curb stop valve shall be Mueller compression type valves.

6. The House Sewer Connection detail shall be revised to reflect a tapping saddle for the connection of the proposed house lateral to the existing sewer main. The applicant's engineer shall contact the Beacon Water & Sewer Department to verify the make and model of tapping saddle required for the connection.

7. A storm drainage trench detail has been provided on the plan, but it is unclear as to where this is required. If this detail is not necessary, the detail shall be removed.

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

**City of Beacon Planning Board Agenda**
**05/10/2022**

**Title:**

Zoning Board of Appeals - May meeting

**ATTACHMENTS**

May 2022 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, May 17, 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. Review and hold public hearing on application submitted by Scott Ramsey & Brian Donnelly, 18 North Walnut Street, Tax Grid No. 30-5954-28-912934-00, in the R1-5 Zoning District, for relief from Section 223-17(E) to construct an accessory structure (accessory apartment) which requires relief from Section 223-17(E) to allow 858 sq. ft. of cumulative lot coverage *(720 sq. ft. maximum cumulative lot coverage permitted)*

2. Review and hold public hearing on application submitted by Thomas Butler, 97 Union Street, Tax Grid No. 30-6054-46-219567-00, in the R1-5 Zoning District, for relief from Section 223-17 to construct a 14'x 15'11" second story rear addition over a new deck and patio with an 8.3 ft. side yard setback *(10 ft. required)*

**Miscellaneous Business**

1. 1113 Wolcott Avenue – SEQRA Review

2. June meeting date reminder – The June Zoning Board meeting will take place on Wednesday, June 22 due to the Juneteenth holiday being observed on Monday.