COURTROOM
1 MUNICIPAL PLAZA
BEACON, NY 12508

Len Warner
Karen Quiana
Kevin Byrne
Donna Francis
J. Randall Williams
David Jensen
Chair John Gunn

May 14, 2024
7:00 PM
Planning Board Agenda

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.

Regular Meeting

1. Approval of April 9, 2024, minutes
2. Public hearing and continue review of application for Site Plan Approval and Special Use Permit, car dealership, 410 Fishkill Avenue, submitted by Carvana, LLC c/o Jenn Roldan.
3. Continue review of application for Amended Site Plan Approval, 11 Mirbeau Lane, submitted by Mirbeau of Beacon, LLC (Edward Kellogg).
4. Continue review of application for Amended Site Plan Approval, 248 Tioronda Avenue, submitted by Beacon 248 Holdings LLC (Bernard Kohn).
5. Continue review of application for Subdivision Approval, residential, 39 Howland Avenue, submitted by John Vergara.
6. Continued review of application for Site Plan and Subdivision Approval, Mixed-Use Commercial and Residential, 45 Beekman Street, High Street, and High Street, submitted by Beekman Arts Center LLC and Bay Ridge Studios LLC.
7. Review of application for Site Plan Approval, 19 Henry Street, townhomes, submitted by Lori Joseph Builders, Inc.

Miscellaneous Business

1. Consider request for a six (6) month extension of Special Use Permit, 16 West Main Street, submitted by JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC.

Architectural Review

1. Certificate of Appropriateness â€“ 1201 North Avenue; Facade
2. New Single-Family House â€“ 144 Spring Valley Street; Facade

3. Certificate of Appropriateness â€“ 265 Main Street; Sign
4. Certificate of Appropriateness â€“ 512 Main Street; Sign
5. New Single-Family House â€“ 290 South Avenue; Facade
6. Certificate of Appropriateness â€“ 246 Main Street; Facade
7. Certificate of Appropriateness â€“ 508 Main Street; Sign

City of Beacon Planning Board Agenda
05/14/2024

Title:

Approval of April 9, 2024, minutes

ATTACHMENTS

City of Beacon Planning Board Agenda
05/14/2024

Title:

Public hearing and continue review of application for Site Plan Approval and Special Use Permit, car dealership, 410 Fishkill Avenue, submitted by Carvana, LLC c/o Jenn Roldan.

ATTACHMENTS

410 Fishkill PB 5.14.24 - Supplemental Planning Board Submission - Cover Letter(6043303.1).pdf

410 Fishkill PB 5.14.24 Exhibit A - Photograph of the Owner's Cleanup.pdf

410 Fishkill PB 5.14.24 Exhibit B - Parking _ Access Report Colliers Engineering _ Design dated 4-30-24(6043257.1).pdf

410 Fishkill PB 5.14.24 Exhibit C - Response Letter Hudson Land Design dated 4-30-24.pdf

410 FIshkill PB 5.14.24 Exhibit D - Short EAF(6043040.2).pdf

410 Fishkill PB 5.14.24 I&I Report Carvana 2024-0430.pdf

410 Fishkill PB 5.14.24 Lighting Exhibit - Carvana.pdf

410 Fishkill PB 5.14.24 As-Built Floor Plans (2).pdf

410 Fishkill PB 5.14.24 Sheet Set Carvana 2024-0430.pdf

Lanc & Tully 410 Fishkill Ave 05-08-24 review.pdf

KARC Review PB_410 Fishkill Ave_5.13.2024.pdf

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Taylor M. Palmer
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April 30, 2024

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: Carvana LLC – Supplemental Submission
Application for Site Plan and Special Use Permit Approval
Premises: 410 Fishkill Avenue, Beacon, New York – Tax ID: (6055-80-424048 & 439071)

Dear Chairman Gunn and Members of the Planning Board:

On behalf of DKH Realty LLC (the "Owner"), the Owner of the above-referenced Premises, we respectfully submit this letter and the referenced enclosures in furtherance of Carvana LLC's (the "Applicant" or "Carvana") pending Application for Site Plan and Special Use Permit Approval proposing to reuse the former Healey Hyundai car dealership for Carvana's smaller-scale car dealership operations at the Premises.

This letter and its referenced enclosures formally respond to the Board's comments at the April 9, 2024 Planning Board meeting, and provides responses to the comments contained in the recent memoranda prepared by the City's Consultants. In advance of the May 14, 2024 Planning Board Public Hearing on the Application, this supplemental submission also introduces additional refinements to the enclosed Site Plan Set, as is more fully detailed below.

CARVANA'S PROPOSED REDUCED-SCALE AUTOMOBILE SALES OPERATION ON THE PREMISES:

As this Board is aware, the Applicant proposes to adaptively reuse the former car dealership for Carvana's reduced-scale car dealership operations. As was discussed at the Board's March 12, 2024 meeting, Carvana is an online used automobile dealer that offers pre-owned vehicles for sale. Carvana's website allows purchasers to finalize their vehicle purchase online, where they can select to pick up their car from a location or to accept delivery directly to the customer. If a customer elects to choose to pick up their purchased vehicle, an on-site pick up would be scheduled for that customer at the Premises, which process typically only takes about 15 minutes or less during regular business hours.

As was also discussed with the Board, Carvana will not be conducting retail service/repair operations at the Premises, and Carvana is only proposing to utilize the existing repair bays at the Premises for detailing and readying purchased vehicles for pick up, including state inspection activities. These operations are exclusively for Carvana and will not be open to the public. Carvana's projected employee count will also be about one-third of the previous car dealership, with approximately 12-15 total employees.

THE PROPOSED SITE PLAN REFINEMENTS FOR CARVANA ENSURE SAFE & EFFICIENT OPERATION ON THE PREMISES:

In response to comments from this Board and its consultants regarding the existing off-street parking areas and existing access to the Premises, the Applicant retained Colliers Engineering to prepare a Parking & Access Report, dated April 30, 2024 (the "Parking & Access Report") in further support of the Application.[1] As is more fully detailed in the enclosed Parking & Access Report and shown in the enclosed Site Plan drawings and Response Letter, the Applicant has made adjustments to the Site Plans to ensure safe and efficient operation on the Premises, which includes some of the following updates:

1) A more clearly defined drive aisle has been provided on the northern portion of the Premises;
2) Parking spaces have been adjusted, including spaces for Carvana's single-car haulers, and a drive lane provides access to the exit-only area;
3) Areas have been designated on the Site Plans for Carvana's employee operations (specifically the northern access and parking areas), which separates those operations and parking areas from the flow of customers coming to and from the Premises;
4) The Applicant has committed to wayfinding signage; and
5) Parking spaces will no longer be located in the public right-of-way.

The enclosed Parking & Access Report also highlights two (2) important findings. First, that if the City Council adopts certain amendments to the existing parking regulations as presently proposed (i.e., a minimum parking requirement of three (3) parking spaces per 1,000 square feet), then approximately 59 parking spaces would be required (per the revised Code) where 63 parking spaces are proposed, as compared to the 146 spaces that are required under the current Zoning Code. As was discussed at the Planning Board's April 9th meeting, including during the Work Session preceding the meeting, the City Planner notes that unlike the process in other zoning

[1] Note: As this Board is aware, this Application is considered a Type II Action, exempt from review in accordance with the State Environmental Quality Review Act ("SEQRA"). *See* 6 NYCRR 617.5(c)(18).

districts in the City that allows for parking waivers in certain instances, the current Code only permits the Planning Board to land-bank certain parking in the GB Zoning District under the current regulations. However, while it is anticipated that the changes to the parking regulations will be adopted at a future date – which would make Carvana's proposed parking area zoning-compliant – the Applicant has submitted an Application for area variance relief to the Zoning Board of Appeal ("ZBA") in the meantime.[2]

Secondly, and perhaps most importantly, notwithstanding any potential future zoning amendments, Carvana's unique online and associated car dealership operations; taken together with the limited number of employees (approximately 12-15); and the short, prescheduled customer pick-up appointments (scheduled in 15-minute intervals) – among other mitigating factors detailed herein – the actual parking demand for Carvana's operations on the Premises is about 29 spaces of the 63 parking spaces that are proposed. *See* **Exhibit B** - Parking & Access Report. Thus, the Applicant respectfully submits that there will be ample off-street parking provided for Carvana's operations.

RESPONSE TO COMMENTS MEMORANDA:

In addition to the site plan modifications articulated above regarding parking and access, as is more fully detailed in the enclosed response to comment memoranda, the Applicant has prepared updated floor plans and the Applicant made adjustments to the lighting plan and the infill and infiltration studies.

Furthermore, the Applicant respectfully submits the following memoranda prepared by its engineering consultant providing annotated responses to the applicable comments noted in in the memoranda prepared by the City's Engineering Consultant, Lanc & Tully, dated April 3, 2024 (the "Engineering Comments Memorandum"); and the City's Planning Consultant, KARC Planning Consultants, Inc., dated April 4, 2024 (the "Planning Comments Memorandum"):[3]

- Response to Comments Memorandum prepared by Hudson Land Design Professional Engineering, P.C. ("HLD") dated April 30, 2024 providing responses to the Engineering and Planning Comments Memoranda. *See* **Exhibit C** – HLD Response to Comments Memorandum.

The Applicant updated the Site Plans to include these changes to further mitigate against any

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[2] Note: As this Board is aware, at this Board's April 9th meeting, the Application was referred to the ZBA for a parking variance. The Applicant respectfully requests that this Board consider issuing a positive recommendation to the ZBA regarding the proposed off-street parking for Carvana's operations.

[3] Note: The City's Traffic Consultant, in its April 7, 2023 comment memorandum, acknowledged that the Applicant has addressed all prior traffic and parking comments.

potential impacts and to conform with the criteria set forth in the Zoning Code.[4] This includes the proposed updates related to vehicular circulation, off-street parking and to the lighting plan, which the Applicant has refined in a manner that ensures a harmonious relationship with the other non-residential uses along Fishkill Avenue; while minimizing changes to the building footprint; and reducing the scale of operations on the Premises, such as through the use of scheduled appointments for pickups and because Carvana will not be conducting retail service/repair operations at the Premises.

CONCLUSION AND LIST OF ENCLOSURES:

In support of this supplemental submission, please find enclosed five (5) copies of the following documents:

Exhibit A: Photographs of the Owner's Cleanup Work to Remove Blown Debris Located Behind the Premises (being provided in response to comments from the Board);

Exhibit B: Parking & Access Report, prepared by Colliers Engineering & Design dated April 30, 2024;

Exhibit C: Response to Comments Letter prepared by Hudson Land Design Professional Engineering, P.C. dated April 30, 2024; and

Exhibit D: A copy of the Short Environmental Assessment Form ("EAF").[5]

In further support of this Application, we respectfully submit five (5) copies of the updated Site Plan Set, entitled "Carvana", prepared by Hudson Land Design Professional Engineering, P.C., dated February 27, 2024, last revised April 30, 2024, numbered and titled as follows (unless otherwise noted):

- Sheet 1 of 3: Cover Sheet;
- Sheet 2 of 3: Existing Conditions Plan; and
- Sheet 3 of 3: Site Plan.

[4] *See* Zoning Code Sections 223-18(B)(1) (Special Use Permits) 223-25(E) (Site Plan).
[5] Note: As noted above, this Application is considered a Type II Action and is exempt from review in accordance with SEQRA. Notwithstanding, a Short EAF was submitted so that it could be included in the referral to Dutchess County Planning.

Additionally, enclosed please find five (5) copies of the following:

- As-Built Floor Plans and Floor Plans Showing Uses;
- Lighting Plan; and
- Inflow & Infiltration Study.

We look forward to the Board's continued review of the Project at the May 14th meeting for the Public Hearing on the Application. As noted herein, the Applicant respectfully requests that this Board consider issuing a positive recommendation to the ZBA in connection with the Applicant's proposed off-street parking for Carvana's reduced car dealership operations.

In the meantime, should this Board or City Staff have any questions or comments with regard to the foregoing, please do not hesitate to contact me.

Very truly yours,

Taylor M. Palmer

Enclosures

cc: Bruce Flower – City of Beacon Building Inspector
Jennifer L. Gray, Esq. – Planning Board Attorney
Lanc & Tully, P.C.
KARC Planning Consultants, Inc.
Hudson Land Design Professional Engineering, P.C.
Carvana, LLC
DKH Realty, LLC
Maximillian R. Mahalek, Esq.

Exhibit A

Photographs Taken April 30, 2024
Showing Owner's Recent Cleanup Work to Remove Blown Debris
Located Behind the Premises
Along the Property Line with the MTA Metro-North Property

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

Colliers
Engineering & Design

Via
April 30, 2024

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

Carvana - 410 Fishkill Avenue
City of Beacon, Dutchess County, New York
Colliers Engineering & Design Project No. 24004190A

Dear Chairman Gunn and Members of the Planning Board,

We are writing on behalf of the Applicant for the proposed Carvana store ("the Project"), which is proposed to occupy the former Healey Hyundai site located at 410 Fishkill Avenue in the City of Beacon. Colliers Engineering and Design (CED) has conducted a review of the Project relating to parking needs as well as vehicular access and circulation. The following provides a summary of our assessment of the Project and our recommendations.

Project Description

Carvana proposes to reoccupy the former Healey Hyundai car dealership to provide a similar but reduced use from the former Healey Hyundai use. The existing building, which will be reoccupied without modification, totals approximately 19,588 sq. ft. including approximately 2,828 sq. ft. of second floor mezzanine space. The prior Healey Hyundai use operated as a new and use car sales dealership along with parts sales and service provided on the site. Within the 19,588 sq. ft. the building has several service bays that will also remain as discussed further below. Access to the site is currently provided via a two-way driveway located approximately 150-ft. north of Conklin Street and a second two-way driveway at the northern property line of the site (approximately 475-ft. north of Conklin Street). There is also an existing one-way entry and exit loop in the middle of the site frontage that was formerly utilized for parts and service sales and vehicle drop-off/pick-up. It should be noted that there is no existing curbing or sidewalks along the site frontage separating Fishkill Avenue from the paved surface of the site.

Carvana proposes to reoccupy the site generally in its current form with some minor modifications to onsite parking and loading. It should be noted that Carvana does not intend to fully utilize the entirety of the space with the existing building since it is larger than needed for its operations and there will be no other use of any underutilized spaces.

Carvana is an online used automotive dealer offering pre-owned vehicles for sales. The entirety of the Carvana purchase process is completed online through Carvana.com. This differs from the former Healey Hyundai vehicle sales operations, which were primarily conducted in person. Once a Carvana customer finalizes their vehicle purchase online, they can select to pick-up their vehicle from a location or accept delivery directly to a location of their choosing. For those customers that choose to pick-up their purchased vehicle from a store location, an on-site pick-up event is scheduled through the online system. These prescheduled pick-ups are typically 15 minutes or less and conducted during regular business hours (Monday through Sunday, 8AM to 5PM). Carvana anticipates 10 – 20 vehicle sales per day that will be picked up from this location. Additional deliveries will be conducted utilizing their single car haulers that will first come through this store for inspection, detailing, etc.

The scheduling of pick-ups from the Carvana store will allow Carvana to control the number of customers on site at any one time, which reduces the need for customer parking spaces compared to typical dealership operations. Furthermore, since all vehicle pick-ups at the store will be scheduled and there will be no onsite vehicle sales or servicing of vehicles beyond that which is required for state inspections, there will not be any unexpected customer arrivals to the site.

Carvana will utilize the existing service bays to conduct state inspections and detailing of Carvana sold vehicles only, prior to their initial delivery to the customer. These services will not be open to the public. Caravana anticipates utilizing the five (5) existing service bays furthest to the north in the building for conducting state inspections and associated minor repairs prior to delivery. Detailing of sold vehicles prior to delivery will be conducted in the middle section of the building utilizing the bay doors on the north side of middle building to access the detailing area. Finally, the southerly most bay door nearest the former Healey Hyundai service entrance will be used display/delivery of sold vehicles for customer pick-up. This display/delivery bay, which is identified by Carvana as the "Customer Experience" bay, will be the bay that is nearest the exit only driveway from the property at the center of the building.

Parking

(Appendix A, B & C)

The City of Beacon Zoning Code (the "Zoning Code") provides specific parking requirements for "Motor Vehicle Sales & Service" uses as specified in Section 223-26.F of the code. Based on the Zoning Code, one (1) space is required per employee, plus one (1) space per 150 square feet of gross floor area of building space. The relevant code section is provided in Appendix A for reference. As indicated previously, the Project anticipates having 12 – 15 employees, which would require 15 parking spaces. An additional 131 parking spaces are required based on the total building floor area resulting in a total of 146 parking spaces required by the Zoning Code. Considering the proposal to provide 63 onsite parking spaces as part of the Project, the Project would have a shortfall of 83 parking spaces based on the Zoning Code requirement for which a variance would be required. Note that the 63 onsite parking spaces include 7 spaces designated for the Carvana single car haulers which are used for offsite deliveries.

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CED is also aware that the City of Beacon City Council is currently in the process of reviewing a Proposed Local Law to amend parking requirements in the City of Beacon. Our office has continued to review the progress of this proposed Local Law including reviewing the latest available revision dated April 12, 2024, which was reviewed by the City Council at its April 22, 2024, meeting. A copy of the April 12, 2024, revision of the proposed Local Law is provided in Appendix B for reference. Based on the current version of the proposed Local Law if adopted by the City the required parking for the Project would be based on the Schedule of Off-Street Parking Standards as identified in the table on Page 6 of the Proposed Local Law, which requires a minimum of three (3) spaces per 1,000 sq. ft. of gross floor area up to a maximum of five (5) spaces per 1,000 sq. ft. of gross floor area. Therefore, the Project would require a minimum of 59 parking spaces up to a maximum of 98 parking spaces. The proposed total of 63 parking spaces to be provided on the site falls within this range of minimum and maximum required parking.

For comparison purposes, data provided by the Institute of Transportation Engineers (ITE) in their publication entitle ***Parking Generation, 6th Edition*** dated 2023 was reviewed for Land use 841 – Automobile Sales (Used). While this land use may not provide an exact comparison to the proposed Carvana operations since it is primarily based on traditional automobile sales operations, it is the most comparable industry data available. Based on the size of the building, the ITE data indicates an average parking demand of 60 parking spaces with an 85th percentile parking demand of 98 parking spaces. This is similar to the range of parking spaces that would be required under the City's proposed Local Law. However, it should also be noted that the ITE data also provides parking demand rates based on the number of employees at the facility. Based on the maximum of 15 employees at the facility, the ITE data indicates an average parking demand of 21 parking spaces with an 85th percentile parking demand of 33 parking spaces. The relevant ITE data is provided in Appendix C for reference.

As noted previously, the Carvana operations are significantly different than typical automobile sales facility operations. Based on the planned operations of the facility, Carvana will require up to 15 employee parking spaces, one for each employee. In addition, Carvana will reserve seven (7) parking spaces along Fishkill Avenue at the north end of the side for their single car haulers, which are used for offsite deliveries. Carvana also proposes to provide seven (7) designated parking spaces for customer parking, including one (1) ADA accessible parking space on the south side of the building. Since the pickup of vehicles will be prescheduled in 15-minute intervals and there are no other public services provided other than pick-up of presold vehicles, the need for customer parking is anticipated to be very limited

The above identified parking spaces will make up 29 of the 63 proposed onsite spaces, leaving 34 remaining parking spaces for storage of vehicles for daily deliveries both for pickup at the store and offsite delivery using the single car haulers. Based on the 10-20 pickup deliveries per day it is anticipated that the 34 remaining spaces would serve the needs of the facility for the storage of pre-sold vehicles, which only occurs for limited durations.

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Access & Circulation

(Figures No. 1 & 2, Appendix D)

In addition to the parking assessment discussed above, CED also conducted a review of the future access and circulation relating to the proposed Carvana use. As noted previously the site is currently accessed primarily by two (2) two-way driveway connections to Fishkill Avenue and a one-way loop driveway in the middle of the site frontage. Furthermore, there is no existing curbing or sidewalks along the site frontage separating Fishkill Avenue from the paved surface of the site and as indicated on the property survey, some of the formerly used parking spaces encroached on the Fishkill Avenue right-of-way.

Under the proposed Carvana use, the existing northerly and southerly two-way driveways are proposed to remain. It is recommended that the northerly driveway be signed for "Employees Only" use, while the southerly driveway be signed for customer access. It is also recommended to eliminate the existing one-way entry only driveway in the middle of the site frontage since this is a redundant access under the proposed Carvana operation. The existing one-way exit-only driveway in the middle of the site frontage will remain to allow picked up vehicles to exit from the Customer Experience delivery area at this location. Pavement striping and signage should be provided to reinforce this as an exit only driveway. These access driveway modifications will significantly improve vehicle operations/turning movements along the site frontage.

Furthermore, all parking spaces along the site frontage will be restriped to be outside the Fishkill Avenue right-of-way. On the south side of the site, the parking spaces will be moved back into the site approximately 20-ft. to allow for the striping of a 15 ft. wide by 140-ft. long loading zone as was identified on the previously approved site plan but appears to have not been in use. This area will also be lined with planter boxes to separate the onsite parking spaces from the loading zone and Fishkill Avenue. The loading zone will be entirely outside the Fishkill Avenue right-of-way.

At the north end of the site along the Fishkill Avenue frontage there will be seven (7) single car hauler parking spaces and seven (7) customer vehicle staging spaces. These spaces again will be restriped outside of the Fishkill Avenue right-of-way. It is recommended that each space be provided with a concrete wheel stop positioned along the Fishkill Avenue frontage in order to further separate these spaces from the Fishkill Avenue pavement.

CED understands that the City of Beacon has formed a Fishkill Avenue Corridor Ad Hoc Committee that has been tasked with developing concepts and proposals for the Fishkill Avenue corridor that will look at such items as the future streetscape of Fishkill Avenue, design standards, pedestrian/bicycle/transit accommodations as well as several other items. This committee was announced by Mayor Kyriacou on November 27, 2023, and appointed committee members were announced on January 26, 2024.

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CED is also aware that there was a previously proposed City project that would have provided streetscape and other improvements in the area of the site. However, this Project has since been modified to remove much of the Fishkill Avenue work to allow the Fishkill Avenue Committee to conduct its studies and provide recommendations for the area. In light of this it is the recommendation of CED that other than the recommendations made above, no other streetscape type modifications along the Fishkill Avenue site frontage be made at this time in order to not install something that would potentially conflict with the findings and recommendations of the Fishkill Avenue Committee.

Lastly, the proposed loading zone, which was identified on the previously approved site plan, was also reviewed. Carvana anticipates 1 – 2 deliveries of vehicles to the site per day utilizing 9-car haulers. The location of the loading zone at the south end of the site is positioned to all the car haulers to arrive either from the south or from the north and pull head-in to the loading zone from either direction. Figures No. 1 and 2 contained in Appendix D show the car hauler vehicle maneuvering into the loading zone from both directions making a head-in maneuver. Carvana anticipates that their car haulers will arrive from the south on Fishkill Avenue since they have the ability to dictate and control the arrival and departure patterns of the vehicles. However, in either case the head-in maneuver will result in minimal disruption to traffic along Fishkill Avenue since no additional maneuvering in Fishkill Avenue will be required by the vehicle. When departing the site, the haulers should be required to depart to the north if arriving from the south and to the south if arriving from the north which again will require no additional maneuvering along Fishkill Avenue and minimal disruption to traffic along the roadway.

The 15-ft. x 140-ft. loading space will provide sufficient space for the hauler to be positioned entirely outside the Fishkill Avenue right-of-way and allow for vehicle unloading without encroaching onto Fishkill Avenue. The proposed planters will be positioned such that vehicles unloaded can be driven around them on each end of the Loading zone to allow the vehicles to enter directly into the parking lot without encroaching on Fishkill Avenue.

Colliers Engineering & Design

Conclusion

As summarized in our analysis of the proposed parking, the site will provide sufficient parking to meet the parking demands of the Carvana use, which will have a significantly reduced parking demand from the previous Healey Hyundai dealership. The ability to schedule deliveries ahead of time through the Carvana online system will allow Carvana to control the follow of vehicles into and out of the site and thereby controlling the parking demands throughout the day. Based on our analysis, it is the opinion of CED that a parking variance of 83 parking spaces, in accordance with the current Zoning Code requirements, is warranted for the Project.

In addition, with the several access and circulation related recommendations noted above, the Project will result in improved traffic flow and operations in and around the site with less impact to Fishkill Avenue than the former Healey Hyundai use.

Sincerely,

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.

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

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Colliers Engineering & Design

Appendix

Appendix A | City of Beacon Zoning Code Section 223-26.F

City of Beacon, NY
Tuesday, April 30, 2024

Chapter 223. Zoning

Article III. General Regulations

§ 223-26. Off-street parking, loading and vehicular access.

A. General.

(1) All structures and land uses hereafter erected, enlarged, created or extended shall be provided with the amount of off-street automobile parking space and loading and unloading space required by the terms of this section to meet the needs of persons making use of such structures or land. A permit for the erection, replacement, reconstruction, extension or substantial alteration of a structure or the development of a land use shall not be issued unless off-street automobile parking facilities and, where required loading and unloading spaces shall have been laid out in plan in accordance with the appropriate requirements for structures and uses as set forth in this section, and such required parking and loading facilities shall be completed before a certificate of occupancy shall be issued. As used herein, "parking facilities" shall be construed to include loading and unloading spaces required by this section.

(2) In case of exceptional difficulty or unusual hardship to such properties arising out of the requirements of this section, the Board of Appeals may reduce the parking requirements but shall require such degree of compliance as it may deem reasonable for that part of the structure or use that is legally nonconforming and shall not waive any part of the requirement for that part of the structure or use that constitutes an enlargement or expansion and shall not permit reduction or elimination of whatever quantity of parking may already exist, unless it is in excess of requirements.

(3) Required off-street parking facilities which, after development, are later dedicated to and accepted by the City shall be deemed to continue to serve the uses or structures for which they were originally provided.

B. Effect on existing uses.

(1) Structures and land uses in existence on April 20, 1964, or structures and uses for which building permits had been approved on or before said date, shall not be subject to the requirements set forth in this section, unless there shall occur an increased intensity of use, provided that any parking facilities now existing to serve such structures or uses shall not in the future be reduced, except where they exceed such requirement, in which case they may not be reduced below such requirement.

(2) Whenever a building or structure erected prior to or after April 20, 1964. or any land use shall undergo any increase in intensity of use in the number of dwelling units, floor area, seating capacity, number of employees or other unit of measurement specified hereinafter for required parking facilities, or from other causes, and further when said increase would result in a requirement for additional parking facilities through application of the Schedule of Off-Street Parking Requirements (Subsection **F**), additional parking facilities shall be provided accordingly, except that no building or structure erected prior to said date shall be required to provide parking facilities unless the aforesaid additional required facilities amount to a cumulative total increase of at least 25% over the existing use as of said date, in which case

parking spaces shall be provided on the basis of the total units of measurements of the new use or of the alteration or expansion of the existing use.

C. Location, use, design, construction and maintenance.
[Amended 5-19-2014 by L.L. No. 6-2014; 5-15-2017 by L.L. No. 7-2017]

(1) Location. The off-street parking facilities which are required by this section shall be provided on the same lot or premises with such structure or land use; except that off-street parking spaces required for structures or land uses on two or more adjoining lots may be provided in a single common facility on one or more of said lots, provided that a binding agreement, in a form approved by the Corporation Counsel, assuring the continued operation of said parking facility during the life of the structure or the land use the parking is designed to serve, is filed on the land records prior to approval of the plans for said parking facility. In any residence district, no off-street parking facility shall be developed in any required front yard or in any required side or rear yard adjacent to a street line or in any other side or rear yard within five feet of the lot line. However, off-street parking spaces shall be permitted in residential districts as indicated in § **223-17C**.

(2) Parking specifications.

(a) Each parking space provided in an unenclosed area shall be at least nine feet wide and at least 18 feet long, except that the Planning Board, in approving a plan under § **223-25**, may permit that portion of the total required parking which is specifically set aside for and limited to employee parking to have a width of at least 8 1/2 feet and a depth of at least 18 feet. This possible exception shall not be permitted in the CMS District.
[Amended 6-15-2020 by L.L. No. 7-2020]

(b) Each parking space which is bordered by walls or columns on two or more sides shall be not less than 10 feet wide nor less than 18 feet long. Enclosed or garaged parking areas shall not contain any columns, walls or other obstacles which would prevent or obstruct the use of any parking space.

(c) The maneuvering area needed to permit parked vehicles to enter and exit off-street parking spaces shall have a width of at least 24 feet, except where the Planning Board approves a lesser distance as adequate for areas with parallel or angled parking spaces.

(3) Landscaping. Except for parking spaces accessory to a one-family dwelling, all off-street parking areas shall be landscaped with appropriate trees, shrubs and other plant materials and ground cover, as approved by the Planning Board based upon consideration of the adequacy of the proposed landscaping to assure the establishment of a safe, convenient and attractive parking facility with a minimum amount of maintenance, including plant care, snowplowing and the removal of leaves and other debris. At least one tree with a minimum caliper of three inches at a height of four feet above ground level shall be provided within such parking area for each 10 parking spaces.

(a) Wherever possible, planting islands, at least eight feet in width, shall be provided to guide vehicle movement and to separate opposing rows of parking spaces so as to provide adequate space for plant growth, pedestrian circulation and vehicle overhang. Such planting islands and the landscaping within them shall be designed and arranged in such a way as to provide vertical definition to major traffic circulation aisles, entrances and exits, to channel internal traffic flow and prevent indiscriminate diagonal movement of vehicles and to provide relief from the visual monotony and shadeless expanse of a large parking area.

(b) The Planning Board may require curbing to facilitate surface drainage and prevent vehicles from overlapping sidewalks and damaging landscaping materials.

(c) No obstruction to driver vision shall be erected or maintained on any lot within the triangle formed by the street line of such lot, the outer edge of the access driveway to the parking

area and a line drawn between points along such street line and access drive 30 feet distant from their point of intersection.

(4) Grades, drainage, paving and marking. All proposed and required parking facilities, regardless of size, shall be graded, surfaced, drained and maintained throughout the duration of their use so as to comply with the New York State Stormwater Management Design Manual, as amended from time to time, and/or Chapter **190**, Stormwater Management and Erosion and Sediment Control, of this Code, or other acceptable stormwater management practice(s), as deemed suitable to the City Engineer to the extent necessary to avoid nuisances of dust, erosion or excessive water flow across public ways or adjacent lands. The drainage analysis for said parking facilities shall include pre- and post-development conditions as well as remediation and/or mitigation of stormwater runoff. The maximum slope within a parking area shall not exceed 5%. In RD Districts and in nonresidential developments, the Planning Board shall require the provision of suitable markings to indicate individual parking spaces, maneuvering area, entrances and exits.
[Amended 6-15-2020 by L.L. No. 7-2020]

(5) Traffic circulation. In order to encourage safe and convenient traffic circulation, the Planning Board may require the interconnection of parking areas via access drives within and between adjacent lots. The Board shall require written assurance and/or deed restrictions, satisfactory to the Corporation Counsel, binding the owner and his heirs and assignees to permit and maintain such internal access and circulation and inter-use of parking facilities.

(6) Two or more uses on same lot. Where two or more different uses occur on a single lot, the total amount of parking facilities to be provided shall be the sum of the requirements of each individual use on the lot, except that the Planning Board may approve the joint use of parking space by two or more establishments on the same lot or on contiguous lots, the total capacity of which is less than the sum of the spaces required for each, provided that said Board finds that the capacity to be provided will substantially meet the intent of this article by reason of variation in the probable time of maximum use by patrons or employees at such establishments and provided that such approval of such joint use shall be automatically terminated upon a change of use at any such establishment.

(7) Designed residence and multifamily residence districts.
[Amended 6-15-2020 by L.L. No. 7-2020]

(a) In RD Districts, in order that some of the required parking spaces may be convenient for use by visitors as well as by occupants, 2/3 of the required car spaces for a residential building shall, whenever possible, be directly accessible to a main entrance to that building and within 100 feet of that entrance.

(b) In RD Districts, off-street parking lots shall be located behind, underneath, or to the side of the building, whenever possible. Any parking to the side of the building shall be screened from street views by a low wall, hedge, fence, and/or other landscaping and, whenever possible, it shall be located at least 40 feet from any property line that fronts on a street.

(8) Off-street parking for private passenger vehicles may be allowed by a special permit from the Planning Board on a vacant lot in a residential district which has a shared parcel line for at least 20 feet with a commercial or industrial district, provided that the off-street parking shall be on a portion of the lot within 200 feet of the commercial or industrial district and that the use shall not include fee-based parking for railroad commuters.
[Added 10-3-2022 by L.L. No. 10-2022]

D. Alternatives to providing parking spaces.
[Amended 6-15-1992 by L.L. No. 5-1992]

(1) Conveyance of land. Where, because of limitations of size, dimensions or topography of a lot, an applicant for a building permit in a business district finds it impractical to provide all or a portion of the off-street parking spaces required by Subsection **F** herein, in connection with a proposed building or addition, he may grant and convey to the City of Beacon, and the City

Council, at its discretion, may accept, appropriately located and developed land for commercial parking as a permitted use equivalent, provided that said land is permanently dedicated to the City.[1]

[1] *Editor's Note: Former Subsection D(2), Fee in lieu of waived parking, as amended, which immediately followed, was repealed 4-7-2008 by L.L. No. 4-2008.*

E. Waiver of improvement. Except within the Central Main Street District, and notwithstanding any other provision of this chapter, the City Council or Planning Board, in reviewing plans submitted in accordance with the provisions of this section or § **223-18** or **223-25**, may waive the initial improvement of up to 50% of the required off-street parking spaces, provided that all of the required spaces are shown on the proposed plan and further provided that suitable agreements, satisfactory to the City Council or Planning Board, are obtained assuring the City that the property owner(s) will be responsible for the construction of such waived spaces, or any portion thereof, within six months of the date such spaces may be deemed necessary by the City Council or Planning Board.
[Amended 7-6-2004 by L.L. No. 13-2004; 2-19-2013 by L.L. No. 3-2013; 6-15-2020 by L.L. No. 7-2020]

F. Schedule of Off-Street Parking Requirements. Off-street parking spaces shall be provided as follows, except that the Board of Appeals may modify these provisions as a condition of the issuance of a special permit according to the provisions of § **223-19**.

Use	**Minimum Off-Street Parking**
1- and 2-family dwelling	2 spaces for each dwelling unit
Multifamily dwelling and/or apartment or artist live/work space [Amended 8-6-2001 by L.L. No. 12-2001]	1 space for each dwelling unit, plus 1/4 space for each bedroom, plus 1/2 space for each live/work space containing retail area
Professional home office or home occupation permitted in a residential district [Amended 6-15-2020 by L.L. No. 7-2020]	2 spaces in addition to spaces required for the residential use, except that there shall be 4 spaces for each medical or dental practitioner in addition to spaces required for the residential use
Bed-and-breakfast establishment [Amended 3-18-2002 by L.L. No. 9-2002; 6-15-2020 by L.L. No. 7-2020]	1 space for each guest sleeping room, plus 2 spaces for the dwelling unit, plus 1 space for each nonresident employee
Hotel or inn [Amended 6-15-2020 by L.L. No. 7-2020]	Subject to § **223-14.1C**
Place of worship, theater, auditorium, athletic field or other place of assembly	1 space for each 4 seats or pew spaces or, in places or, in places without seats, 1 space for each 100 square feet of floor space used for public assembly
Nursery school or day-care center [Added 3-18-2002 by L.L. No. 10-2002]	1 per employee plus 1 per classroom
Primary or secondary school [Added 3-18-2002 by L.L. No. 10-2002]	1 per employee plus 1 per 5 students in the 11th grade or above, or 1 per 4 assembly seats, whichever is greater
Dance, art, tutorial, martial arts or similar instructional school [Added 11-4-2002 by L.L. No. 29-2002]	1 space for each 150 square feet of gross floor space
Hospital, nursing home, convalescent home or home for the aged	1 space for each 3 resident persons, plus space for each employee, including medical, nursing and service staff employed at the same time when the building is operating at full capacity
Golf and country club	1 space for each 2 memberships
Bowling alley or other place of indoor commercial recreation or public amusement	5 spaces for each bowling lane; all others, 1 space for each 4 persons of maximum occu-

Use	Minimum Off-Street Parking
[Amended 7-6-2004 by L.L. No. 13-2004; 6-15-2020 by L.L. No. 7-2020]	pancy or 1 space for each 200 square feet of gross floor area, whichever is greater
Retail or service business, including auction gallery [Amended 2-18-1992; 6-21-1999 by L.L. No. 14-1999]	1 space for each 200 square feet of gross floor area, excluding utility areas
Restaurant or coffee house [Amended 7-6-2004 by L.L. No. 13-2004; 5-2-2005 by L.L. No. 2-2005]	1 space for each 3 patron seats or 1 space for each 150 square feet of gross floor area, excluding kitchen and storage areas, whichever is greater
Office for business or pro-fessional use (other than accessory to residential use) [Amended 6-21-1999 by L.L. No. 14-1999]	1 space for each 200 square feet of gross floor area, excluding utility areas
Banking office [Amended 6-21-1999 by L.L. No. 14-1999]	1 space for each 200 square feet of gross floor area, excluding utility areas
Funeral home or undertaking establishment [Amended 6-15-2020 by L.L. No. 7-2020]	10 spaces per establishment, plus 1 space per employee
Motor vehicle sales and service	1 space per employee, plus 1 space per 150 square feet of gross floor space
Animal care facility [Amended 6-15-2020 by L.L. No. 7-2020]	1 space per employee, plus 1 space per 300 square feet of gross floor space
Car washing establishment	Subject to § **223-21F**
Research or development laboratory	1 space per employee, but not less than 1 space per 600 square feet of gross floor space
Manufacturing or industrial use	1 space per 2 employees but not less than 1 space per 400 square feet of gross floor space
Wholesale, warehouse storage, utility or other similar commercial use [Amended 9-19-2022 by L.L. No. 9-2022]	1 space per employee but not less than 1 space per 1,000 square feet of gross floor space
Self-storage facility [Added 9-19-2022 by L.L. No. 9-2022]	1 space per 10,000 square feet of gross floor space, plus one space per employee
Senior housing [Added 3-22-1982; amended 6-15-2020 by L.L. No. 7-2020]	2 spaces for each 3 dwelling units
Museums located within walking distance (3,000 feet) of entrance to train station [Added 2-7-2000 by L.L. No. 5-2000; amended 5-2-2005 by L.L. No. 2-2005; 6-15-2020 by L.L. No. 7-2020]	1 parking space per 3,000 feet of gross floor space
Artist studio [Added 6-16-2003 by L.L. No. 6-2003]	1 space for each 500 square feet of gross floor space
Art gallery/exhibit space [Added 5-2-2005 by L.L. No. 2-2005]	1 space for each 250 square feet of gross floor area
Bar or brew pub [Added 5-2-2005 by L.L. No. 2-2005]	1 space for each 3 patron seats or 1 space for each 50 square feet of gross floor area, excluding kitchen and storage areas, whichever is greater
Microbrewery or microdistillery [Added 5-2-2005 by L.L. No. 2-2005; amended 5-19-2014 by L.L. No. 8-2014]	1 space for each employee on the largest shift, plus 1 space for each 3 patron sitting or stand-

Use	Minimum Off-Street Parking
	ing spaces in any tasting room or other visitor facility open to the general public
Museum [Added 5-2-2005 by L.L. No. 2-2005]	1 space for each 300 square feet of gross floor area
Other uses not listed Amended 5-2-2005 by L.L. No. 2-2005]	Off-street parking requirements for types of uses which do not fall within the categories listed above shall be determined by the Planning Board upon consideration of relevant factors entering into the parking needs of each such use

(1) Notwithstanding § **223-26F** above, with respect to lots which, on the effective date of this section, are located wholly or partially within 2,500 feet of the train station platform, the City Council shall have the authority to limit the amount of parking to be provided for multifamily and nonresidential development projects on said lots having a parking requirement in accordance with § **223-26F** of 25 spaces or more, in the interest of appropriately and reasonably minimizing the environmental impact of the project's vehicular traffic accessing the train station. In such cases, the City Council shall ensure that convenient pedestrian access is provided by the project, or is otherwise available between the project and the train station. Where a substantial change in elevation exists between the project and the train station, the City Council may require the project to provide, if deemed feasible by the Council, an elevator, escalator, stairs and/or other similar pedestrian conveyance or access for such purpose.
[Added 6-7-2010 by L.L. No. 8-2010]

G. Operation and maintenance of off-street parking facilities. Required off-street parking facilities shall be maintained as long as the use of the structure exists which the facilities are designed to serve. Required parking areas developed for specific structures and uses shall be reserved at all times to those persons who are employed at or make use of such structures and land uses, except when dedicated to and accepted by the City as public parking areas.

H. Off-street loading requirements. Off-street loading and unloading facilities shall be located on the same site with the use to be served, except as provided in Subsection **C(1)**, and shall be provided as follows:

(1) Size. Each off-street loading space shall be at least 14 feet in width, at least 35 feet in length and at least 14 feet in height, exclusive of access and turning areas, except that adjacent loading spaces may be each 12 feet in width.

(2) Required number of spaces.

(a) For retail and/or service business establishments: a minimum of one space for the first 7,500 square feet or major portion thereof, plus one space for each additional 10,000 square feet of gross floor area or major portion thereof, except that no berths shall be required for buildings with a gross floor area of less than 5,000 square feet.

(b) For office establishments: a minimum of one space for the first 20,000 square feet of gross floor area or major portion thereof, plus one space for each additional 40,000 square feet of gross floor area or major portion thereof, except that no berths are required for buildings of less than 10,000 square feet of gross floor area.

(c) For research establishments: a minimum of one space for the first 12,000 square feet of gross floor area of building or major portion thereof, plus one space for each additional 20,000 square feet of gross floor area or major portion thereof.

(d) For wholesale business, industry, storage, warehouses and other commercial establishments: a minimum of one space for each establishment, plus one space for each 10,000 square feet of gross floor area or major portion thereof.

(e) For nursing homes: a minimum of one space for each establishment.

[Added 12-21-1998 by L.L. No. 17-1998[2]]

[2] *Editor's Note: This local law also provided for the renumbering of former Subsection H(2)(e) as Subsection H(2)(f).*

(f) For museums, a minimum of one space for each establishment.

[Added 2-7-2000 by L.L. No. 4-2000[3]]

[3] *Editor's Note: This local law also provided for the renumbering of former Subsection H(2)(f) as Subsection H(2)(g).*

(g) Other uses which do not fall within the categories listed above shall be determined by the City Council and adopted as an amendment to this section.

I. Driveways. For reasons of traffic and pedestrian safety, both on and off street, as well as to provide for possible future road widening or other improvements, all new driveways and sidewalk crossings entering onto any street shall comply with all requirements of Chapter **100**, Driveways, and shall be subject to the approval of the Highway Superintendent, except where such are part of a use subject to special permit or site development plan approval, in accordance with §§ **223-18** and **223-25**, in which case they shall be subject to approval by the Planning Board and/or City Council.
[Amended 9-4-2018 by L.L. No. 16-2018]

Colliers
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Appendix

Appendix B | Proposed Local Law to Amend Parking Requirements in the City of Beacon – Latest Revision April 12, 2024

PROPOSED LOCAL LAW NO. __ OF 2024

CITY COUNCIL
CITY OF BEACON

A LOCAL LAW TO AMEND PARKING REQUIREMENTS IN THE CITY OF BEACON

A LOCAL LAW to amend the Zoning Code concerning parking requirements.

BE IT ENACTED by the City Council of the City of Beacon as follows:

Section 1. Chapter 223 of the City Code of the City of Beacon, Article III, General Regulations, Section 223-26, entitled "Off-street parking, loading and vehicular access" is hereby amended as follows:

§ 223-26 **Off-street parking, loading and vehicular access.**

A. General.

~~(1) All structures and land uses hereafter erected, enlarged, created or extended shall be provided with the amount of off-street automobile parking space and loading and unloading space required by the terms of this section to meet the needs of persons making use of such structures or land.~~ A permit for the erection, replacement, reconstruction, extension or substantial alteration of a structure or the development of a land use shall not be issued unless off-street automobile parking ~~facilities~~ areas or structures and, where ~~required~~ appropriate loading and unloading spaces ~~shall have been laid out in plan in accordance~~are consistent with the ~~appropriate requirements for structures and uses as set forth~~provisions in this section~~, and such required parking and loading facilities shall be completed before a certificate of occupancy shall be issued. As used herein, "parking facilities" shall be construed to include loading and unloading spaces required by this section~~.

~~(2) In case of exceptional difficulty or unusual hardship to such properties arising out of the requirements of this section, the Board of Appeals may reduce the parking requirements but shall require such degree of compliance as it may deem reasonable for that part of the structure or use that is legally nonconforming and shall not waive any part of the requirement for that part of the structure or use that constitutes an enlargement or expansion and shall not permit reduction or elimination of whatever quantity of parking may already exist, unless it is in excess of requirements.~~

~~(3) Required off-street parking facilities which, after development, are later dedicated to and accepted by the City shall be deemed to continue to serve the uses or structures for which they were originally provided.~~

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~~B. Effect on existing uses.~~

~~(1) Structures and land uses in existence on April 20, 1964, or structures and uses for which building permits had been approved on or before said date, shall not be subject to the requirements set forth in this section, unless there shall occur an increased intensity of use, provided that any parking facilities now existing to serve such structures or uses shall not in the future be reduced, except where they exceed such requirement, in which case they may not be reduced below such requirement.~~

~~(2) Whenever a building or structure erected prior to or after April 20, 1964, or any land use shall undergo any increase in intensity of use in the number of dwelling units, floor area, seating capacity, number of employees or other unit of measurement specified hereinafter for required parking facilities, or from other causes, and further when said increase would result in a requirement for additional parking facilities through application of the Schedule of Off-Street Parking Requirements (Subsection F), additional parking facilities shall be provided accordingly, except that no building or structure erected prior to said date shall be required to provide parking facilities unless the aforesaid additional required facilities amount to a cumulative total increase of at least 25% over the existing use as of said date, in which case parking spaces shall be provided on the basis of the total units of measurements of the new use or of the alteration or expansion of the existing use.~~

~~C.~~B. Location, use, design, construction and maintenance.

(1) Location. ~~The~~Except as required elsewhere under the City Code, any approved off-street parking ~~facilities~~ area or structure ~~which are required by this section~~ shall be provided on the same lot or premises with such structure or land use; ~~except~~ unless ~~that~~ such off-street parking spaces ~~required~~ for structures or land uses on two or more adjoining lots may be provided in a single common facility on one or more of said lots, provided that an easement or deed restriction(s) ~~binding agreement~~, in a form approved by the Corporation Counsel, assuring the continued operation of said parking facility during the life of the structure or the land use the parking is designed to serve, is filed on the land records prior to approval of the plans for said parking facility.

~~(1)~~(2) In any residence district, no designated off-street parking ~~facility~~ area or structure shall be developed in any ~~required~~ front yard forward of the principal building, except as approved by the Building Inspector or Planning Board for an unusual lot configuration. Nor shall any residence district off-street parking area or structure be developed ~~or~~ in any ~~required~~ minimum side or rear yard setback adjacent to a street line or in any other side or rear yard within five feet of the lot line. However, off-street parking spaces shall be permitted in residential districts as indicated in § **223-17C**.

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~~(2)~~(3) Parking specifications.

(a) Each parking space provided in an unenclosed area shall be at least nine feet wide and at least 18 feet long, except that the Planning Board, in approving a plan under § **223-25**, may permit that portion of the total ~~required~~ parking which is specifically set aside for and limited to employee parking to have a width of at least 8 1/2 feet and a depth of at least 18 feet. This possible exception shall not be permitted in the CMS District.

(b) Each parking space which is bordered by walls or columns on two or more sides shall be not less than 10 feet wide nor less than 18 feet long. Enclosed or garaged parking areas shall not contain any columns, walls or other obstacles which would prevent or obstruct the use of any parking space.

(c) Except for one-family and two-family dwellings, ~~The~~ the maneuvering area needed to permit parked vehicles to enter and exit off-street parking spaces shall have a width of at least 24 feet, ~~except~~ unless ~~where~~ the Planning Board approves a lesser distance as adequate for areas with parallel or angled parking spaces.

(4) Landscaping. Except for parking spaces accessory to a one-family and two-family dwellings and accessory apartment dwelling units subject to approval by the Building Inspector, all off-street parking areas shall be landscaped with appropriate trees, shrubs and other plant materials and ground cover, as approved by the Planning Board based upon consideration of the adequacy of the proposed landscaping to assure the establishment of a safe, convenient and attractive parking facility with a minimum amount of maintenance, including plant care, snowplowing and the removal of leaves and other debris.

~~(3)~~(a) At least one tree with a minimum caliper of three inches at a height of four feet above ground level shall be provided within such parking area for each ~~10~~ 8 parking spaces.

~~(a)~~(b) Wherever possible, planting islands, at least eight feet in width, shall be provided to guide vehicle movement and to separate opposing rows of parking spaces so as to provide adequate space for plant growth, pedestrian circulation and vehicle overhang. Such planting islands and the landscaping within them shall be designed and arranged in such a way as to provide vertical definition to major traffic circulation aisles, entrances and exits, to channel internal traffic flow and prevent indiscriminate diagonal movement of vehicles and to provide relief from the visual monotony and shadeless expanse of a large parking area.

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~~(b)~~(c) The Planning Board may require curbing to facilitate surface drainage and prevent vehicles from overlapping sidewalks and damaging landscaping materials.

(d) No obstruction to driver vision shall be erected or maintained on any lot within the triangle formed by the street line of such lot, the outer edge of the access driveway to the parking area and a line drawn between points along such street line and access drive ~~30~~ 25 feet distant from their point of intersection.

~~(c)~~(e) Such property owner shall have an obligation to maintain and replace any landscaping which dies or becomes unsightly.

~~(4)~~(5) Grades, drainage, paving and marking. All proposed and ~~required~~ approved parking ~~facilities~~areas and structures, regardless of size, shall be graded, surfaced, drained and maintained throughout the duration of their use so as to comply with the New York State Stormwater Management Design Manual, as amended from time to time, and/or Chapter **190**, Stormwater Management and Erosion and Sediment Control, of this Code, or other acceptable stormwater management practice(s), as deemed suitable to the City Engineer to the extent necessary to avoid nuisances of dust, erosion or excessive water flow across public ways or adjacent lands. The drainage analysis for said parking ~~facilities~~ areas or structures shall include pre- and post-development conditions as well as remediation and/or mitigation of stormwater runoff. The maximum slope within a parking area shall not exceed 5%. In RD Districts and in any multifamily or nonresidential developments, the Planning Board shall require the provision of suitable markings to indicate individual parking spaces, maneuvering area, entrances and exits. Except for one-family or two-family dwellings, the Planning Board shall require green stormwater infrastructure for the development of parking spaces, unless the Applicant establishes to the Planning Board's satisfaction that the underlying soils do not allow natural drainage. Such green stormwater infrastructure is subject to § 190-9.

~~(5)~~(6) Traffic circulation. In order to encourage safe and convenient traffic circulation, the Planning Board may require the interconnection of parking areas via access drives within and between adjacent lots. The Board shall require ~~written assurance and/or deed restrictions~~easements, satisfactory to the Corporation Counsel, binding the owner and his heirs and assignees to permit and maintain such internal access and circulation and inter-use of parking ~~facilities~~areas or structures.

~~(6)~~(7) Two or more uses on same lot. Where two or more different uses occur on a single lot, ~~the total amount of parking facilities to be provided shall be the sum of the requirements of each individual use on the lot, except that~~ the Planning Board may approve the joint use of parking space by two or more establishments on the same lot or on contiguous lots, the total capacity of which is less than the sum of

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the spaces ~~required~~ needed for each, provided that said Board finds that the capacity to be provided will substantially meet the intent of this article by reason of variation in the probable time of maximum use by patrons or employees at such establishments and provided that such approval of such joint use shall be automatically terminated upon a change of use at any such establishment.

~~(7)~~(8) Designed residence and multifamily residence districts.

(a) In RD Districts, in order that some of the ~~required~~ parking spaces may be convenient for use by visitors as well as by occupants, 2/3 of the ~~required~~ car spaces for a residential building shall, whenever possible, be directly accessible to a main entrance to that building and within 100 feet of that entrance.

(b) In RD Districts, off-street parking lots shall be located behind, underneath, or to the side of the building, whenever possible. Any parking to the side of the building shall be screened from street views by a low wall, hedge, fence, and/or other landscaping and, whenever possible, it shall be located at least 40 feet from any property line that fronts on a street.

~~(8)~~(9) Off-street parking for private passenger vehicles may be allowed by a special permit from the Planning Board on a vacant lot in a residential district which has a shared parcel line for at least 20 feet with a commercial or industrial district, provided that the off-street parking shall be on a portion of the lot within 200 feet of the commercial or industrial district and that the use shall not include fee-based parking for railroad commuters.

~~D.~~C. Alternatives to providing parking spaces.

(1) Conveyance of land. Where, because of limitations of size, dimensions or topography of a lot, an applicant for a building permit in a business district finds it impractical to provide all or a portion of the off-street parking spaces required by ~~Subsection F hereinthe~~ Planning Board, in connection with a proposed building or addition, ~~he~~ the applicant may grant and convey to the City of Beacon, and the City Council, at its discretion, may accept, appropriately located and developed land for commercial parking as a permitted use equivalent, provided that said land is permanently dedicated to the City.

~~(1)~~(2) Waiver of improvement. Except within the Central Main Street District, and notwithstanding any other provision of this chapter, the City Council or Planning Board, in reviewing plans submitted in accordance with the provisions of this section or § **223-18** or **223-25**, may waive the initial improvement of up to 50% of the ~~required~~ off-street parking spaces, provided that all of the ~~required~~ spaces are shown on the proposed plan and further provided that suitable agreements,

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satisfactory to the City Council or Planning Board, are obtained assuring the City that the property owner(s) will be responsible for the construction of such waived spaces, or any portion thereof, within six months of the date such spaces may be deemed necessary by the City Council or Planning Board.

D. Schedule of Off-Street Parking ~~Requirements~~Standards. ~~Off-street parking spaces shall be provided as follows, except that the Board of Appeals may modify these provisions as a condition of the issuance of a special permit according to the provisions of § **223-19**.~~

(1) In order to promote walkability and other transportation alternatives and to avoid excessive automobile traffic and unnecessarily large paved parking lots, parking maximums have been established for all uses. N~~n~~o minimum number of off-street parking spaces are ~~required,~~required within the CMS, L, WD, and T districts due to the proximity of these districts to municipal parking areas, public transportation, and pedestrian-oriented streetscapes. ~~except for one-family and two-family dwellings as well as accessory apartment dwelling units which shall require a minimum of one off-street parking space per dwelling unit.~~

(2) The Planning Board shall determine the appropriate number of on-site parking spaces as part of application review and based on the context of the property, including but not limited to, as applicable, the size of the parcel, proposed uses, existing buildings on the parcel, especially if they are designated as historic, availability of public and street parking in the area, ~~walkable~~ access to public transit, a parking study submitted by the applicant, shared parking arrangements, land-banking authorized under § **223-26C(2)**, compliance with the Americans with Disabilities Act (ADA) and any state requirements for accessible parking, and input from any public hearing.

(3) Any professional parking study requested by the Planning Board and reviewed by the City's consultant shall be based primarily on specific site-related information, a comparable analysis of similar uses and properties in the area or region, and an examination of demand reduction strategies, including such elements as promotion of walking, bicycle parking or storage facilities, alternative mobility options, transit access opportunities, car-share rentals, and ride-sharing or carpooling services.

(4) The following table gives guidance to the Planning Board on the minimum and maximum ~~parking allowed~~parking allowed.; ~~notwithstanding~~Where only maximums are identified, the Planning Board may approve fewer spaces:

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Schedule of Off-Street Parking Standards				
Building Use	CMS, L, WD, T		R1, RD, LI, HI, WP, FCD, GB	
	Min	Max	Min	Max
Residential (Including accessory apartment)	=	1 space per dwelling unit	1 space per dwelling unit	3 spaces per dwelling unit
Lodging	=	0.75 space per guest room	0.5 space per guest room	1.5 space per guest room
Commercial (Retail / Office / Service / Food / Auto-Oriented/ Social and Community)	=	3 spaces Per 1000 SF GFA	3 spaces Per 1000 SF GFA	5 spaces Per 1000 SF GFA
Health Care and Educational		4 spaces per 1000 SF GFA	1 space per 1000 SF GFA	4 spaces per 1000 SF GFA
Industrial (Industrial or Assembly)	=	=	0.25 space per 1,000 SF GFA	2.5 spaces per 1,000 SF GFA
Other Uses		Off-street parking requirements for types of which do not fall within the categories listed above shall be determined by the Planning Board or the Building Inspector upon consideration of relevant factors dictating the parking needs of each such use		

NOTES:
* The calculation of Gross Floor Area ("GFA") shall exclude utility space
* Up to 30% of the provided parking may be designated for compact automobiles at the discretion of and in accordance with standards as determined by the Planning Board

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Use	Minimum Maximum Off-Street Parking
1- and 2-family dwelling	2 spaces 3 spaces for each dwelling unit
Multifamily dwelling and/or apartment or artist live/work space	1 space for each dwelling unit, plus 1/4 space for each bedroom, plus 1/2 space for each live/work space containing retail area
Professional home office or home occupation permitted in a residential district	2 spaces in addition to spaces required for the residential use, except that there shall be a maximum 4 spaces for each medical or dental practitioner in addition to spaces required for the residential use
Bed-and-breakfast establishment	1 space for each guest sleeping room, plus 2 spaces for the dwelling unit, plus 1 space for each nonresident employee
Hotel or inn	Subject to § **223-14.1C** 1 for each hotel guest room, plus 1 for each employee on site at any one time
Place of worship, theater, auditorium, athletic field or other place of assembly	1 space for each 4 seats or pew spaces or, in places or, in places without seats, 1 space for each 100 square feet of floor space used for public assembly
Nursery school or day-care center	1 per employee plus 1 per classroom
Primary or secondary school	1 per employee plus 1 per 5 students in the 11th grade or above, or 1 per 4 assembly seats, whichever is greater

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Use	Minimum Maximum Off-Street Parking
Dance, art, tutorial, martial arts or similar instructional school	1 space for each 150 square feet of gross floor space
Hospital, nursing home, convalescent home or home for the aged	1 space for each 3 resident persons, plus space for each employee, including medical, nursing and service staff employed at the same time when the building is operating at full capacity
Golf and country club	1 space for each 2 memberships
Bowling alley or other place of indoor commercial recreation or public amusement	5 spaces for each bowling lane; all others, 1 space for each 4 persons of maximum occupancy or 1 space for each 200 square feet of gross floor area, whichever is greater
Retail or service business, including auction gallery	1 space for each 200 250 square feet of gross floor area, excluding utility areas
Restaurant or coffee house	1 space for each 3 patron seats or 1 space for each 150 200 square feet of gross floor area, excluding kitchen and storage areas, whichever is greater
Office for business or professional use (other than accessory to residential use)	1 space for each 200 300 square feet of gross floor area, excluding utility areas
Banking office	1 space for each 200 300 square feet of gross floor area, excluding utility areas

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Use	Minimum Maximum Off-Street Parking
Funeral home or undertaking establishment	10 spaces per establishment, plus 1 space per employee
Motor vehicle sales and service	1 space per employee, plus 1 space per 150 square feet of gross floor space
Animal care facility	1 space per employee, plus 1 space per 300 square feet of gross floor space
Car washing establishment	Subject to § **223-21F** 1 space per each two persons working at the same time at full capacity or 1 space for each 400 square feet of gross floor area, whichever is greater
Research or development laboratory	1 space per employee, but not less than or 1 space per 600 square feet of gross floor space
Manufacturing or industrial use	1 space per 2 employees but not less than or 1 space per 400 square feet of gross floor space
Wholesale, warehouse storage, utility or other similar commercial use	1 space per employee but not less than or 1 space per 1,000 square feet of gross floor space
Self-storage facility	1 space per 10,000 square feet of gross floor space, plus one space per employee

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Use	Minimum Maximum Off-Street Parking
Senior housing	2 spaces for each 3 dwelling units
Museums located within walking distance (3,000 feet) of entrance to train station	1 parking space per 3,000 feet of gross floor space
Artist studio	1 space for each 500 square feet of gross floor space
Art gallery/exhibit space	1 space for each 250 square feet of gross floor area
Bar or brew pub	1 space for each 3 patron seats or 1 space for each 250 square feet of gross floor area, excluding kitchen and storage areas, whichever is greater
Microbrewery or microdistillery	1 space for each employee on the largest shift, plus 1 space for each 3-patron sitting or standing spaces in any tasting room or other visitor facility open to the general public
Museum	1 space for each 300 500 square feet of gross floor area
Other uses not listed	Off-street parking requirements for types of uses which do not fall within the categories listed above shall be determined by the Planning Board or the Building Inspector, as the case may be, upon consideration of relevant factors entering into the parking needs of each such use

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~~Use~~ ~~Minimum~~ ~~Maximum~~ ~~Off-Street Parking~~

~~(1) Notwithstanding § **223-26F** above, with respect to lots which, on the effective date of this section, are located wholly or partially within 2,500 feet of the train station platform, the City Council shall have the authority to limit the amount of parking to be provided for multifamily and nonresidential development projects on said lots having a parking requirement in accordance with § **223-26F** of 25 spaces or more, in the interest of appropriately and reasonably minimizing the environmental impact of the project's vehicular traffic accessing the train station. In such cases, the City Council shall ensure that convenient pedestrian access is provided by the project, or is otherwise available between the project and the train station. Where a substantial change in elevation exists between the project and the train station, the City Council may require the project to provide, if deemed feasible by the Council, an elevator, escalator, stairs and/or other similar pedestrian conveyance or access for such purpose.~~

E. Operation and maintenance of off-street parking ~~facilities~~areas and structures. ~~Required~~ Approved off-street parking ~~facilities~~ areas or structures shall be maintained as long as the use of the structure exists which the ~~facilities~~ parking areas or structures are designed to serve. ~~Required~~ Designated parking areas developed for specific structures and uses shall be reserved at all times to those persons who are employed at or make use of such structures and land uses, except when dedicated to and accepted by the City as public parking areas.

F. Off-street loading requirements. Off-street loading and unloading facilities ~~shall be located on the same site with the use to be served, except as provided in Subsection **C(1)**, and~~ shall be provided as follows:

...

(2) ~~Required number~~ Number of spaces. The Planning Board shall determine the location (on-site or off-site) and appropriate number of on-site loading spaces as part of site plan approval and based on the context of the property, including but not limited to the size of the parcel, proposed uses, existing buildings on the parcel, a professional study prepared by the applicant, and input from any public hearing.

~~(a) For retail and/or service business establishments: a minimum of one space for the first 7,500 square feet or major portion thereof, plus one space for~~

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~~each additional 10,000 square feet of gross floor area or major portion thereof, except that no berths shall be required for buildings with a gross floor area of less than 5,000 square feet.~~

~~(b) For office establishments: a minimum of one space for the first 20,000 square feet of gross floor area or major portion thereof, plus one space for each additional 40,000 square feet of gross floor area or major portion thereof, except that no berths are required for buildings of less than 10,000 square feet of gross floor area.~~

~~(c) For research establishments: a minimum of one space for the first 12,000 square feet of gross floor area of building or major portion thereof, plus one space for each additional 20,000 square feet of gross floor area or major portion thereof.~~

~~(d) For wholesale business, industry, storage, warehouses and other commercial establishments: a minimum of one space for each establishment, plus one space for each 10,000 square feet of gross floor area or major portion thereof.~~

~~(e) For nursing homes: a minimum of one space for each establishment.~~

~~(f) For museums, a minimum of one space for each establishment.~~

~~(g) Other uses which do not fall within the categories listed above shall be determined by the City Council and adopted as an amendment to this section.~~

G. Driveways. For reasons of traffic and pedestrian safety, both on and off street, as well as to provide for possible future road widening or other improvements, all new driveways and sidewalk crossings entering onto any street shall comply with all requirements of Chapter **100**, Driveways, and shall be subject to the approval of the Highway Superintendent, except where such are part of a use subject to special permit or site development plan approval, in accordance with §§ **223-18** and **223-25**, in which case they shall be subject to approval by the Planning Board and/or City Council.

Section 2. Chapter 223 of the City Code of the City of Beacon, Article III, General Regulations, Section 223-14.1, entitled "Hotels," Subsection C is hereby amended as follows:

§ 223-14.1 **Hotels.**

…

C. ~~Minimum~~ O~~o~~ff-street parking shall be in accordance with § 223-26.

~~(1) For hotel rooms: One parking space shall be provided for each hotel guest room.~~

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~~(2) For restaurants, bars and other public rooms, and for recreation facilities and other permitted uses, other than lobbies: The number of parking spaces required in accordance with § 223-26 of this chapter shall be provided.~~

~~(3) For employees: One parking space shall be provided for each employee for the maximum number of employees working at the hotel at any one time.~~

…

Section 3. Chapter 223 of the City Code of the City of Beacon, Article III, General Regulations, Section 223-21, entitled "Car washes," Subsection F(1) is hereby amended as follows:

§ 223-21 **Car washes.**

…

F. Off-street parking ~~requirements~~ shall be provided in accordance with § 223-26~~as follows:~~

~~(1) One space per each two persons employed at the same time when the building is operating at full capacity or one space for each 400 square feet of gross floor area, whichever is greater.~~Off-street parking shall be in accordance with § 223-26.

…

Section 4. Chapter 223 of the City Code of the City of Beacon, Article III, General Regulations, Section 223-21, entitled "Nursing homes," Subsection D(1) is hereby amended as follows:

§ 223-21 **Nursing homes.**

…

~~D.~~(1) Off-street parking shall be provided in accordance with § 223-26.~~.~~

~~(1) One off-street parking space shall be required for each three resident persons and one for each person employed at the same time when the building is operating at full capacity, including staff doctors.~~Off-street parking shall be in accordance with § 223-26.

…

Section 5. Chapter 223 of the City Code of the City of Beacon, Article III, General Regulations, Section 223-25, entitled "Site development plan approval," Subsection A, is hereby amended as follows:

§ 223-25 **Site development plan approval.**

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A. Approval required. No building permit shall be issued, other than for interior alterations, and no change in type of use, as categorized in § 223-26DF hereof, shall be permitted, other than one-family dwellings, except in conformity with an approved site development plan, and no certificate of occupancy for such structure or use shall be issued until all the requirements for such approval and any conditions attached thereto have been met. The continued validity of any certificate of occupancy shall be subject to continued conformance with such approved plan and conditions. Revisions of such plans shall be subject to the same approval procedure.

Section 6. Chapter 223 of the City Code of the City of Beacon, Article IVA, Waterfront Zones, Section 223-41.3, entitled "Waterfront Park (WP) Zone," Subsection J(11) is hereby amended as follows:

§ 223-41.3 **Waterfront Park (WP) Zone.**

…

J. Waterfront ~~park~~ Park standards. Because the Waterfront Park area is a central element in the City's waterfront, it is essential that any proposed site plans meet the following standards:

…

(11) Off-street parking and loading~~:~~ shall be provided in accordance with § 223-26

…

~~(b) Parking requirementsshall be in accordance with § 223-26.~~

~~[1] Marina: 1/2 space per slip or dry rack storage unit.~~

~~[2] Museums, educational facilities, auditorium, athletic field or other place of assembly: One space for each four seats or pew spaces or, in places without seats, one space for each 100 square feet of floor space used for public assembly.~~

~~(c) With respect to any building, structure or use for which the required number of parking spaces is not specifically set forth in the above schedule, the Planning Board in the course of site plan review shall determine the number of off-street parking spaces required, which number shall bear a reasonable relation to the minimum off-street parking requirements for specified uses as set forth in the above schedule.~~

~~(d) Up to 30% of the required parking may be designated for compact automobiles at the discretion of and in accordance with standards as determined by the Planning Board~~.

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~~(e) Alternative methods of meeting off-street parking requirements.~~

~~[1] General~~

~~[a] The waterfront area will include a mix of land uses on the waterfront, wherein the cumulative parking demand is less than the sum of the peak demand values for each individual land use. This makes it possible to share parking without conflict and to avoid a large surplus of parking spaces in the waterfront area.~~

~~[b] Also, because of the special nature and value of land along the waterfront, and because of the anticipated mix of land uses, alternative parking solutions, such as valet parking, off-site parking, etc., may, in certain situations, also be appropriate.~~

~~[2] Planning Board authority. The Planning Board shall be authorized to find that any portion of the off-street parking requirements of a Waterfront Park project have been satisfied when the applicant establishes to the Board's satisfaction that alternative parking solutions are appropriate and will provide adequate parking for the project. If an applicant wishes to use alternative parking methods, he must submit a complete analysis to the Board for review. This analysis must include estimates of peak parking demands for different land uses for different hours of the day and days of the week. It should also define strategies intended to incorporate alternative parking methods and the advantages of such strategies.~~

~~[3] Alternative parking methods. Alternative parking methods include the following, and such other methods as the Planning Board deems appropriate, or any combination thereof:~~

~~[a] Parking shared among various use elements within a Waterfront Park project.~~

~~[b] Parking shared among various use elements within a Waterfront Park project.~~

~~[c] Valet parking.~~

~~(f) Off-street loading. Off-street loading shall be provided as the Planning Board may find appropriate.~~

Section 7. Chapter 223 of the City Code of the City of Beacon, Article IVA, Waterfront Zones, Section 223-41.4, entitled "Waterfront Development (WD) Zone," Subsection J(11) is hereby amended as follows:

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§ 223-41.4 **Waterfront Development (WD) Zone.**

…

J. Development standards for Waterfront Development District. It is essential that development in this district meet the following development standards:

…

(12) Off-street parking and loading shall be provided in accordance with § 223-26 ~~(11)~~.

~~…~~

~~(b) Parking requirementsshall be in accordance with § 223-26, except that the maximum parking standards for the following uses in the WD Zone are:.~~

~~[1] Multifamily dwelling: one space per unit.~~

~~[2] Retail or service business: one space for each 333 square feet of gross floor, excluding basement storage utility areas.~~

~~[3] Restaurant: one space for each three patron seats or one space for each 300 square feet of gross floor area, excluding kitchen and storage areas, whichever is greater.~~

~~[4] Office for business or professional use: one space for each 400 square feet of gross floor area.~~

~~[5] Hotel: 0.75 space for each hotel guest room.~~

~~(c) With respect to any building, structure or use for which the required number of parking spaces is not specifically set forth in the above schedule, the Planning Board, in the course of site plan review, shall determine the number of off-street parking spaces required, which number shall bear a reasonable relation to the minimum off-street parking requirements for specified uses as set forth in the above schedule.~~

~~(d) Up to 30% of the required parking may be designated for compact automobiles at the discretion of and in accordance with standards as determined by the Planning Board.~~

~~(e) Alternative methods of meeting off-street parking requirements.~~

~~[1] General.~~

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[a] The WD Zone encourages a mix of land uses on the waterfront wherein the cumulative parking demand is less than the sum of the peak demand values for each individual land use. This makes it possible to share parking without conflict and to avoid a large surplus of parking spaces in the waterfront area.

[b] Also, because of the special nature and value of land along the waterfront, and because of the anticipated mix of land uses, alternative parking solutions, such as valet parking, off-site parking, etc., may, in certain situations, also be appropriate.

[2] Planning Board authority. The Planning Board shall be authorized to reduce parking requirements for a given use, based upon a finding that any portion of the off-street parking requirements of a waterfront development have been satisfied when the applicant establishes to the Board's satisfaction that alternative parking solutions are appropriate and will provide adequate parking for the WD site. If an applicant wishes to use alternative parking methods, he must submit a complete analysis to the Board for review. This analysis must include estimates of peak parking demands for different land uses for different hours of the day and days of the week. It should also define strategies intended to incorporate alternative parking methods and the advantages of such strategies.

[3] Alternative parking methods. Alternative parking methods include the following, and such other methods as the Planning Board deems appropriate, or any combination thereof:

[a] Parking shared among various use elements within the waterfront development. The Planning Board's acceptance of such an alternative parking method shall be based on a professional parking study of the proposed use and the surrounding area that demonstrates that a different amount of parking would be appropriate for the use in its particular location and/or that existing and/or proposed off-site parking is sufficient.

[b] Provision of parking off-site, in private or municipal lots, where appropriate arrangements for such parking can be made.

[c] Valet parking.

(f) Off-street loading. Off-street loading shall be provided as the Planning Board may find appropriate.

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Section 8. Chapter 223 of the City Code of the City of Beacon, Article IVC, Fishkill Creek Development (FCD) Zone, Section 223-41.13, entitled "Uses; plan review; design standards," Subsection I(11) is hereby amended as follows:

§ 223-41.13 **Uses; plan review; design standards.**

…

I. Fishkill Creek development design standards.

…

(11) Off-street parking and loading.

…

(b) ~~Parking requirements.~~ The FCD District parking ~~requirements~~ shall be in accordance with § 223-26 of this chapter~~, except that the requirements in § 223-26F shall be both the minimum and maximum requirements for a FCD project~~.

~~(c) With respect to any building, structure or use for which the required number of parking spaces is not specifically set forth in § 223-26F of this chapter, the Planning Board, in the course of site plan review, shall determine the number of off-street parking spaces required, which number shall bear a reasonable relation to the minimum off-street parking requirements for specified uses as set forth in the above schedule.~~

~~(d) Up to 20% of the required parking may be designated for compact automobiles at the discretion of and in accordance with standards as determined by the Planning Board.~~

~~(e) Off-street loading shall be provided as the Planning Board may find appropriate.~~

Section 9. Chapter 223 of the City Code of the City of Beacon, Article IVD, Central Main Street (CMS) District, Section 223-41.18, entitled "Regulations," Subsections A and G are hereby amended as follows:

§ 223-41.18 **Regulations.**

A. Uses by right. The uses listed below are permitted by right in the CMS District, in the manner and under the conditions specified below. Unless otherwise indicated in this § 223-41.18, all such uses require site development plan review and approval. Site development plan review shall not be required for a change of use in an existing building where the new use is allowed by right, the building will not be expanded, and the ~~minimum~~ maxiumum

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number of off-street parking spaces required for the new use in § 223-41.18G(2) is not more than 25% greater than the ~~requirement~~ maximum standard for the existing use in § 223-26DF~~F~~ herein.

...

G. Parking location and quantity.

...

(2) ~~The minimum quantity of required on-site parking spaces shall be as follows~~Parking shall be in accordance with § 223-26~~, except that the maximum parking standards for the following uses in the CMS District are as follows~~:

~~(a) Residential: one space per unit.~~

~~(b) Office and nonretail commercial: two spaces per 1,000 square feet of floor area.~~

~~(c) Retail commercial and personal services: two spaces per 1,000 square feet of floor area.~~

~~(d) Other uses: as determined to be appropriate by the Planning Board in the course of site plan review, or in the case of a new use where site plan review is not required under § 223-41.18A, as determined by the Building Inspector in consultation with the City Planner.~~

(3) The ~~requirements~~ maximum standards in ~~Subsection G(2) above or~~ § 223-26 may be modified by the Planning Board, in its discretion, based upon information submitted by the applicant or otherwise made available in the public record, demonstrating one or more of the following:

(a) That the projected operational characteristics of the proposed use require a different amount of parking.

(b) That adequate shared parking, contractually obligated for the duration of the proposed use, is available within 500 feet of the site and within the CMS or PB District.

(c) That the applicant has provided sufficient bicycle parking to reduce anticipated vehicular travel demand.

(d) That there is sufficient public parking available within 800 feet of the site and within the CMS or PB District to meet foreseeable parking needs of the proposed use and surrounding uses for the duration of the proposed use.

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(e) That the applicant will voluntarily dedicate land for public parking on site or will acquire land by purchase or long-term lease (for the duration of the proposed use) within 800 feet of the site and within the CMS or PB District and voluntarily dedicate such land to the City for public parking.

(f) That a professional parking study of the proposed use and the surrounding area demonstrates that a different amount of parking would be appropriate for the use in its particular location and/or that existing and/or proposed off-site parking is sufficient.

(g) The application involves a designated historic property as defined in Chapter 134 of the City Code.

~~(4) For lots of 8,000 square feet or less, where the provision of on-site parking is infeasible, the Planning Board may waive all parking requirements, provided that the total floor area of the building is no greater than 5,000 square feet.~~

~~(5) Section 223-26B of this chapter shall apply in the CMS District.~~

Section 10. Chapter 223 of the City Code of the City of Beacon, Article IVE, Linkage District (L), Section 223-41.21, entitled "Regulations," Subsections A and F are hereby amended as follows:

§ 223-41.21 **Regulations.**

A. Uses by right. Uses listed below in this Subsection A are permitted by right subject to site plan review, except as otherwise noted in this § 223-41.21. Site plan review shall not be required for a change of use in an existing building where the new use is allowed by right, the building will not be expanded, and the ~~minimum~~ maximum number of off-street parking spaces ~~required~~ for the new use in § 223-41.21F(2) is not more than 25% greater than the ~~requirement~~ maximum standard for the existing use in § 223-26D~~F~~ herein. The following uses are allowed by right subject to a requirement that for any new construction of a principal building, an apartment use or attached, semidetached, or multifamily dwelling unit shall only be located on the upper stories or at least 50 feet behind the facade in the rear portion of the ground floor, if the building faces the north side of Beekman Street between Route 9D and West Main Street, faces the north side of West Main Street, or if the parcel is within 400 feet of the Route 9D-Beekman Street intersection, as identified on the Zoning Map:

…

F. Parking location and quantity.

…

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(2) ~~The minimum quantity of required on-site parking spaces shall be as follows~~Parking shall be in accordance with § 223-26~~, except that the maximum parking standards for the following uses in the L District are as follows~~:

~~(a) Residential: one space per unit.~~

~~(b) Office and general commercial: 2.5 spaces per 1,000 square feet of floor area.~~

~~(c) Retail commercial and personal services: three spaces per 1,000 square feet of floor area.~~

~~(d) Other uses: as determined to be appropriate by the Planning Board in the course of site plan review, or in the case of a new use where site plan review is not required under § 223-41.21A, as determined by the Building Inspector in consultation with the City Planner~~as listed in § 223-26 of this chapter.

(3) The ~~quantity of required on-site parking~~maximum standards in ~~Subsection F(2) above or~~ § 223-26 may be modified by the Planning Board, in its discretion, based upon information submitted by the applicant or otherwise made available to the Planning Board in the public record, demonstrating one or more of the following:

~~(e)~~(a) That the projected operational characteristics of the proposed use and/or its proximity within walking distance of the train station and other services justify a reduction in the required amount of parking.

~~(f)~~(b) That adequate shared parking, contractually obligated for the duration of the proposed use, is available within 500 feet of the site and in the L District.

~~(g)~~(c) That the applicant has provided sufficient bicycle parking to reduce anticipated vehicular travel demand, as supported by a professional parking study.

~~(h)~~(d) That there is sufficient public parking available within 800 feet of the site and in the L District to meet foreseeable parking needs of the proposed use and surrounding uses for the duration of the proposed use.

~~(i)~~(e) That the applicant will voluntarily dedicate land for public parking on site or will acquire land by purchase or long-term lease (for the duration of the proposed use) within 800 feet of the site and in the L District and voluntarily dedicate such land to the City for public parking.

~~(j)~~(f) That a professional parking study of the proposed use and the surrounding area demonstrates that a different amount of parking would be

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appropriate for the use in its particular location and/or that existing and/or proposed off-site parking is sufficient.

~~(4) For small preexisting lots where the provision of on-site parking is infeasible, the Planning Board may waive up to 50% of the parking requirements, provided that the total floor area of the building is no greater than 3,000 square feet. The Planning Board may grant additional parking waivers, at its discretion, subject to an in-lieu payment of $10,000 per parking space.~~

~~(5) Section 223-26B of this chapter shall not apply in the L District.~~

Section 11. Chapter 223 of the City Code of the City of Beacon, Article IVF, Senior Affordable Housing Overlay (SAHO) District, Section 223-41.22, entitled "Specific requirements and regulations," Subsection E(1) is hereby amended as follows:

§ 223-41.22 **Specific requirements and regulations.**

…

E. Supplementary site regulations.

(1) Parking~~ ratio~~. ~~Unless modified by the City Council in its zoning designation or special permit, parking spaces shall be provided at the ratio of 1.2 spaces per dwelling unit. The 0.2 fractional space shall be accumulated for staff and visitors~~Off-street parking shall be in accordance with § 223-26.

…

Section 12. Chapter 223 of the City Code of the City of Beacon, Article VI, Definitions and Word Usage, Section 223-63, entitled "Definitions," is hereby amended as follows:

…

LOADING SPACE
Any off-street space available for the loading or unloading of goods and complying with the ~~requirements~~ provisions specified in § 223-26 of this chapter.

…

PARKING SPACE
An off-street space available for the parking of one motor vehicle on a transient basis and complying with the ~~requirements~~ provisions specified in § 223-26 of this chapter.

…

Section 13. Ratification, Readoption and Confirmation.

Except as specifically modified by the amendments contained herein, Chapter 223 of the City of Beacon Zoning Code is otherwise to remain in full force and effect and is otherwise ratified, readopted and confirmed.

Section 14. Numbering for Codification.

It is the intention of the City of Beacon and it is hereby enacted that the provisions of this Local Law shall be included in the Code of the City of Beacon; that the sections and subsections of this Local Law may be re-numbered or re-lettered by the Codifier to accomplish such intention; that the Codifier shall make no substantive changes to this Local Law; that the word "Local Law" shall be changed to "Chapter," "Section" or other appropriate word as required for codification; and that any such rearranging of the numbering and editing shall not affect the validity of this Local Law or the provisions of the Code affected thereby.

Section 15. Severability.

The provisions of this Local Law are separable and if any provision, clause, sentence, subsection, word or part thereof is held illegal, invalid or unconstitutional, or inapplicable to any person or circumstance, such illegality, invalidity or unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, subsections, words or parts of this Local Law or their petition to other persons or circumstances. It is hereby declared to be the legislative intent that this Local law would have been adopted if such illegal, invalid or unconstitutional provision, clause, sentence, subsection, word or part had not been included therein, and if such person or circumstance to which the Local Law or part hereof is held inapplicable had been specifically exempt there from.

Section 16. Effective Date.

This local law shall take effect immediately upon filing with the Office of the Secretary of State.

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Colliers
Engineering
& Design

Appendix

Appendix C | ITE Parking Data

Land Use: 841 Automobile Sales (Used)

Description

A used automobile sales dealership is typically located along a major arterial street characterized by abundant commercial development. The sale or lease of used cars is the primary business at these facilities. Automobile servicing and parts sales may also be available. The dealerships may also provide truck sales and servicing.

Time-of-Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday at 13 study sites in a general urban/suburban setting.

Hour Beginning	Percent of Weekday Peak Parking Demand
12:00–4:00 a.m.	—
5:00 a.m.	—
6:00 a.m.	—
7:00 a.m.	—
8:00 a.m.	14
9:00 a.m.	45
10:00 a.m.	69
11:00 a.m.	90
12:00 p.m.	79
1:00 p.m.	79
2:00 p.m.	75
3:00 p.m.	92
4:00 p.m.	93
5:00 p.m.	100
6:00 p.m.	62
7:00 p.m.	32
8:00 p.m.	13
9:00 p.m.	—
10:00 p.m.	—
11:00 p.m.	—

Additional Data

The sites were surveyed in the 2010s in Texas.

Source Numbers

565, 566

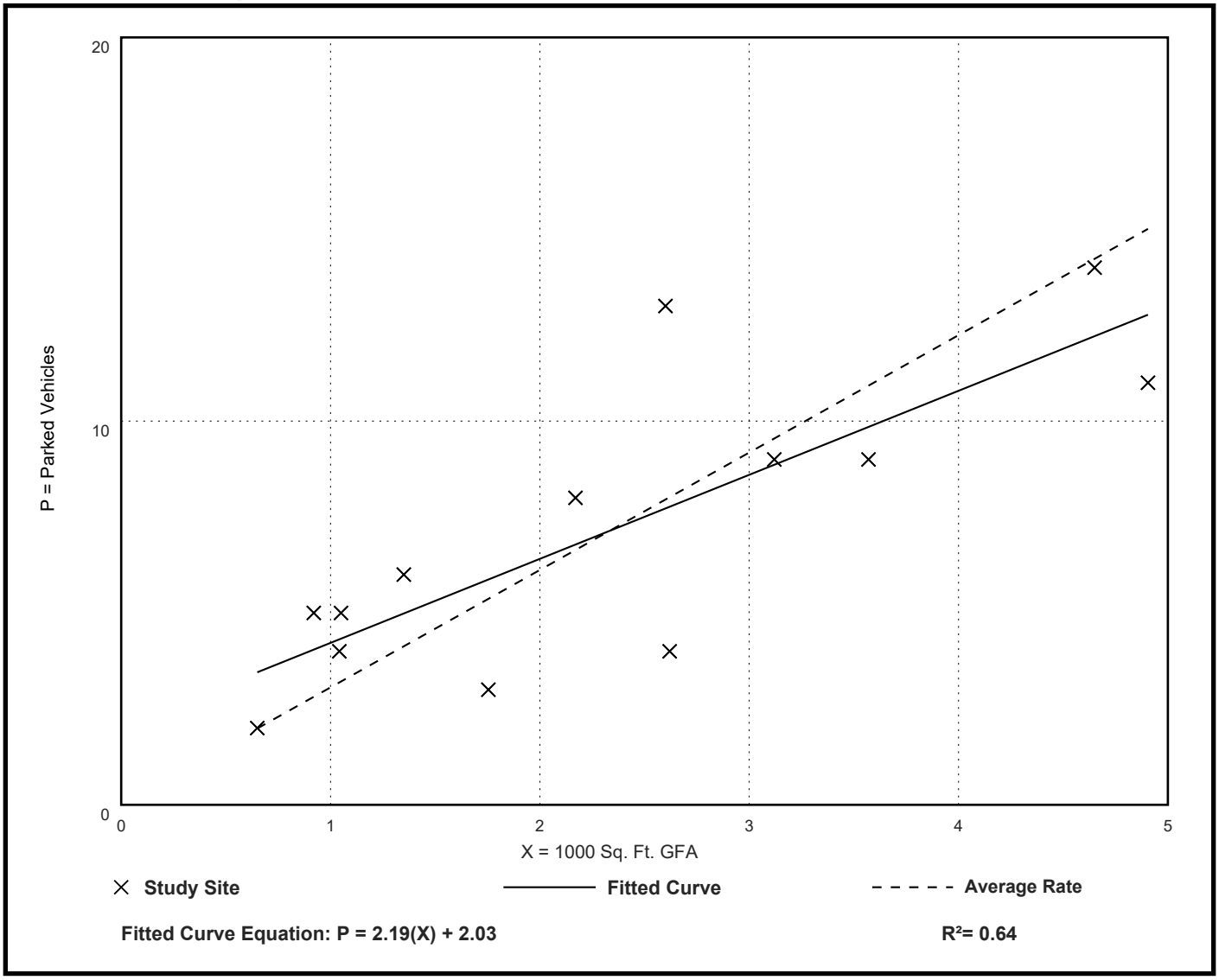
Automobile Sales (Used)
(841)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban
Number of Studies: 13
Avg. 1000 Sq. Ft. GFA: 2.3

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
3.06	1.53 - 5.43	2.75 / 4.98	***	1.13 (37%)

Data Plot and Equation



Fitted Curve Equation: P = 2.19(X) + 2.03

R^2= 0.64

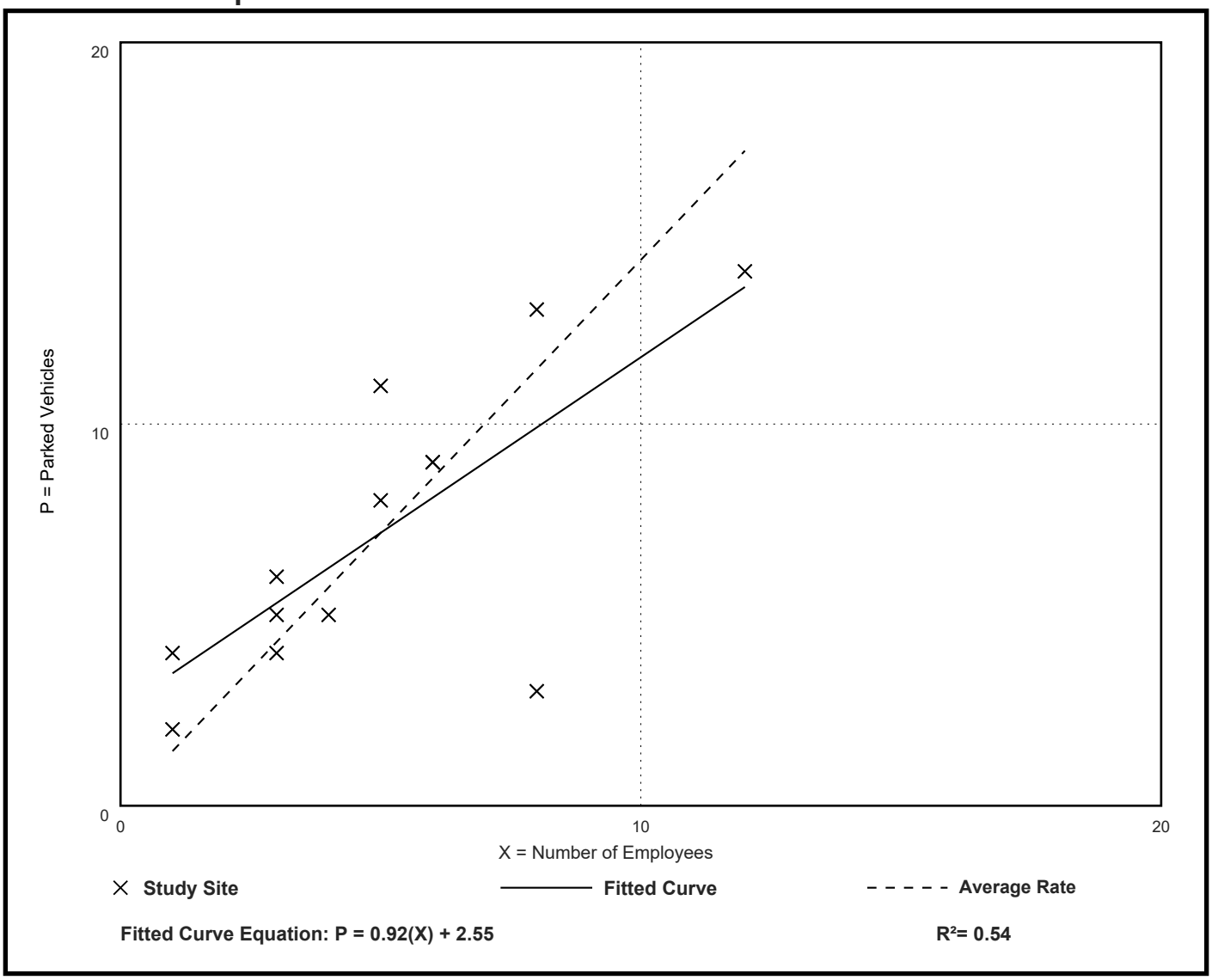
Automobile Sales (Used)
(841)

Peak Period Parking Demand vs: Employees
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban
Number of Studies: 13
Avg. Num. of Employees: 5.0

Peak Period Parking Demand per Employee

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.43	0.38 - 4.00	1.44 / 2.18	***	0.60 (42%)

Data Plot and Equation



Fitted Curve Equation: P = 0.92(X) + 2.55

R^2= 0.54

Colliers
Engineering
& Design

Appendix

Appendix D | Car Hauler Turning Diagram

PROPOSED POLE MOUNTED LIGHT (TYP.) SEE LIGHTING EXHIBIT FROM RC LURIE COMPANY

PROPOSED SNOW STORAGE AREA (DRAINS TO EXISTING CATCH BASIN ALONG FISHKILL AVENUE)

PROPOSED 15' X 140' LOADING ZONE. AREA TO BE STRIPED 24" WIDE BARS AT 45° ANGLE, 4 FEET ON CENTER WITH WORDING "NO PARKING – LOADING ZONE" (PER PREVIOUSLY APPROVED SITE PLAN)

PROPOSED CONCRETE WHEEL STOP (TYP.)

CUSTOMER VEHICLE STAGING

CUSTOMER EXPERIENCE EXIT

CUSTOMER ENTRANCE

PROPOSED 32" X 64" PLANTER SEE PLANTER DETAIL (TYP.)

PROPOSED SEVEN (7) CURB–SIDE PICK UP EVENT PARKING SPACES (USE EXISTING STRIPED SPACES INCLUDING ONE (1) ADA ACCESSIBLE PARKING SPACE

PROPOSED BUILDING MOUNTED LIGHT (TYP.) SEE LIGHTING EXHIBIT FROM RC LURIE COMPANY

EXISTING OVERHEAD DOORS (TYP.)

DETAIL BAY & CUSTOMER EXPERIENCE ACCESS

EXISTING 5 POLE MOUNTED LIGHTS–EQUIPPED WITH ONE LIGHT HEAD EACH

ADDITIONAL EMPLOYEE PARKING AND VEHICLE STORAGE

APPROXIMATE LOCATION SOLAR INVERTERS

APPROXIMATE EXISTING BUILDING MOUNTED LIGHT

APPROXIMATE EXISTING 2 BUILDING MOUNTED LIGHTS

1 Story Concrete Block Building No. 394

1 Story Stucco, Metal & Glass Building No. 410

2 Story Metal Building

Concrete Block Wall

1 Story Concrete Block

Conklin St

CONKLIN STREET

Fishkill Ave

FISHKILL AVENUE

Formerly New York, New Haven and Hartford Railroad

40 0 40

SCALE : 1" = 40'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

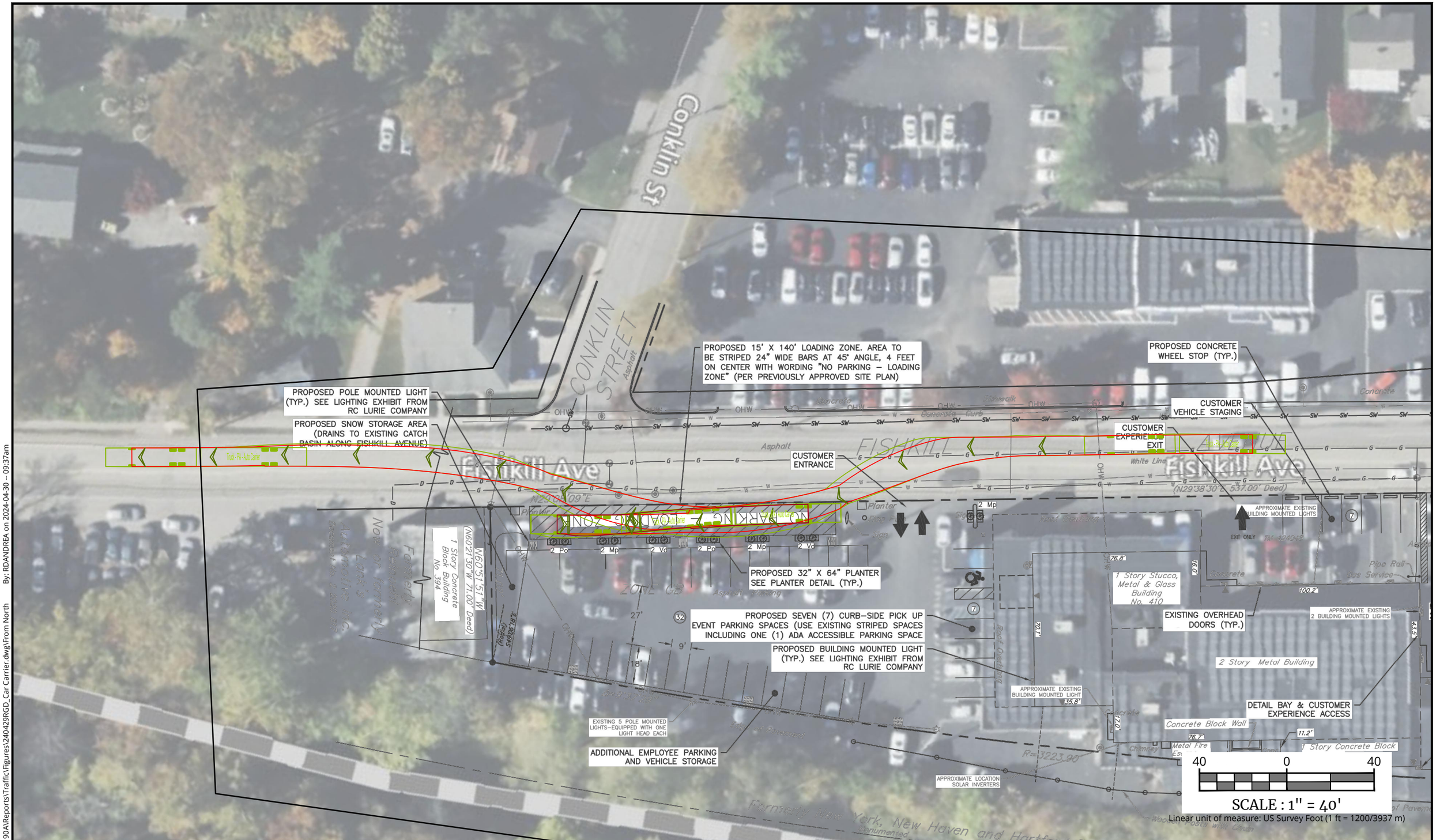
R:\Projects\2024\24004190A\Reports\Traffic\Figures\240429RGD_Car Carrier.dwg\From South - 09:37am By: RDANDREA on 2024-04-30

Colliers Engineering & Design

CARVANA	PARKING & ACCESS ASSESSMENT
410 FISHKILL AVENUE	24004190A
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK	4/30/2024

CAR HAULER
ARRIVAL FROM THE SOUTH
DEPARTURE TO THE NORTH

FIGURE NO. 1



Colliers Engineering & Design	CARVANA 410 FISHKILL AVENUE CITY OF BEACON, DUTCHESS COUNTY, NEW YORK	PARKING & ACCESS ASSESSMENT 24004190A 4/30/2024		CAR HAULER ARRIVAL FROM THE NORTH DEPARTURE TO THE SOUTH FIGURE NO. 2

R:\Projects\2024\24004190A\Reports\Traffic\Figures\240429RGD_Car Carrier.dwg\From North By: RDANDREA on 2024-04-30 – 09:37am

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
www.HudsonLandDesign.com

April 30, 2024

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

Re: Carvana – Application for Site Plan and Special Use Permit Approvals
410 Fishkill Avenue, City of Beacon, New York
Tax Parcels: 6055-80-424048
6055-80-439071
±1.373 acres total

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) is pleased to submit five (5) copies of the following documents in support of the Project:

- Civil Site Plan Set (Sheets 1 through 3 of 3)
- Lighting Exhibit
- As-Built Floor Plans
- Floor Use Exhibit
- Inflow & Infiltration Study
- Vehicular Access and Circulation Report by Colliers Engineering & Design

These items have been updated in response to comments from the Planning Board and from the City's consultants for the Planning Board's continued review and consideration of the Application at this Board's May 14, 2024 meeting. The following are point-by-point responses to each comment contained within the letters prepared by the City's consultants:

Lanc & Tully Review Letter, Dated April 3, 2024:

General Comments:

1. An inflow and infiltration study is attached. Floor drains in the garage bay sections of the building were found to connect to the manhole in front of the north end of the building, with an apparent connection to the sanitary main in Fishkill Avenue.
2. Water, sanitary sewer, and gas service connections have been verified and are shown on Sheet XC-1.

3. Parking spaces have been adjusted and a drive lane has been provided along the building to access the exit only directly in front of the "dispensing bay." See revised parking on Sheet SP-1.
4. Existing parking striping was shown across the right-of-way line. This striping is to be removed and is no longer shown on Sheet SP-1.
5. A note has been added to Sheet SP-1 stating that the Applicant shall apply for and obtain permits for signage from the building department prior to any signs being installed on the site.
6. Please see revised plans with traffic flow more clearly defined. Customers are welcomed to enter the site at the main entrance/exit in the southern portion of the site where 7 customer parking spaces are available to them. Customers picking up a vehicle will then be welcomed into the main lobby and out to the single car display bay in which they will receive their vehicle and exit out of the exit only drive. Activities taking place in the northern portion of the site are limited to Carvana employee activities (ie. intaking vehicles into the detail bays and loading vehicles onto the single haulers for deliveries). As such Carvana will provide signage and wayfinding to ensure this is clear to our customers.
7. Please see updated plans noting all repairs will be limited to what is required for state inspections including but not limited to the inspection, repair or replacement of seat belts, breaks, steering, front end, suspension, chassis, frame and wheel fasteners, tires, lights, windshields and other glass, windshield wipers and blades, horns, mirrors, and emissions inspections. These services will not be open to the public and will be conducted solely for Carvana vehicles. A note has been added to Sheet SP-1 stating that vehicle service is limited to inspections and detail and is not open to the public.
8. As the Applicant discussed with the Planning Board at its April 9th meeting Agenda, the Applicant met with representatives of MTA Metro-North (the "MTA") at the Premises on April 5, 2024 to review the conditions in the field. The Applicant's attorney remains in contact with representatives from MTA's Real Estate Department regarding the process to memorialize any pertinent agreement(s) related to the Premises and MTA's property, which the MTA is in the process of abandoning. These communications include recent correspondence from MTA dated April 30, 2024, regarding same. The Applicant will continue to work with the MTA and will keep the Board and City Staff apprised of any updates.
9. See attached revised lighting plan from RC Lurie.

KARC Planning Consultants, Inc. Review Letter, Dated April 4, 2024:

1. Parking Layout & Circulation.
    - Haulers will unload in the "No Parking Loading Zone" - the length of this area is in excess of the length of our 9 car hauler's providing 10-15 feet of additional space for a vehicle to be unloaded and parked in the lot behind the planters. The planters are spaced so that vehicles unloaded can be driven around them on each end of the Loading zone.
    - Noted. The plan has been adjusted, please see updated plan which provides for a more clearly defined drive isle.
2. Noted. Please see the attached floor plans. Carvana's use of the building is concentrated in the existing bays and customer lobby of the existing building. The revised Site Plan has a total of 63 parking spaces including the 7 car hauler spaces. Carvana is currently seeking a variance of the Beacon Zoning Board for parking spaces.
3. Noted.
4. Lighting Plan.

- The proposed lights are full cutoff on the horizontal plan. A note has been added to Sheet SP-1.
- Site lighting is proposed to be on from dusk to dawn for security purposes. Lighting will be controlled using a timer.
- The proposed lights are 4000K color temperature as specified in the 40K in the light models.
- See attached revised lighting plan from RC Lurie.
- See attached revised lighting plan from RC Lurie.

5. As the Applicant discussed with the Planning Board at its April 9th meeting Agenda, the Applicant met with representatives of MTA Metro-North (the "MTA") at the Premises on April 5, 2024 to review the conditions in the field. The Applicant's attorney remains in contact with representatives from MTA's Real Estate Department regarding the process to memorialize any pertinent agreement(s) related to the Premises and MTA's property, which the MTA is in the process of abandoning. These communications include recent correspondence from MTA dated April 30, 2024, regarding same. The Applicant will continue to work with the MTA and will keep the Board and City Staff apprised of any updates.
6. Acknowledged.

We look forward to continuing our discussions regarding this Application at your May 14, 2024, Planning Board meeting. Should you have any questions, please feel free to contact me at my direct line 845-766-8955.

Sincerely,

Daniel G. Koehler, P.E.
Principal

cc: Jenn Roldan, Sr. Project Manager, Development, Carvana LLC, Applicant (via email)
DKH Realty, LLC, Owner (via email)
Michael A. Bodendorf, P.E. (HLD file)
DKH Realty, LLC (via email)
Taylor M. Palmer, Cuddy & Feder LLP (via email)

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:

Carvana - Application for Amended Site Plan and Special Use Permit Approvals

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

410 Fishkill Ave, Beacon New York (Tax Parcel #: 6055-80-424048 & 6055-80-439071)

Brief Description of Proposed Action:

The project proposes continued use of vehicle sales. Healey Hyundai recently vacated the premises, and Carvana is seeking to lease the property for a vehicle sales use but at a much reduced scale. Vehicle purchases are completed online, and this facility will be used as a transaction point where the customer may pick the vehicle up (there is an option to have the vehicle delivered directly to the customer, thereby bypassing use of this facility for pick up). The scheduled pick up events typically last 15 minutes, and take place during normal business hours. Carvana will not be conducting retail service/repair operations. Carvana is proposing to utilize existing repair bays for detailing and readying purchased vehicles for pick up, including state inspection activities. These operations are exclusively for Carvana's use and will not be open to the public.

Name of Applicant or Sponsor:	Telephone: 602-403-9140
Carvana, LLC	E-Mail: jennifer.roldan@carvana.com

Address:

300 East Rio Salada Parkway

City/PO:	State:	Zip Code:
Tempe	AZ	85281

	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 Building Permit; City of Beacon ZBA: Area Variance for Parking	☐	☑

3. a. Total acreage of the site of the proposed action? 1.373 acres
   b. Total acreage to be physically disturbed? 0 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 1.373 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): Railroad
   ☐ 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: _____ Will continue use of existing service line from municipal water main. _____	☐	☑

	NO	YES
11. Will the proposed action connect to existing wastewater utilities?		
If No, describe method for providing wastewater treatment: _____ Will continue use of existing service line from municipal sewer main. _____	☐	☑

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

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

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

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

☐ Wetland ☑ Urban ☑ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Indiana Bat	☐	☑
16. Is the project site located in the 100-year flood plan?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☐	☑
If Yes, a. Will storm water discharges flow to adjacent properties?	☐	☑
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☑
If Yes, briefly describe: Some site runoff will be captured by State drainage system in Fishkill 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)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	☑	☐

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: 4/16/2024; revised 4/30/2024

Signature: Title: Consulting 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]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
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]	No

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
www.HudsonLandDesign.com

April 30, 2024

Mr. Bruce Flower
City of Building Inspector
1 Municipal Center
Beacon, NY 12508

Re: Infiltration and Inflow Investigation – 410 Fishkill Ave
Carvana Site Plan
City of Beacon, New York
Tax ID: 6055-80-424048
6055-80-439071

Dear Mr. Flower,

Hudson Land Design (HLD) has completed an infiltration and inflow investigation (I&I) at the above referenced parcels as required by the City of Beacon. The investigation was conducted on April 26, 2024 at the existing building located at 410 Fishkill Avenue. The building consists of a 2-story automobile dealership. The majority of the first floor consists of garage bays and showroom floor space. The second floor is mostly offices and storage.

The first phase of the study consisted of an exterior inspection of the building to determine the location of roof leader discharge points. The building at 410 Fishkill Avenue has a flat roof with interior drains, scuppers, and gutter along the rear of the building. Runoff travels via nine downspouts to existing surface grade or through pipes discharging to the slope behind the building.

The second phase of the study consisted of interior inspection of the building to determine if there are any illicit connections to the building sewer line from sump pumps, floor drains and the like. At 410 Fishkill Avenue HLD personnel located two floor drains, one in the north garage bay area and one in the central garage bay area. The floor drains appear to be connected to the City's sanitary system through the manhole in front of the northern garage bay doors.

Exhibit 1-6: View of building rear where gutter and downspouts can be seen.

Exhibit 7-8: View of floor drain in the garage bay areas.

Based on our observations, HLD believes that the floor drains at 410 Fishkill Avenue are connected to the building's sanitary line. Vehicle detailing and inspection services will occur in the garage bay areas, requiring a connection to the City's sanitary sewer system for proper drainage. The floor drains will remain connected. Notes have been added to the plans detailing maintenance and cleanout of the floor drains as follows:

- Floor drains in the garage bay areas will be inspected and cleaned every 6 months, or more frequently if necessary.

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

Sincerely,

Daniel G. Koehler, P.E.
Principal

cc: Carvana LLC (via email)
Michael A. Bodendorf, P.E. (HLD file)

Luminaire Schedule							
Symbol	Qty	Label	LLF	Arrangement	Description	Watts	MTG HT
	3	E1A	0.950	Single	NV-1-T4-32L-7-40K7-HSS-SINGLE	71	20
	1	E2A	0.950	Back-Back	NV-1-T5-16L-1-40K-TWIN	56	20
	3	N1A	0.950	Single	NV-1-T5-16L-1-40K-SINGLE	56	20
	10	WM-B	0.950	Single	NV-W-T4-16L-7-40K-WALL	37	15
	2	WM-A	0.950	Single	NV-W-T3-16L-7-40K-WALL	37	15

CARVANA - DATE: 03/22/24

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
RAILROAD PROP LINE	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.
SITE CALCS	Illuminance	Fc	1.70	9.1	0.0	N.A.	N.A.
STREET PROP LINE	Illuminance	Fc	0.16	0.4	0.0	N.A.	N.A.
MAIN LOT	Illuminance	Fc	1.57	5.7	0.2	7.85	28.50

CONKLIN ST

FISHKILL AVENUE

Asphalt

Concrete

Sidewalk

Concrete Curb

MH

White Line

Drop Inlet

Hyd. with bollards

Planter

Flag Pole

Sign

Roof Overhang

1 Story Stucco, Metal & Glass Building No. 410

Concrete

Gas Service

Pipe Rail

Asphalt Parking

ZONE GB

1 Story Concrete Block Building No 394

Formerly Reinoehl Now or formerly Lank's Automotive Inc.

Formerly Brownell & Brownell Now or formerly DKH Realty LLC

Lot 3

Lot 2

Lot 1

Story Metal Building

Storage

Brick & Concrete Block

Garage Area

Edge of Pavement

Formerly New York, New Haven and Hartford Railroad Co., formerly Con Rail Corporation

Now or formerly Metro-North Commuter Railroad

Centerline

Railroad

Monument

Rip Rap

Roof Overhang

Roof Leader

Wires (Typical)

536.96'

136.44'

L=541.56'

L=541.60' Deed)

N60°51'51"W 71.00' Deed)

S60°51'51"E 136.38' Deed)

N58°43'47"W (Radial)

S58°43'47"E (Radial)

N38°08'09"E

N38°38'30"E 537.00' Deed)

S39°09'37"E

E1A MH: 20

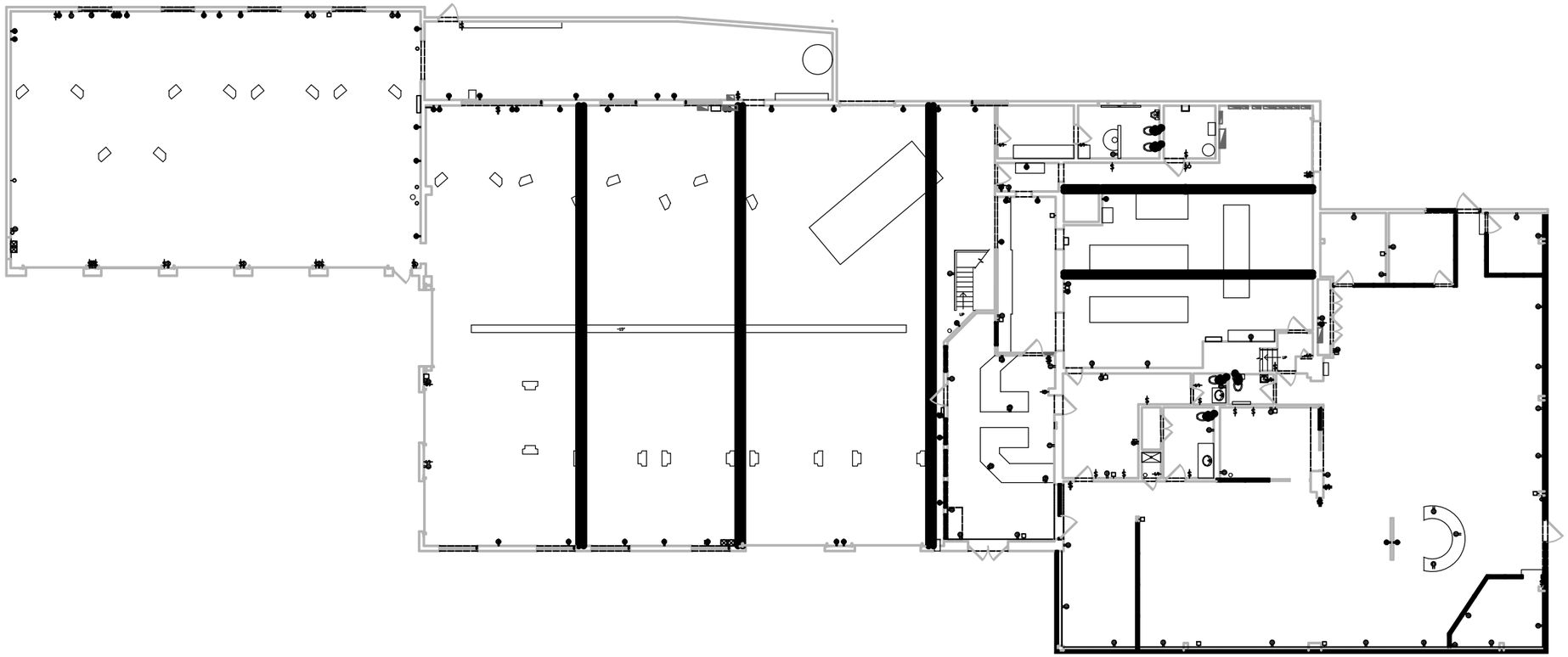
E2A MH: 20

N1A MH: 20

WM-B MH: 15

WM-A MH: 15

LIGHTING EXHIBIT
MARCH 26, 2024
PREPARED BY RC LURIE COMPANY



FIRST FLOOR PLAN (+/-16,760 SQ. FT.)

SCALE NTS

1

Platt360
An As-Built Provider

1302 Key Peninsula HWY #113
Lakebay, WA 98349

TEL 518-694-1000

www.platt360.com

CARVANA

McIntosh

REVISIONS:

CLIENT:
The McIntosh Group

TITLE:
Carvana
410 Fishkill Ave,
Beacon, NY 12508

LOCATION:
Beacon, NY

DRAFTED BY:
A.VanAlstine

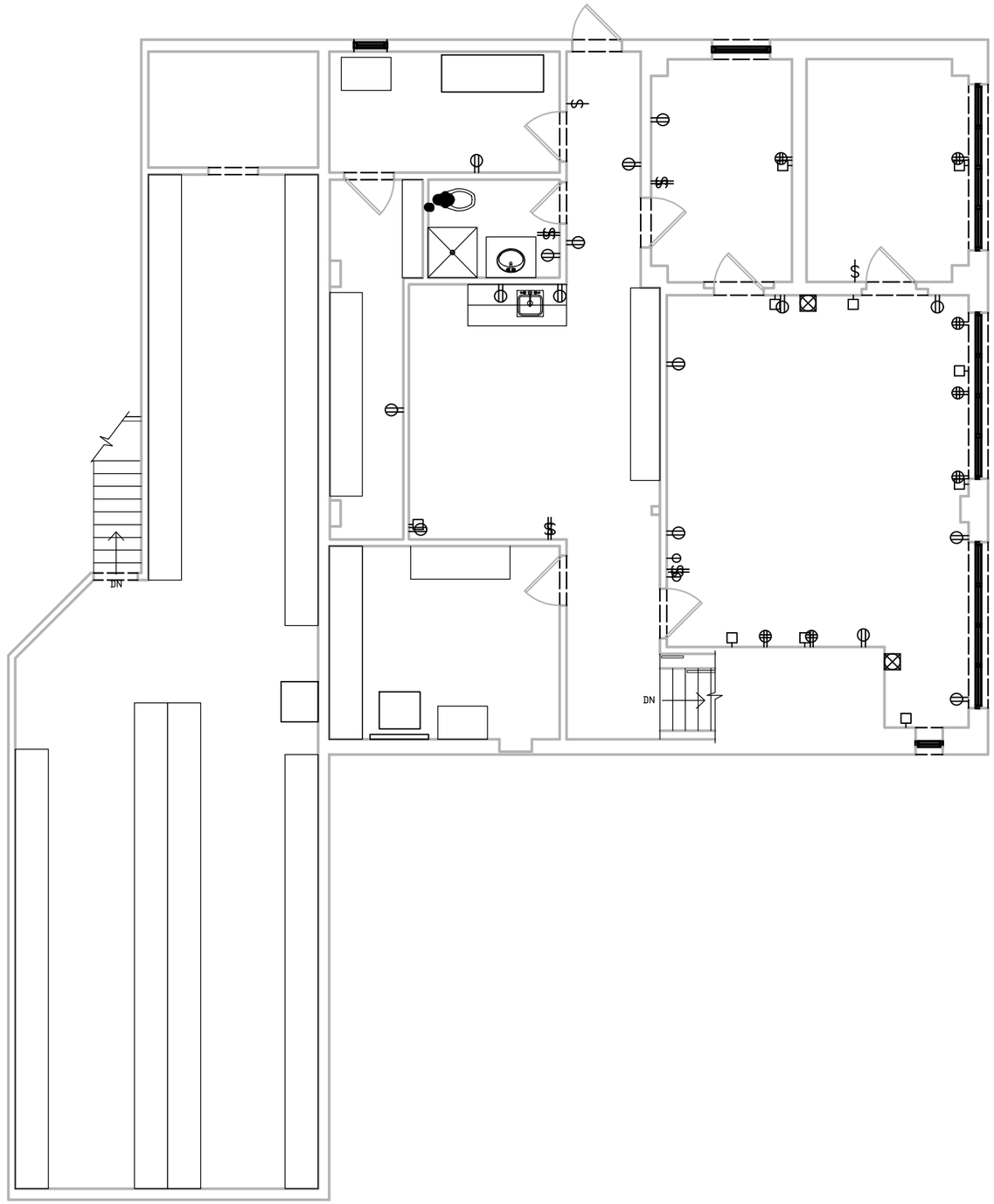
PROJECT MANAGER:
B. Fields

DATE:
09-28-2023

DRAWING NUMBER:
A200

PAGE: **4** OF: **5**

First Floor Plan



SECOND FLOOR PLAN (+/-2,828 SQ. FT.)

SCALE NTS 1

Platt360
An As-Built Provider

1302 Key Peninsula HWY #113
Lakebay, WA 98349

TEL 518-694-1000

www.platt360.com

CARVANA

McIntosh

REVISIONS:

CLIENT:
The McIntosh Group

TITLE:
Carvana
410 Fishkill Ave,
Beacon, NY 12508

LOCATION:
Beacon, NY

DRAFTED BY:
A.VanAlstine

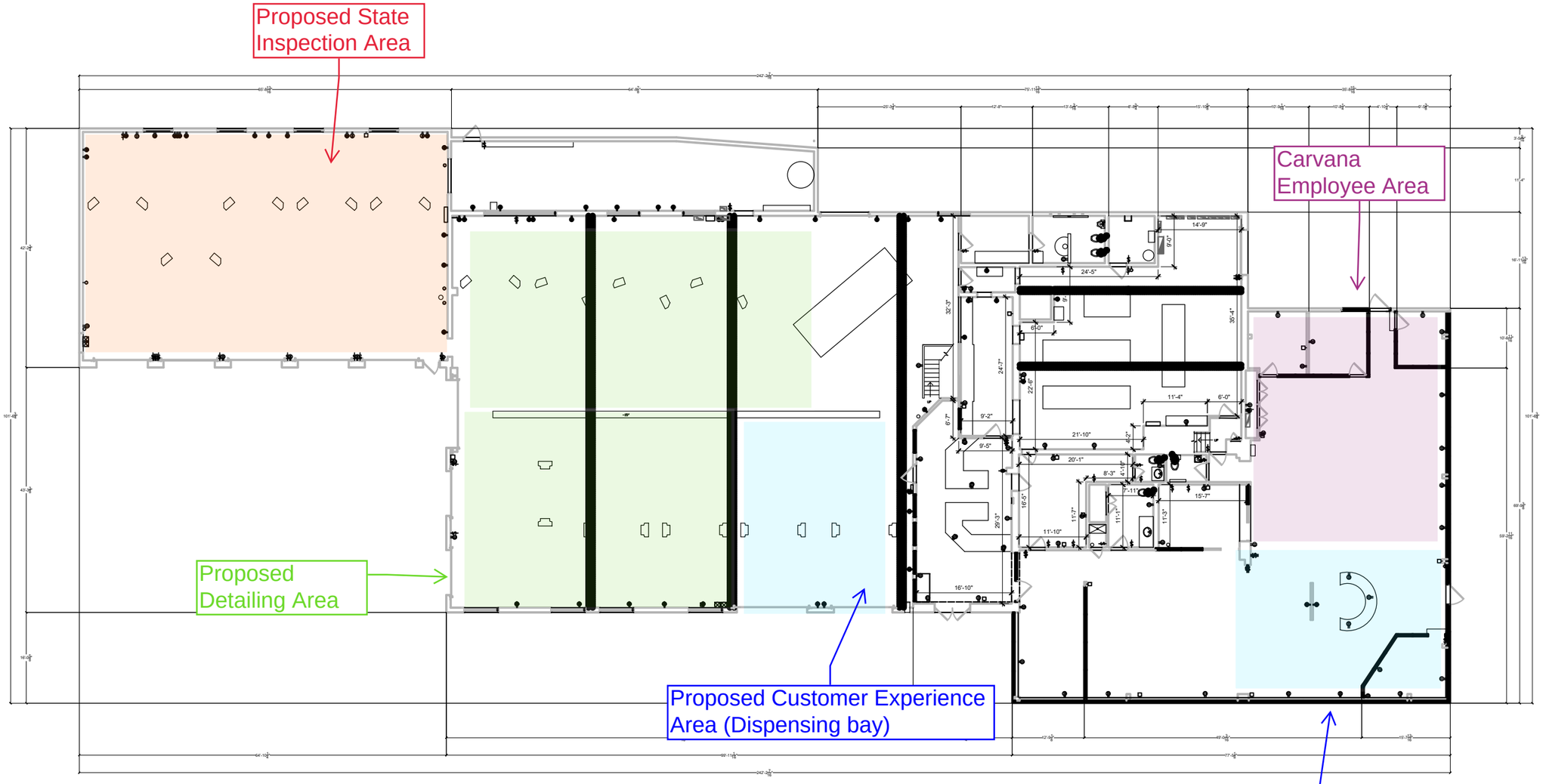
PROJECT MANAGER:
B. Fields

DATE:
09-28-2023

DRAWING NUMBER:
A201

PAGE: **5** OF: **5**

Second Floor Plan



FIRST FLOOR PLAN (+/-16,760 SQ. FT.)

SCALE NTS 1

Platt360
An As-Built Provider

1302 Key Peninsula HWY #113
Lakebay, WA 98349

TEL 518-694-1000

www.platt360.com

CARVANA

McIntosh

REVISIONS:

CLIENT:
The McIntosh Group

TITLE:
Carvana
410 Fishkill Ave,
Beacon, NY 12508

LOCATION:
Beacon, NY

DRAFTED BY:
A.VanAlstine

PROJECT MANAGER:
B. Fields

DATE:
09-28-2023

DRAWING NUMBER:
A200

PAGE: **4** OF: **5**

First Floor Plan

CARVANA

SITE DEVELOPMENT

410 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

PARCEL INFORMATION:
TAX ID: 6055-80-424048 & 6055-80-439071
TOTAL LOT AREA: ±1.373 ACRES
ZONING DISTRICT: GB (GENERAL BUSINESS)

SITE LOCATION MAP SCALE: 1" = 400'

ADJOINING OWNERS WITHIN 200':

PARCEL: OWNER & ADDRESS
1. LAURIE GONZALEZ, 14 MEAD AVE, BEACON NY 12508
2. HOWARD BANICK, 18 MEAD AVE, BEACON NY 12508
3. AUDREY HENDERSON, 22 MEAD AVE, BEACON NY 12508
4. AARON YERKS, 26 MEAD AVE, BEACON NY 12508
5. BRENT STAPLETON, 30 MEAD AVE, BEACON NY 12508
6. PETER NETTLETON, 34 MEAD AVE, BEACON NY 12508
7. JOSEPH POWERS, 40 MEAD AVE, BEACON NY 12508
8. DKH REALTY LLC, PO BOX 859, GOSHEN NY 10924
9. DKH REALTY LLC, PO BOX 859, GOSHEN NY 10924
10. DKH REALTY LLC, 2528 ROUTE 17M, GOSHEN NY 10924
11. 397 FISHKILL AVENUE, LLC., 397 FISHKILL AVE UNIT A, BEACON NY 12508
12. 397 FISHKILL AVENUE, LLC., 397 FISHKILL AVE UNIT A, BEACON NY 12508
13. 393 FISHKILL AVENUE, LLC., 397 FISHKILL AVE UNIT A, BEACON NY 12508
14. JOSHUA KOGAN, 389 FISHKILL AVE, BEACON NY 12508
15. DKH REALTY LLC, 2528 ROUTE 17M, GOSHEN NY 10924
16. DKH REALTY LLC, 2528 ROUTE 17M, GOSHEN NY 10924
17. METROPOLITAN TRANSPORTATION, 2 BROADWAY, NEW YORK NY 10004
18. LANDGROVE REALTY INC, 29 LYDIA DRIVE, BEACON NY 12508
19. LANK'S AUTOMOTIVE INC, 394 FISHKILL AVE, BEACON NY 12508

APPLICANT'S CONSENT:
THE UNDERSIGNED APPLICANT 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.

_____ _____
CARVANA, LLC 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.

DRAWING INDEX:
SHEET 1: COVER SHEET (CV-1)
SHEET 2: EXISTING CONDITIONS PLAN (XC-1)
SHEET 3: SITE PLAN (SP-1)

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

PROPERTY OWNER:
DKH REALTY, LLC
PO BOX 859
GOSHEN, NY 10924
PH: 845-291-1998

APPLICANT:
CARVANA, LLC
300 E RIO SALADA PARKWAY
TEMPE AZ 85281
PH: 602-403-9140

PROJECT SURVEYOR:
BADEY & WATSON SURVEYING & ENGINEERING
3063 ROUTE 9
COLD SPRING NY 10516
PH: 845-265-9217

DRAWN BY: CMB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	3/26/24	PER PLANNING BOARD COMMENTS	CMB				
2	4/30/24	PER PLANNING BOARD COMMENTS	ESR				

STATE OF NEW YORK
DANIEL G. KOGUT
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

COVER SHEET

CARVANA

410 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-424048 & 439071

JOB #:	2024:007
DATE:	2/27/24
SCALE:	AS SHOWN
TITLE:	CV-1
SHEET:	1 OF 3

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

LEGEND

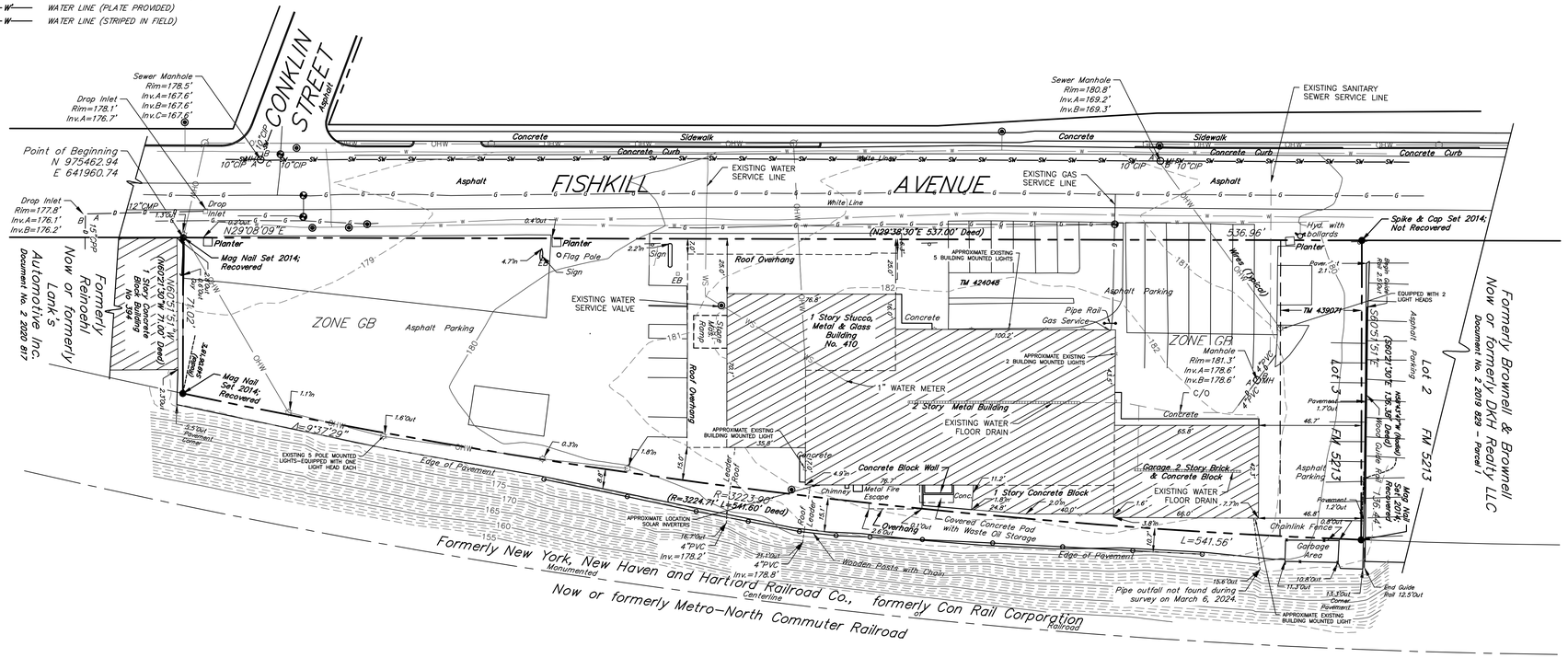
BZ	BOLLARD
350	CONTOUR LINE
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
DIP	DUCTILE IRON PIPE
	FIRE HYDRANT
	GAS VALVE
	GUY
	LAMP
	POLE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
	SIGN (SMALL)
362.8	SPOT ELEVATION
TC217.7 x BC215.9	TOP & BOTTOM OF CURB
TF	TRAFFIC POLE
VT	VETRIFIED CLAY PIPE
WP	WARNING PAD
	WATER VALVE

LEGEND

	FIRE HYDRANT
	GAS VALVE
	LAMP
MH	MANHOLE
	POLE
	WATER VALVE

SUBTERRANEAN

D	DRAINAGE LINE (STRIPED IN FIELD)
G	GAS LINE (STRIPED IN FIELD)
SW	SEWER LINE (STRIPED IN FIELD)
T	TELEPHONE LINE (STRIPED IN FIELD)
W	WATER LINE (PLATE PROVIDED)
W	WATER LINE (STRIPED IN FIELD)


CONKLIN STREET
Asphalt
FISHKILL AVENUE
Asphalt
Concrete
Sidewalk
Concrete Curb
White Line
Point of Beginning
N 975462.94
E 641960.74
Sewer Manhole
Rim=178.5'
Inv.A=167.6'
Inv.B=167.6'
Inv.C=167.6'
Drop Inlet
Rim=178.1'
Inv.A=176.7'
Drop Inlet
Rim=177.8'
Inv.A=176.1'
Inv.B=176.2'
Drop Inlet
EXISTING WATER SERVICE LINE
EXISTING GAS SERVICE LINE
EXISTING SANITARY SEWER SERVICE LINE
Sewer Manhole
Rim=180.8'
Inv.A=169.2'
Inv.B=169.3'
Spike & Cap Set 2014; Not Recovered
Hyd. with bollards
Planter
Mag Nail Set 2014; Recovered
Flag Pole
Sign
EXISTING WATER SERVICE VALVE
Roof Overhang
APPROXIMATE EXISTING 5 BUILDING MOUNTED LIGHTS
TM 424048
TM 439071
Asphalt Parking
Pipe Rail
Gas Service
1 Story Stucco, Metal & Glass Building No. 410
1" WATER METER
2 Story Metal Building
EXISTING WATER FLOOR DRAIN
APPROXIMATE EXISTING 2 BUILDING MOUNTED LIGHTS
APPROXIMATE EXISTING BUILDING MOUNTED LIGHT
Concrete Block Wall
Chimney
Metal Fire Escape
1 Story Concrete Block
Garage 2 Story Brick & Concrete Block
EXISTING WATER FLOOR DRAIN
Covered Concrete Pad with Waste Oil Storage
Overhang
Chainlink Fence
Garbage Area
Wooden Posts with Chain
Edge of Pavement
L=541.56'
Pipe outfall not found during survey on March 6, 2024.
APPROXIMATE LOCATION SOLAR INVERTERS
EXISTING 5 POLE MOUNTED LIGHTS-EQUIPPED WITH ONE LIGHT HEAD EACH
EQUIPPED WITH 2 LIGHT HEADS
Manhole
Rim=181.3'
Inv.A=178.6'
Inv.B=178.6'
Inv.C=178.6'
Inv.=178.2'
Inv.=178.8'
Formerly New York, New Haven and Hartford Railroad Co., formerly Con Rail Corporation
Now or formerly Metro-North Commuter Railroad
Monumented
Centerline
Railroad
Formerly Reinoehl Now or formerly Lank's Automotive Inc. Document No. 2 2020 817
Formerly Brownell & Brownell Now or formerly DKH Realty LLC Document No. 2 2019 823 - Parcel I
Lot 3
Lot 2
FM 5213
1 Story Concrete Block Building No. 414
ZONE GB
Asphalt Parking
Roof Overhang
Concrete
Asphalt
Parking
Pavement
Mag Nail Set 2014; Recovered
End Guide Rail 12.5'Out
Corner Pavement
APPROXIMATE EXISTING BUILDING MOUNTED LIGHT
Roof Leader
Roof Drain
Gutter
Flagpole
Area Drain
Sign
Power
Pipe Guard
Bollard
Wire (Typical)
Curb Ramp
Pavement 1.7'Out
Pavement 1.2'Out
Pavement 2.5'Out
Pavement Corner
Fence
Edge of Pavement

LEGEND

BZ	BOLLARD
350	CONTOUR LINE
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
DIP	DUCTILE IRON PIPE
	FIRE HYDRANT
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	POLE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
	SIGN (SMALL)
362.8	SPOT ELEVATION
TC217.7 / BC215.9	TOP & BOTTOM OF CURB
TF	TRAFFIC POLE
VT	VETRIFIED CLAY PIPE
	WARNING PAD
	WATER VALVE

LEGEND

	FIRE HYDRANT
	GAS VALVE
	LAMP
MH	MANHOLE
	POLE
	WATER VALVE

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D	DRAINAGE LINE (STRIPED IN FIELD)
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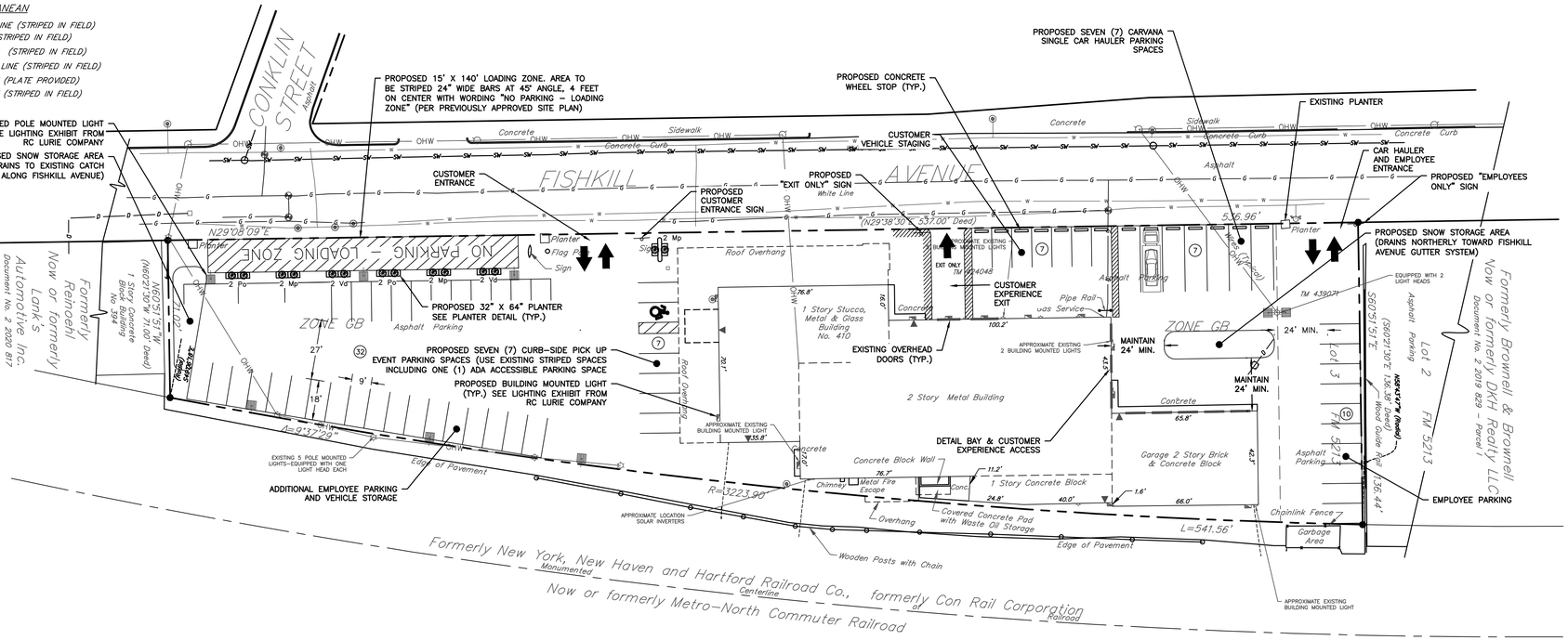
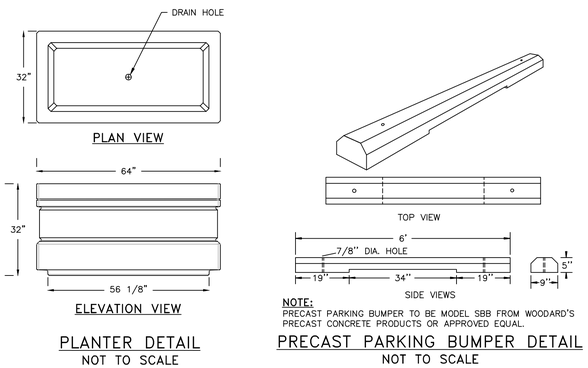
W	WATER LINE (PLATE PROVIDED)
W	WATER LINE (STRIPED IN FIELD)





PLANTER DETAIL
NOT TO SCALE

NOTE:
PRECAST PARKING BUMPER TO BE MODEL SBB FROM WOODARD'S PRECAST CONCRETE PRODUCTS OR APPROVED EQUAL.

PRECAST PARKING BUMPER DETAIL
NOT TO SCALE

SCHEDULE OF REGULATIONS (GB ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT	EXISTING
LOT AREA:	N/A	±59,799 SQFT
LOT WIDTH:	N/A	±536.96 FEET
LOT DEPTH:	100 FEET MINIMUM	±136.44 FEET
YARD SETBACKS:		
FRONT YARD:	15 FEET MINIMUM	±24.99 FEET
SIDE YARD:	20 FEET MINIMUM	±46.84 FEET
REAR YARD:	25 FEET MINIMUM	±1.82 FEET*
MAX. BUILDING HEIGHT:	35 FT MAX.	2 STORIES

*EXISTING NON–CONFORMING

SITE PLAN NOTES:

1. THE PROJECT PROPOSES CONTINUED USE OF VEHICLE SALES. HEALEY HYUNDAI RECENTLY VACATED THE PREMISES, AND CARVANA IS SEEKING TO LEASE THE PROPERTY FOR A VEHICLE SALES USE BUT AT A MUCH REDUCED SCALE. VEHICLE PURCHASES ARE COMPLETED ONLINE, AND THIS FACILITY WILL BE USED AS A TRANSACTION POINT WHERE THE CUSTOMER MAY PICK THE VEHICLE UP (THERE IS AN OPTION TO HAVE THE VEHICLE DELIVERED DIRECTLY TO THE CUSTOMER, THEREBY BYPASSING USE OF THIS FACILITY FOR PICK UP). THE SCHEDULED PICK UP EVENTS TYPICALLY LAST 15 MINUTES, AND TAKE PLACE DURING NORMAL BUSINESS HOURS. CARVANA WILL NOT BE CONDUCTING RETAIL SERVICE/REPAIR OPERATIONS. CARVANA IS PROPOSING TO UTILIZE EXISTING REPAIR BAYS FOR DETAILING AND READYING PURCHASED VEHICLES FOR PICK UP, INCLUDING STATE INSPECTION ACTIVITIES. THESE OPERATIONS ARE EXCLUSIVELY FOR CARVANA USE AND WILL NOT BE OPEN TO THE PUBLIC. CARVANA ANTICIPATES 12 TO 15 EMPLOYEES AT THIS LOCATION.
2. THE FACILITY WILL OPERATE 7 DAYS PER WEEK, FROM 7 AM TO 7 PM. THESE HOURS MAY ADJUST UPON OPERATION BASED ON DEMAND.
3. THERE ARE NO WETLANDS OR FLOODPLAINS ASSOCIATED WITH THE PROJECT SITE.
4. INDIANA BAT WAS IDENTIFIED AS AN ENDANGERED SPECIES NEAR THE PROJECT SITE. THE PLAN CALLS FOR NO REMOVAL OF EXISTING TREES.
5. CARVANA ANTICIPATES ADDING SITE SIGNAGE, TO BE DETAILED ON FUTURE SUBMITTALS. THE ANTICIPATED SITE SIGNAGE WILL CONSIST OF RE–USE OF THE EXISTING MONUMENT SIGNS AND NEW BUILDING MOUNTED SIGNS.
6. APPLICANT SHALL APPLY FOR AND OBTAIN PERMITS FOR SIGNAGE FROM THE BUILDING DEPARTMENT PRIOR TO ANY SIGNS BEING INSTALLED ON THE SITE.
7. ONSITE VEHICLE REPAIR SERVICES INCLUDE INSPECTIONS AND DETAILING AND ARE NOT OPEN TO THE PUBLIC.
8. FLOOR DRAINS IN THE GARAGE BAY AREAS WILL BE INSPECTED AND CLEANED EVERY 6 MONTHS, OR MORE FREQUENTLY IF NECESSARY.

LIGHTING NOTES:

1. SEE SEPARATE LIGHTING PLAN BY RC LURIE COMPANY.
2. ALL PROPOSED LIGHTING SHALL BE FULL CUTOFF ABOVE THE HORIZONTAL PLANE.
3. EXISTING LIGHTING LEVELS ALONG FISHKILL AVENUE NOT MODELED.
4. SITE LIGHTING SHALL BE ON FROM DUSK UNTIL DAWN FOR SECURITY REASONS USING TIMERS.

PARKING NOTES:

1. THE FIRST FLOOR AREA OF THE EXISTING BUILDING IS 16,760 SQUARE FEET. THERE IS MEZZANINE FLOOR AREA TOTALING 2,828 SQUARE FEET. PER §223–26(F), FOR MOTOR VEHICLE SALES AND SERVICE, 1 SPACE IS REQUIRED PER EMPLOYEE, PLUS 1 SPACE PER 150 SQUARE FEET OF GROSS FLOOR AREA. USING 15 EMPLOYEES, AND 19,588 SQUARE FEET OF GROSS FLOOR AREA, THE CALCULATED REQUIRED PARKING IS 146 PARKING SPACES. THIS GROSSLY EXCEEDS THE ANTICIPATED PARKING USAGE FOR THIS OPERATION DUE TO THE LIMITED NUMBER OF EMPLOYEES, IN COMBINATION WITH THE SCHEDULED ON–SITE PICK UP EVENTS AND THE SERVICE AND REPAIR OPERATIONS BEING CLOSED TO THE PUBLIC. THE CURRENT PLAN PROPOSES 63 PARKING SPACES. IN ADDITION, A NUMBER OF VEHICLES WILL BE WITHIN THE BUILDING FOR DETAILING AND STATE INSPECTIONS, SAID VEHICLE PARKING WITHIN THE BUILDING IS NOT INCLUDED IN THE PROVIDED PARKING COUNT. IT SHOULD BE NOTED THAT THE PREVIOUS SITE PLAN, AS APPROVED BY THE PLANNING BOARD, PROVIDED 108 PARKING SPACES ON THESE TWO SUBJECT PARCELS. THE APPLICANT IS SEEKING RELIEF OF 83 PARKING SPACES FROM THE CITY OF BEACON ZONING BOARD OF APPEALS, WHERE 146 PARKING SPACES ARE REQUIRED AND 63 PARKING SPACES ARE PROVIDED.
2. THERE IS AN EXISTING ADA ACCESSIBLE PARKING SPACE ON THE SOUTHWEST CORNER OF THE BUILDING.
3. THE PREVIOUS APPROVED SITE PLAN AND SPECIAL USE PERMIT FOR THIS PROJECT UTILIZED PARKING AT 360 FISHKILL AVENUE (NOW 409 FISHKILL AVENUE), WHICH IS NO LONGER NEEDED.

SHRUB PLANTING SCHEDULE:

KEY	QTY	BOTANICAL NAME	COMMON NAME	CALIPER	SPACING
Po	4	PHYSOCARPUS OPULIFOLIUS	COMMON NINEBARK	3 GALLON	4–6 FT
Mp	6	MYRICA PENSYLVANICA	NORTHERN BAYBERRY	3 GALLON	6 FT
Vd	4	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	3 GALLON	6 FT

APPLICANT'S CONSENT:

THE UNDERSIGNED APPLICANT 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.

_____ _____
CARVANA, LLC 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	3/26/24	PER PLANNING BOARD COMMENTS	CMB				
2	4/30/24	PER PLANNING BOARD COMMENTS	ESR				

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

STATE OF NEW YORK · DANIEL G. KOENIG · 082715 · 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

SITE PLAN

CARVANA

410 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055–80–424048 & 439071

JOB #: 2024:007
DATE: 2/27/24
SCALE: 1" = 30'
TITLE: SP–1
SHEET: 3 OF 3

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

LANC & TULLY
Engineering and Surveying, P.C.

May 8, 2024

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

RE: 410 Fishkill Ave.
Carvana Site Plan
Tax Nos. 6055-80-424048 & 439071
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding the proposed re-use of the building located at 410 Fishkill Avenue for a Carvana dealership:

- Cover letter dated April 30, 2024, from Cuddy & Feder, LLP.
- Parking Study dated April 30, 2024, as prepared by Colliers Engineering & design.
- Engineering response letter dated April 30, 2024, as prepared by Hudson Land Design.
- Short Environmental Assessment Form dated April 30, 2024.
- Infiltration & Inflow (I&I) Investigation dated April 30, 2024, as prepared by Hudson Land Design.
- Plan titled "Lighting Exhibit", dated April 30, 2024, as prepared by RC Lurie Company.
- Plan set titled "Carvana Site Development – 410 Fishkill Avenue", with the latest revision date of dated April 30, 2024, and consisting of 3 sheets as prepared by Hudson Land Design.
- 3 sheets of floor plans as prepared by Platt 360.

The proposed project, located at 410 Fishkill Avenue, entails the re-use of the existing Healey Hyundai car dealership as a Carvana car dealership. The project site consists of 2 parcels located in the GB (General Business) Zone, with the 2 parcels combined having a total area of ±1.373 acres. It should be noted that a Special Use Permit is required for vehicle sales or a rental lot in the GB zone.

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

General Comments:

1. An Inflow & Infiltration study of the existing site and building was conducted by the Applicant's engineer. The findings of the report show that there is no cross-connections between storm water systems and the City's sewer collection system.

2. The parking stalls designated for customers should be signed as such.

3. The ADA parking stall and access aisle shall be compliant with current codes which require an 8-foot-wide access aisle. Construction details for this shall be provided on the plans, along with the required signage being provided and shown on the plan.

4. The "Existing Conditions Plan" shows a number of encroachments (garbage dumpster area, pavement, a light pole, building overhang, roof leaders) on to the railroad property. How are these encroachments to be handled? ***Applicant notes that their Attorney has been in contact with MTA Metro-North to discuss whether an entry permit or use agreement is necessary for the existing improvements that encroach on the railroad's property.*** The Applicant shall continue to provide status updates to the Planning Board as to the status of these discussions and the acquiring of any necessary agreements.

5. There are several locations on the site around the E1 and E2 light poles that have significant hot spots under them ranging up to 13.4-footcandles, as well as some of the wall mounted units along the building ranging up to 9.2 footcandles. Section 223-14, Paragraph B(3)(b) states "Pedestrian and parking lot areas should average approximately one footcandle. Only high security areas may require lighting in the two to five footcandle range, while over five footcandles is usually a waste of energy and a source of glare." The applicant should look at changing the light fixtures, providing dimmers, or other adaptive controls to reduce the lighting on the site to comply with zoning.

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: Natalie Quinn, Planner
Jennifer Gray, Esq.
Bruce Flower, Building Inspector

KARC
PLANNING CONSULTANTS, INC.

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

FR: KARC Planning Consultants, Inc.

DATE: May 13, 2024

RE: 410 Fishkill Avenue Site Plan and Special Use Permit, Carvana, LLC c/o Jenn Roldan

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I have reviewed the following additional and revised materials regarding the proposed re-use of the building located at 410 Fishkill Avenue:

- Cover letter by Taylor Palmer of Cuddy + Feder, dated April 30, 2024
- Site Plan Set (3 sheets) by Hudson Land Design, last revised April 30, 2024
- Photographs of site
- Parking and Access Report by Colliers Engineering & Design, dated April 30, 2024
- Response letter by Daniel Koehler of Hudson Land Design, dated April 30, 2024
- Short EAF Part 1, signed by Daniel Koehler of Hudson Land Design, revised April 30, 2024
- As-Built Floor Plans & Proposed Floor Use Plan by Platt360 dated September 28, 2023
- Lighting Plan by RC Lurie Company, dated April 30, 2024
- Inflow & Infiltration Study by Hudson Land Design, dated April 30, 2024

Project Description:

The applicant is proposing to utilize an existing 1 to 2-story auto dealer building, having a total of 19,588 square feet (including 2,828 sq. ft. of mezzanine) for continued use as commercial vehicle sales. The 1.373-acre site includes two parcels (6055-80-424048 and 6055-80-439071) in the General Business (GB) district. Vehicle sales and Auto Repair are both permitted by Special Use Permit within the GB district. As of the most recent site plan, 63 off-street parking spaces are proposed onsite.

Comments & Recommendations:

1. **Parking Requirement:**
   The applicant is proposing 63 parking spaces where a total of 146 parking spaces is required pursuant to Section 223-26(F). An area variance for parking will be required. Based on the applicant's description of the reduced scale of the use and identified parking needs, the requirement for 146 spaces does appear to be gratuitous and the proposed 63 spaces is in line with the draft parking legislation currently being considered by the City Council.

2. **Frontage and Landscaping:**
   The proposed project site has a 500-foot frontage on Fishkill Avenue that is currently devoid of curbing, landscaping, or sidewalk facilities. The applicant has proposed landscaping planters

along 140 feet of the frontage, but these planters are set back behind the proposed loading area, and concrete wheel stops along 14 parking stalls facing Fishkill Avenue on the northern portion of the lot. The Board may wish to discuss additional improvements such landscaping in front of the building (near roof overhang) and utilization of the excess asphalt area at the southern end of the parcel. For example, is there a way to shift the Loading Zone into the site so that the proposed planters could be placed along Fishkill Avenue rather than behind the Loadin Zone?

3. **Lighting Plan:**
   Notes have been added to SP-1 indicating that all proposed lighting fixtures will be full-cutoff and that the hours of lighting will be from dusk to dawn for security reasons. The following clarifications are required with regards to compliance with Section 223-14B:
   - Pedestrian and parking lot areas should average approximately one footcandle. The average footcandle for the proposed lighting plan has been increased to an average of 5.74 fc. Only high security areas may require lighting in the two to five footcandle range, while over five footcandles is usually a waste of energy and a source of glare. The lighting plan shows significant hotspots in multiple locations onsite ranging as high as 13.4 fc. The Planning Board should discuss whether lower lighting levels can be achieved while maintaining the desired level of security on site.
   - Proposed color temperature should be specified in the Luminaire Schedule table to confirm compliance with the suggested range of 2,400 to 4,000 Kelvin degrees.
   - Proposed color rendering index should be specified in the Luminaire Schedule table to confirm compliance with the suggested range of 80 to 100.

4. **Rear Yard:**
   The building onsite maintains a number of improvements including pavement, fencing, and refuse that are located beyond the rear property line. The applicant has indicated that they are in conversation with MTA Metro-North to discuss retention of these existing encroachments.

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

Natalie Quinn
Beacon Planning Consultant

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

City of Beacon Planning Board Agenda
05/14/2024

Title:

Continue review of application for Amended Site Plan Approval, 11 Mirbeau Lane, submitted by Mirbeau of Beacon, LLC (Edward Kellogg).

ATTACHMENTS

Mirbeau PB 5.14.24 HLD Response Letter_2024-0422.pdf

Mirbeau PB 5.14.24 Ed Kellogg Response Letter_2024-0419.pdf

Mirbeau PB 5.14.24 Construction Estimates.pdf

Mirbeau PB 5.14.24 Amended SWPPP_2024-0326.pdf

Mirbeau PB 5.14.24 ViewShedDiagrams_240419.pdf

Mirbeau PB 5.14.24 SITE PLAN SET_MIRBEAU-AMENDED_2024-0415r.pdf

Mirbeau PB lead agency response NYSDOT_LAD_CONSENT_SEQR_24-077 4.15.24.pdf

Mirbeau PB lead agency response DCDBCH 4.19.24.pdf

Lanc & Tully Mirbeau 05-08-24 reviw.pdf

KARC Review PB_11 Mirbeau Ln 2024.05.10.pdf

Mirbeau - FEAF Part 2.pdf

Mirbeau - FEAF Part 3.pdf

Mirbeau - Amended SEQRA Negative Declaration.pdf

Mirbeau - Amended Site Plan 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, NY 12550 (Satellite Office)
Phone: 845-440-6926 Fax: 845-440-6637
www.HudsonLandDesign.com

April 22, 2024

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

Re: Mirbeau Subdivision, Site Plan and Special Use Permit – Amended Site Plan
11 Mirbeau Lane
Tax Parcel: 6054-13-001258, ±64.39 ac.
City of Beacon, NY

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) has revised the plan set in response to Lanc & Tully's (L&T) April 4, 2024 comment letter, and KARC's April 4, 2024 comment letter. Please note that an application package has been dropped off to Jim Upright, PE, PG of the Dutchess County Department of Community and Behavioral Health (DCDBCH) for their concurrent review of the water and sewer revisions. Below is a point-by-point response to the comments received.

Lanc & Tully April 4, 2024 Comment Letter

General Comments

1. As stated above, a revised plan set has been provided to the DCDBCH for their reapproval based upon their April 9, 2024 comment letter. Any correspondence received from the DCDBCH will be provided to the planning board for their records.
2. Comment noted. Please see response letter prepared by Ed Kellogg of Mirbeau dated April 19, 2024 for a response to this comment.

Sheet 2 of 29

1. The subdivided lots are shown on the sheet and labeled as Lot 1 and Lot 2.

Sheet 3 of 29

1. Comment noted. Please see response letter prepared by Ed Kellogg of Mirbeau dated April 19, 2024 for a response to this comment.

Sheet 4 of 29

1. The walkways from the ADA parking spaces to the mansion will remain as stone dust per Mirbeau. Stone dust is used for ADA walkways at other Mirbeau locations and has not been an issue during wet weather or snow and ice conditions. The walkways will be properly maintained throughout the year to ensure that the surface remains adequate for disabled users. There is also a drop off area at the porte-cochère in front of the mansion available for disabled guests.

Sheet 14 of 29

1. The duplicate label has been removed from CB7 in the stormwater profile from CB 7 to CB 14.

SWPPP Comments

1. The noted typos have been corrected. To save on paper, a hard copy of just page 13 of the revised SWPPP is provided for review; however, a full digital copy is provided. Full hard copies of the SWPPP will be provided for the Planning Board records along with final plans for chairman's signature.

KARC April 4, 2024 Comment Letter

Comments & Recommendations:

1. Comment noted.
2. The label on the plans has been revised to refer to "Amended Site Plan Note" #12 & 13.
3. Comment noted.

The following items submitted for continued review prior to chairman's signature:

- Five (5) copies of a full set of revised Amended Site Plans, and
- Three (3) copies of the Amended SWPPP.

Additional materials are being submitted by other project consultants under separate cover. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,

Michael A. Bodendorf, P.E.
Principal

cc: Mirbeau Beacon, LLC
Dan Leary, Esq.
Henry Thomas, RLA
David Bios, AIA
Richard D'Andrea, P.E., PTOE
Daniel G. Koehler, P.E. (HLD file)

THE Mirbeau COMPANIES

April 19, 2024

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

Re: Mirbeau Inn & Spa
Site Plan Amendment

Chairman Gunn,

We have enclosed the the revised Amended Site Plans and responses to the Planning Board and its Consultants comments.

Enclosed are:

1. Hudson Land Design Site Plans
2. Arrowstreet Sight Line of the Dining Wing Roof

Responses below:

Planning Board comment responses:

1. Mirbeau Lane/West Lot Surface improvements: In response to the City's Engineer and Attorney comments, we propose that Mirbeau submit a request to the Planning Board to review the conditions of these areas, three (3) years from the Opening Date. This will allow the Planning Board and the Applicant to determine if the existing surface conditions can remain or if any portion of these areas should be paved.

2. Performance Bonds for offsite work: We are in agreement with the Building Inspector's proposal to tie the submittal of the Bonds to the issuance of the Road Opening Permit by the Highway Superintendent. We will submit separate Bonds for each improvement, as a pre-condition to the issuance of any Road Opening Permit.

   The outline below states that Start and Finish Date for each improvement as well as the Cost Estimate.

Grandview Sewer Connection/Road restoration:

Start Date	Finish Date	Cost Estimate (Engineer's Estimate Attached)
5/6/24	6/1/24	$97,326

Route 9D Left turn lanes: Start Date and Finish Date

Start Date	Finish Date	Cost Estimate (Engineer's Estimate Attached)
6/2/25	7/21/25	$623,317

Route 9D Water tap: Start Date and Finish Date

Start Date	Finish Date	Cost Estimate
6/14/24	6/26/24	$15,000

Route 9D Water tap road restoration: Start Date and Finish Date

Start Date	Finish Date	Cost Estimate
6/27/24	7/3/24	$5,000

Route 9D Gas connection: Start Date and Finish Date

Start Date	Finish Date	Cost Estimate
11/1/24	11/22/24	$10,000

Route 9D Gas connection road restoration: Start Date and Finish Date

Start Date	Finish Date	Cost Estimate (Gas is off in the shoulder, not in the road)
11/22/24	11/26/24	$5,000

Grandview Water tap: Start Date and Finish Date (removed for VE)

Start Date	Finish Date	Cost Estimate
7/8/24	7/12/24	$10,000

Grandview Water tap road restoration: Start Date and Finish Date (Removed for VE)

Start Date	Finish Date	Cost Estimate
7/15/24	7/19/24	$3,000

3. Subdivision: As we discussed, there is no new subdivision or re-subdivision proposed by the Applicant. The revised Easement for the Gatehouse Lane sewer route will be shown on a revised Subdivision Plat to be signed by the Dutchess County Department of Health and the Chairman of the Planning Board, and then recorded.

Lanc & Tully April 4 comment responses:
Hudson Land Design has provided detailed responses in the attached correspondence.
The proposed Bond submission proposal is stated above.

KARC April 4 comment responses:

1. Noted. All of the elevations were previously submitted and discussed at the meeting. Please refer to the Architectural Review comments below.
2. The Notes on the plans have been corrected and submitted.

Planning Board Architectural Review:

1. The domed Banquet Room roof is confirmed to be actual Copper.
2. The Arrowstreet Sight Line plan is included to show the visibility of mechanical equipment on the Dining Wing roof. The equipment is located in the center and on the west side of the roof and is minimally visible from the edge of the dining terrace.

We look forward to reviewing the submittals and discussing these responses at the May 12th Planning Board meeting and Public Hearing.

Thank you.

Edward A. Kellogg
Partner
Mirbeau of Beacon, LLC

Colliers Engineering & Design

5/12/23

E-1
ENGINEER'S COST ESTIMATE - ROADWORK
MIRBEAU INN & SPA
WOLCOTT AVENUE (NYS ROUTE 9D) LEFT TURN LANE
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK

ITEM NUMBER	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	AMOUNT
201.06	CLEARING AND GRUBBING	LS	$ 10,000.00	1	$ 10,000.00
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	$ 100.00	599	$ 59,900.00
203.03	EMBANKMENT IN PLACE	CY	$ 75.00	137	$ 10,275.00
203.07	SELECT GRANULAR FILL	CY	$ 120.00	22	$ 2,640.00
206.0201	TRENCH AND CULVERT EXCAVATION	CY	$ 95.00	84	$ 7,980.00
209.100101	MULCH - TEMPORARY	SY	$ 2.00	821	$ 1,642.00
209.11000001	GEOTEXTILE FABRIC SEDIMENT COLLECTION BAG	EA	$ 500.00	1	$ 500.00
209.1101NN24	TEMPORARY CATCH BASIN INSERT TRASH,SEDIMENT AND DEBRIS REMOVAL	EA	$ 550.00	3	$ 1,650.00
209.13	SILT FENCE-TEMPORARY	LF	$ 15.00	792	$ 11,880.00
209.22	CONSTRUCTION ENTRANCE	SY	$ 55.00	139	$ 7,645.00
304.11000008	SUBBASE COURSE (MODIFIED)	CY	$ 160.00	331	$ 52,960.00
404.097101	9.5 F1 TOP COURSE ASPHALT, 70 SERIES COMPACTION	TON	$ 180.00	97	$ 17,460.00
404.197901	19 F9 BINDER COURSE ASPHALT, 70 SERIES COMPACTION	TON	$ 200.00	162	$ 32,400.00
404.257901	25 F9 BINDER COURSE ASPHALT, 70 SERIES COMPACTION	TON	$ 200.00	194	$ 38,800.00
418.7603	ASPHALT PAVEMENT JOINT ADHESIVE	LF	$ 7.00	1,439	$ 10,073.00
407.0103	STRAIGHT TACK COAT	GAL	$ 15.00	138	$ 2,070.00
603.6601	REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE, CLASS HEII 14" RISE, 23" SPAN	LF	$ 200.00	24	$ 4,800.00
603.77	CONCRETE COLLARS	EA	$ 1,100.00	2	$ 2,200.00
604.301873	RECTANGULAR DRAINAGE STRUCTURE TYPE R FOR CAST IRON F3 FRAME	LF	$ 1,950.00	6	$ 11,700.00
605.0901	UNDERDRAIN FILTER TYPE 1	CY	$ 65.00	56	$ 3,640.00
605.1502	PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING, 6 INCHDIAMETER	LF	$ 10.00	649	$ 6,490.00
607.96000008	REMOVE AND DISPOSE OF EXISTING FENCE	LF	$ 15.00	185	$ 2,775.00
608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY	$ 1,000.00	45	$ 45,000.00
608.01050409	CURB RAMP CONFIGURATION TYPE 4	EA	$ 12,350.00	2	$ 24,700.00
608.02010015	UNCLASSIFIED EXCAVATION AND DISPOSAL FOR SIDEWALKS, CURB RAMPS AND CURBS	CY	$ 300.00	6	$ 1,800.00
608.02020015	OPTIONAL TYPE SUBBASE COURSE FOR SIDEWALKS, CURB RAMPS AND CURBS	CY	$ 300.00	4	$ 1,200.00
609.15	RESETTING EXISTING CURB	LF	$ 150.00	649	$ 97,350.00
610.1402	TOPSOIL - ROADSIDE	CY	$ 130.00	69	$ 8,970.00
610.1601	TURF ESTABLISHMENT - ROADSIDE	SY	$ 10.00	821	$ 8,210.00
635.0103	CLEANING AND PREPARATION OF PAVEMENT SURFACE - LINES	LF	$ 5.00	1,476	$ 7,380.00
645.5102	GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF, WITH Z-BARS	SF	$ 65.00	18.75	$ 1,218.75
645.81	TYPE A SIGN POSTS	EA	$ 375.00	3	$ 1,125.00
655.0706	CAST FRAME F3, UNMOUNTABLE CURB BOX CU3 & RETICULINEGRATE G3	EA	$ 1,575.00	2	$ 3,150.00
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	$ 1.50	1,367	$ 2,050.50
685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	$ 1.50	3,992	$ 5,988.00
685.13	WHITE EPOXY REFLECTORIZED PAVEMENT LETTERS - 20 MILS	EA	$ 150.00	4	$ 600.00
685.14	WHITE EPOXY REFLECTORIZED PAVEMENT SYMBOLS - 20 MILS	EA	$ 165.00	3	$ 495.00
MISC	RELOCATE UTILITY POLE	EA	$ 30,000.00	1	$ 30,000.00
				SUB TOTAL	$ 546,617.25
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	5% OF SUBTOTAL		$ 27,400.00
MISC	MOBILIZATION	LS	4% OF SUBTOTAL		$ 21,900.00
MISC	CONTINGENCY	LS	5% OF SUBTOTAL		$ 27,400.00
				TOTAL	$ 623,317.25

Mirbeau Beacon Inn & Spa
City of Beacon, NY
3/29/2023
Project Number 2021:051

Performance Bond Estimate - Sewer Main and Walkway Along Grandview and South Avenue

No.	Sewer Main and Walkway	Units	$/Unit	Quantity	Cost	Notes
1	Manholes	LF	817.50	25	$ 20,029	Per LF of depth; City bid rate
2	Manholes casting	EA	500.00	3	$ 1,500	Per contractor estimate
3	8" SDR-35 Sewermain	LF	48.40	735	$ 35,574	Per City of Beacon bid rates - Incl. Item 4 backfill
4	Sawcut pavement	LF	5.20	735	$ 3,822	Per contractor estimate
5	Core & Drill Existing Manhole	EA	1891.00	1	$ 1,891	Per contractor estimate
6	Pavement Repair Binder Course	SY	23.98	327	$ 7,841	Per City of Beacon current bid rates
7	Pavement Repair Asphalt Top Course	SY	13.08	327	$ 4,277	Per City of Beacon current bid rates
8	5' Wide Gravel/Stone Dust Walkway	SF	3.00	4701	$ 14,103	Per contractor estimate
9	Testing sewer Mains	LF	2.84	735	$ 2,087	Per contractor estimate
10	Testing sewer Manholes	EA	189.00	3	$ 567	Per contractor estimate
11	As-built Drawings	EA	1000.00	1	$ 1,000	
	Subtotal				$ 92,692	
	Total all Items				**$ 92,692**	
	5% Contingency				**$ 4,635**	
	Grand Total				**$ 97,326**	

Stormwater Pollution Prevention Plan
for
Mirbeau Beacon Inn & Spa

Prepared for:
Mirbeau Beacon, LLC.
433 Broadway STE 203
Saratoga Springs, NY 12866

March 29, 2022
Revised:
May 25, 2022
July 26, 2022
September 27, 2022
October 25, 2022
Amended February 27, 2024
Revised:
March 26, 2024

HUDSON
LAND DESIGN

Prepared by:
Hudson Land Design Professional Engineering, P.C.
174 Main Street
Beacon, NY 12508 (Main Office and Mailing Address)
13 Chambers Street
Newburgh, NY 12550 (Satellite Office)

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1.0 INTRODUCTION

1.1 Overview

This preliminary Stormwater Pollution Prevention Plan (SWPPP) has been developed in accordance with New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity Permit No. GP-0-20-001, which authorizes stormwater discharges to surface waters of the State from the following construction activities identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

1. Construction activities involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a larger common plan of development or sale that will ultimately disturb one or more acres of land; excluding routine maintenance activity that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;
2. Construction activities involving soil disturbances of less than one (1) acre where the Department has determined that a SPDES permit is required for stormwater discharges based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to surface waters of the State.
3. Construction activities located in the New York City, East of Hudson watershed, that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

This project qualifies for SPDES coverage under provision 1 as stated above.

The objectives of this SWPPP are as follows:

- To develop a sediment and erosion control plan in accordance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, which implements best management practices to stabilize disturbed areas, protect off site areas and sensitive areas and minimize the transport of sediment.
- To demonstrate that the resulting stormwater runoff from the development exiting the site will not adversely impact offsite properties, stormwater conveyance systems or receiving water bodies, and that temporary and permanent stormwater systems and facilities are designed in accordance with the latest revision to the New York State Stormwater Management Design Manual (SDM), January 2015.
- To demonstrate that runoff reduction measures have been implemented into the design of the site.
- To demonstrate that the required runoff from the development is captured and treated through approved water quality measures.

Construction activities are not permitted to begin until such time that authorization is obtained under the General Permit. This project is not located within a Municipal Separate Storm Sewer System (MS4) area. Authorization to commence construction activities may commence seven (7) days following receipt of the Notice of Intent (NOI).

A copy of the General Permit, SWPPP, NOI, NOI acknowledgment letter, inspection reports and accompanying plans shall be maintained on-site from the date of initiation of construction activities until final stabilization of all disturbed areas has been achieved and the Notice of Termination (NOT) has been submitted.

1.2 Land Disturbance

Per the General Permit, no more than five (5) acres of land disturbance may occur at any one time without written approval from the NYSDEC. At a minimum, the owner or operator must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

a. The owner or operator shall have a qualified inspector conduct at least two (2) site inspections every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

b. In areas where soil disturbance activity has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be installed and/or implemented within seven (7) days from the date the soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control.

c. The owner or operator shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.

d. The owner or operator shall install any additional site-specific practices needed to protect water quality.

Disturbance of more than five (5) acres at any one time is not anticipated for this project. Phasing of the construction activities is planned to limit the amount of disturbance at any one time.

1.2.1 Special Habitat Considerations

The NYSDEC EAF Mapper identifies the following species as a species of concern, threatened or endangered: Atlantic Sturgeon, Timber Rattlesnake, Spongy-Leaved Arrowhead, Bald Eagle, Pied-billed Grebe, Short nose Sturgeon. An onsite habitat assessment was conducted on the site. No species were identified on the site, nor was any habitat found; however, suitable habitat was found for the Northern Long Eared Bat and Indiana Bat.

1.2.1.1 Northern Long Eared Bat and Indiana Bat

The NYSDEC Environmental Resource Mapper indicated that endangered species reside within the site but are not specific on the particular species present. Need to contact the local NYSDEC Regional Office for information.
The NYSDEC Environmental Resource Mapper does not indicate Northern Long Eared Bat or Indiana Bat on or near the property. Therefore, there will be no impact to their habitat.

In the unlikely event that either bat is discovered on the site, tree removal shall consider the habitat of the Northern Long Eared Bat and the Indiana Bat. To protect these bats from unintentional harm,

forest management practices shall take place during the hibernation period, November 1 through April 1, when bats are not expected to be present. However, the DEC places no restrictions on tree cutting unless a project is located within 5 miles of a known hibernation site or 1.5 miles of a documented summer occurrence. For projects requiring the removal of trees, the DEC recommends the following actions:

- Leave snag and cavity trees uncut unless their removal is necessary for protection of human life and property.
- If any bats are observed flying from a tree, or on a tree that has been cut, tree management activities in the area should be suspended and DEC Wildlife staff notified as soon as possible. A permit may be required to continue work, or you may have to wait until November 1 to resume activities.

Information in regard to the Long Eared Bat and Indiana Bat can be found within Appendix C.

2.0 PROJECT DESCRIPTION

2.1 Project Location

The project site is located at 7 Craig House Lane, in the City of Beacon, Dutchess County, New York and consists of 64.35 acres. The project site is located on the west side of Wolcott Avenue (NYS Route 9D) and is bounded by Grandview and South Avenue on its southerly property line. The Dutchess County Parcel viewer website lists the parcel's tax parcel number is 6054-13-001258.

The project site is previously improved and consists of the former Howland Mansion, the former Tioranda School, two gate houses and a building that was constructed in 1978 to serve the former mental health use when it was the Craig House, as well as related parking areas. The Craig House psychiatric facility closed in 1999, and all of the buildings on the premises have remained vacant and unused since that time.

The remaining existing site cover consists of a mixture of forested areas, open grass fields, specimen trees, some ponds with wetlands and Fishkill Creek binds its westerly property line.

2.2 Project Scope and Description

The scope of the project will be limited only to the 7 Craig House Lane Lot. No work is proposed on the parcel east of Wolcott Avenue (NYS Route 9D). Specifically, the project as proposed by the Applicant will revitalize this long dormant property through adaptive re-use and restoration of existing buildings, and by adding new buildings and improvements, including a hotel with accessory uses, a spa, fine dining restaurant, event facilities, estate-caliber gardens, water features and other site amenities (the "Project"). The Project will consist of the restoration, renovation and expansion of the existing mansion to principally provide amenities associated with the spa and a restaurant. The Project includes five (5) hotel rooms in the mansion, seven (7) grotto hotel rooms within the proposed mansion expansion and sixty-three (63) hotel rooms to be located in a newly constructed, spa chateau building, which includes a proposed spa at the garden level, and five (5) resort-related 2-bedroom rental cottages. New asphalt parking areas will be constructed to serve

the proposed use. A new maintenance building will be constructed which will provide storage of equipment and offices for buildings and grounds staff.

Future uses include Resort Rental Cottages: The 7.0 acre parcel delineated on the site plan will be subdivided from the Premises for future related development by an affiliated entity, and will have a density limited to a maximum of nineteen (19) resort-related rental cottages, with two (2) to three (3) bedrooms in each cottage. Resort Farm: A passive, resort-servicing micro-farm will be constructed at the Southeast corner of the Premises along Grandview Ave. This will include lavender and spice fields and production of on-site farm to table products. The proposed future farm area is shown on the accompanying site plan drawings. The Tioranda school will also be renovated in a future phase that will include recreation areas and parking.

The proposed project at full build-out will disturb approximately ±10.5 acres. The total drainage study area is ±193 square miles. The proposed development will increase impervious area ±0.91 acres in comparison to the pre-developed area.

2.3 Surface Water Bodies

2.3.1 Wetlands

The NYSDEC Resource Mapper indicates that there are no State regulated wetlands on the site. The database also indicates that the nearest State regulated wetland is located about 1,114 feet west of the site's westernmost boundary, this places the site well beyond the nearest State wetland's 100-foot buffer.

The NWI website indicates there are NWI freshwater wetlands, ponds and riverines present on and adjacent to the site. Of the two (2) freshwater ponds on the site's western side near its border with the Fishkill Creek, the DEC map indicates that that southern pond is a C class waterbody under regulation 862-237. The northern pond is classified by the NWI database as a PUBFh freshwater pons with an area of 0.83 acres. No disturbances are proposed to the on-site wetlands

2.3.2 Streams

NWI mapping and the NYSDEC mapper indicates no streams located on the premises. However, Fishkill Creek borders the westerly property line of the parcel. The DEC map indicates that the Fishkill Creek as a Class C stream under regulation 862-237. No disturbances are proposed to the bed or banks of the Fishkill Creek.

2.3.3 Floodplains

Based upon review of the National Flood Insurance Program Flood Insurance Rate Map panels 36027C0576E and 36027C0577E, dated May 2, 2012, for the City of Beacon, New York, it was found that the western portion of the site (along the Fishkill Creek and on-site ponds) is situated along a Zone AE Floodway. The remainder, eastern portion of the site was found to be on an area of minimal flood hazard (Zone X). Please refer to Appendix C for supporting information and details regarding flood hazard zones on site (FEMA FIRMette).

2.4 State Historic Preservation Office (SHPO)

2.4.1 Archaeological Sensitive Area

This project is located within and is adjacent to survey archaeologic area according to the SHPO CRIS website. The site is also adjacent to National Register Building sites along its west and north boundaries according to the SHPO CRIS website. The CRIS site indicates that the existing gates houses, Tioranda School building and Hasbrook Mansion are eligible for historic status. The archaeologic sensitive area origin is approximately 1,865 feet northwest of the project's north boundary. A phase environmental site assessment has been submitted to SHPO for review.

3.0 NOTICE OF INTENT

Prior to commencement of construction activities, the Owner/Operator shall submit a Notice of Intent (NOI) to the NYSDEC for authorization. The NYSDEC authorization schedule is as follows:

For construction activities that are not subject to the requirements of a regulated, traditional land use control MS4:

- Five (5) business days from the date the NYSDEC receives a complete NOI for construction activities with a SWPPP that has been prepared in conformance with the technical standards, or
- Sixty (60) business days from the date the NYSDEC receives a complete NOI for construction activities with a SWPPP that has not been prepared in conformance with the technical standards.

For construction activities that are subject to the requirements of a regulated, traditional land use control MS4:

- Five (5) business days from the date the NYSDEC receives a complete NOI and signed "MS4 SWPPP Acceptance" form.

The project area is under the control of a regulated MS4, therefore the NOI shall be submitted directly to the NYSDEC along with the MS4 SWPPP Acceptance Form. A draft completed NOI is included in Appendix A of this SWPPP.

4.0 SOILS

The hydrologic soil characteristics of the watershed areas were obtained from Web Soil Survey Mapping of Dutchess County, New York, and available Geographical Information Systems (GIS) and are as follows:

Symbol	Description	Hydrologic Soil Group
BeC	Bernardston silt loam, 8 to 15 percent slopes	C/D
ChB	Charlton fine sandy loam, 3 to 8 percent slopes	B
DwB	Dutchess-Cardigan complex, undulating, rocky	B/C
HsA	Hoosic gravelly loam, nearly level	A
HsB	Hoosic gravelly loam, undulating	A

NwC	Nassau-Cardigan complex, rolling, very rocky	C/D
NwD	Nassau-Cardigan complex, hilly, very rocky	C/D

SOIL PROPERTIES

Symbol	Erosion Hazard (k)
BeC	0.32 - Slight
ChB	0.24 - Slight
DwB	0.32 - Slight
HsA	0.10 - Slight
HsB	0.10 - Slight
NwC	0.17 - Slight
NwD	0.17 - Slight

Supporting soils information is provided in Appendix B of this SWPPP. Soil testing for the proposed stormwater treatment facilities can be found in Appendix O.

5.0 RAINFALL

5.1 Overview

The rainfall data utilized in the analysis of the watershed was obtained from Extreme Precipitation Tables from the Northeast Regional Climate Center. Supporting information is provided in Appendix C of this SWPPP. The storm events are as follows:

Storm Event	24-Hour Rainfall (in)
1 - year	2.61
10 - year	4.72
25 - year	5.93
100 - year	8.40

Rainfall data is provided in Appendix C of this SWPPP.

5.2 Rainfall Event Sizing Criteria

The stream channel protection volume (Cpv) criteria, intended to protect stream banks from erosion, will be demonstrated by providing 24 hour extended detention of the Type III 1-year, 24-hour storm event, or by infiltrating the entire volume. When providing extended detention, the channel protection volume criterion is not required where the resulting diameter of the stormwater management basin orifice is less than three (3) inches with a trash rack. Cpv can be met by use of green infrastructure treatment practices described in greater detail in Section 6 of this report.

The overbank flood control (Qp) criteria, intended to prevent an increase in frequency and magnitude of out of bank flooding generated by new development, will be demonstrated by attenuating the Type III 10-year, 24-hour peak discharge rate to pre-development conditions. The overbank flood criteria can be waived if the project site discharges to a tidal water or fifth order stream.

The extreme flood control (Qf) criteria, intended to prevent the increased risk of flood damage from large storm events, maintain the boundaries of pre-development conditions, and protect the physical integrity of stormwater management practices, will be demonstrated by attenuating the Type III 100-year, 24 hour peak discharge rate to pre-development conditions. The extreme flood control criteria can be waived if the project site discharges to a tidal water or fifth order stream. The use of on-site green infrastructure stormwater treatment practices can mitigate post-developed Qp and Qf rates and volumes.

The pre and post-development runoff rates will be compared utilizing the Type III 1-year (channel protection), 10-year (overbank flood control), and 100-year (extreme flood control) year, 24-hour storm events. The pre- versus post-development analysis will include the analysis of the Qp and Qf storm events.

6.0 STORMWATER ANALYSIS AND MANAGEMENT

6.1 Methodology

6.1.1 Hydrologic Analysis

The HydroCAD stormwater modeling system computer program by Applied Microcomputer Systems will be used to analyze, design and document the complete drainage system. The program uses standard hydrograph generation and routing techniques based on the USDA-NRCS Technical Releases TR-20 and TR-55 to develop stormwater runoff rates and volumes.

The program determines the rate and volume of runoff based on inputs of the watershed area, and characteristics of the land including vegetative coverage, slope, soil type, and impervious area.

6.1.2 Stormwater Design Points

Design Points represent the location where the majority of runoff from an area exits the site. The same design points are identified in post-development conditions so that a comparison can be made between the pre-development and post-development conditions. Three design points for the project were selected, as follows:

Stormwater Discharge Points	
SDP	**Description**
1	Fishkill Creek at the Tioranda Bridge.

6.2 Pre-Development Watershed Conditions

The pre-developed site is broken into one overall Fishkill Creek watershed to the design point located at the Tioranda bridge which is summarized below:

Subcatchment 1 is comprised of approximately ±64.34 acres of onsite area tributary to DP 1 consisting of the area between the Fishkill Creek, Wolcott Avenue, and Grandview Avenue, including all the grounds of the Craig House. The area consists of mostly wooded areas, open field areas, water, and the Craig House grounds. The subcatchment area contains soils in hydrologic soil groups A, B, & C. Runoff from the site travels via sheet flow and shallow concentrated flow to the onsite waterbodies and DP 1. All flow from the site discharges to the Fishkill Creek and ultimately to DP 1.

The overall watershed is comprised of approximately 193 square miles of Fishkill Creek watershed area including off-site and on-site areas tributary to DP 1. The offsite area consists of mostly wooded areas, open field areas, residential area and the City of Beacon. The on-site area is undeveloped wooded areas, wetlands, existing buildings and open grass fields. The subcatchment area contains soils in hydrologic soil groups A, B, C, & D. Runoff from the site travels via sheet flow, shallow concentrated flow and stream flow to DP 1. All flow from the site discharges to the Fishkill Creek and ultimately to DP 1.

Detailed stormwater calculations and routing for the pre-development conditions have been included in Appendix D.

The following table summarizes the pre-development watershed conditions:

Pre-Development Watershed Conditions					
Subcatchment	**Area**	**Cover**	**Average Curve #**	**Hydrologic Soil Group(s)**	**Time of Concentration**
1	64.34 ac.	Woods, lawn, water, grass	60	A, B, & C	24.4 min.
Overall	193 sq.mi.	Wooded, open fields, developed areas and water surface areas	N/A	A, B, C, & D	N/A

6.3 Post-Development Watershed Conditions

6.3.1 Downstream Analysis

The project site is located at the mouth of the Fishkill Creek as it enters the Hudson River. The creek is a fourth order stream at this point with a 193 square mile watershed contributing to the design point. The 64.35 acre site is less than a fraction of a percent of the overall watershed of Fishkill creek. The overall Fishkill Creek watershed peak discharge rates occur at a much later time that the on-site peak discharge rates due to the much larger sized overall watershed. Therefore, the goal is to perform a downstream analysis to demonstrate that on-site peak “beats the peak” of the Fishkill Creek by occurring at earlier times than the Fishkill Creek, thereby not increasing the overall peak discharge of the Creek because they don’t occur at the same time.

This project meets the downstream analysis criteria as defined in Section 4.10 of the NYS Stormwater Design Manual. Therefore Qp and Qf can be waived. The post-developed subcatchment areas are broken up to determine WQv, RRv and CPv only. Peak discharge rates of the site are not required.

6.3.2 Onsite Analysis

The post-developed site is broken into six (6) on-site subcatchments. Stormwater treatment will be provided through two proposed bioretention areas, and an underground infiltration/detention storage chamber system. The following is a description of the subcatchments:

Subcatchment 10 is comprised of approximately ±51.04 acres of onsite area tributary to DP 1 consisting of the area between the Fishkill Creek, Wolcott Avenue, and Grandview Avenue, including all the grounds of the Craig House. The area consists of mostly wooded areas, open field areas, water, and the Craig House grounds. The subcatchment area contains soils in hydrologic soil groups A, B, & C. Runoff from the site travels via sheet flow and shallow concentrated flow to the onsite waterbodies and DP 1. All flow from the site discharges to the Fishkill Creek and ultimately to DP 1.

Subcatchment 11 is comprised of ±6.28 acres of onsite area. Land cover consists of open grass field area with mature trees, proposed hotel/spa development and impervious areas. The subcatchment area contains soils in hydrologic soil group B. Runoff from the subcatchment travels via sheet flow, shallow concentrated flow and pipe flow to a proposed underground infiltration chamber system A. Discharge from the chamber system flows westerly through existing drainage ditches on the site to SDP1.

Subcatchment 12 is comprised of ±3.12 acres of onsite area. Land cover consists of open grass field area with mature trees, hotel/spa development and impervious areas. There is a portion of green roof in this area, it has been considered to be lawn in the hydrologic calculations. The subcatchment area contains soils in hydrologic soil groups A and B. Runoff from the subcatchment travels via sheet flow, shallow concentrated flow and pipe flow to proposed bioretention area A. Discharge from the bioretention area flows westerly through an existing drainage ditch on the site to Fishkill Creek, and ultimately to SDP1.

Subcatchment 13 is comprised of ±0.29 acres of onsite area. Land cover consists of open grass field area with mature trees, 3 rental cottages and impervious areas. The subcatchment area contains soils in hydrologic soil group B. Runoff from the subcatchment travels via sheet flow and shallow concentrated flow to proposed bioretention B. Discharge from the rain garden flows westerly through an existing drainage ditch on the site to Fishkill Creek, and ultimately to SDP1.

Subcatchment 14 is comprised of ±0.40 acres of onsite area. Land cover consists of open grass field area with mature trees, 2 rental cottages and impervious areas. The subcatchment area contains soils in hydrologic soil group A. Runoff from the subcatchment travels via sheet flow and shallow concentrated flow to proposed bioretention C. Discharge from the bioretention flows westerly through an existing drainage ditch on the site to Fishkill Creek, and ultimately to SDP1.

Subcatchment P is comprised of ±1.48 acres of self-contained onsite water garden area. The proposed water garden is a tiered recirculating waterbody system. Contributing drainage is the garden itself which does contain a small amount of impervious walkways and a small portion of building. The land cover consists of open grass area, landscaped areas, open water and impervious areas. The subcatchment area contains soils in hydrologic soil group B. Runoff from the subcatchment travels via sheet flow and shallow concentrated flow to the water garden system. The water garden is a closed recirculating pump system that will only overflow during rain events. Overflow from the garden flows westerly through an existing drainage ditch on the site to Fishkill Creek, and ultimately to SDP1.

Detailed stormwater calculations and routing for the post-development condition have been included in Appendix E.

The following table summarizes the post-development watershed conditions:

Post-Development Watershed Conditions					
Subcatchment	**Area (ac)**	**Cover**	**Average Curve #**	**Hydrologic Soil Group(s)**	**Time of Concentration**
10	51.04	Woods, lawn, water, grass	60	A, B, & C	22.2 min.
11	6.28	Developed lawn, landscaped areas, main parking, and hotel	73	B	11.5 min.
12	3.12	Developed lawn, landscaped areas, parking, and hotel	75	A & B	6.1 min.
13	0.29	Developed lawn, landscaped areas, and cottages	72	B	2.8 min.
14	0.40	Developed lawn, landscaped areas, and cottages	45	A	4.3 min.
P	1.48	Developed lawn, landscaped areas, and water feature	73	B	3.3 min.
Overall	193 sq.mi.	Wooded, open fields, developed areas and water surface areas	N/A	A, B, C, & D	N/A

6.4 Hydrologic Review

The stormwater runoff volumes at design point under pre-development and post-development conditions are summarized below.

SDP	**1 – Year***		**10 - Year**		**100 - Year**	
	Pre	**Post**	**Pre**	**Post**	**Pre**	**Post**
Site Only	4.31	3.53	45.90	37.98	164.98	165.09
Site + Overall Watershed	4.31	3.53	6,875.90	6,867.98	13,264.98	13,265.09
Change	-0.78 -18.1%		-7.92 -0.1%		+0.11 +0.0%	

*The StreamStats website does not provide 1-year flows.

As shown above, post-development peak flow rates are less than pre-development rates for the 1-year and 10-year Design storms. The 100-year design storm shows an increase from pre-development rates less than 5%. The proposed stormwater management areas mitigate the increased runoff for the 1-year and 10-year design storms, and provide control of the 1-year storm (CPv) through use of a low-flow orifice.

The stormwater CPv computations are summarized below.

Post-Development Watershed Conditions		
Subcatchment	**Required CPv Runoff Volume (cf)**	**Provided CPv structure**
11	13,024	Twin 24" HDPE outlet pipe
12	7,318	2" dia. orifice
13	-	-
14	-	-
15	479	No outflow

6.5 Stormwater Management System

The stormwater management system will consist of an onsite closed pipe network that will collect site runoff from impervious and pervious surfaces and convey it to the various stormwater practices prior to discharge to stormwater discharge points under overflow conditions.

6.6 Green Infrastructure for Stormwater Management

The SDM encourages the use of green infrastructure (GI) practices for stormwater management. Green infrastructure approach for stormwater management reduces a site's impact on an aquatic ecosystem through the use of site planning techniques, runoff reduction techniques, and certain standard stormwater management practices. The objective is to replicate the pre-development hydrology by maintaining pre-construction infiltration, peak runoff flow, discharge volume, and minimizing concentrated runoff by use of runoff control techniques. When implemented, green infrastructure can reduce volume, peak flow, and flow duration, promote infiltration and evapotranspiration, improve groundwater recharge, reduce downstream flooding, and protect downstream water and wetlands.

6.6.1 Green Infrastructure Practices

Green infrastructure consists of implementing several techniques during the site planning process which are:

- Preservation of Natural Resources – Preservation of undisturbed areas; preservation of buffers; reduction of clearing and grading; locating development in less sensitive areas; open space (park) design; soil restoration.
- Reduction of Impervious Cover – Roadway reduction; sidewalk reduction; driveway reduction; building footprint reduction; parking reduction.
- Runoff Reduction Techniques – Conservation of natural areas; sheet flow to riparian buffers or filter strips; vegetated open swale; tree planting/tree box; disconnection of roof runoff; stream daylighting for redevelopment projects; bioretention areas; rain gardens; green roofs; stormwater planters; rain tank/cistern; pervious pavement.

During the planning process, the above techniques are implemented to the greatest extent possible to reduce runoff developed by the site. The following summarizes the GI techniques implemented on the site:

- Conservation of natural areas
- Sheet flow to riparian buffers
- Impervious cover has been reduced wherever possible.
- Bioretention basins are proposed to provide quantity and quality treatment of stormwater runoff.

6.6.1.1 Conservation of Natural Areas

No conservation easements are proposed on the subject premises; however, all of the forest area between the existing developed area will remain undisturbed as part of the project. Therefore, runoff to this area will continue to be filtered through undisturbed forest surface and allowed to infiltrate where possible prior to discharging to the onsite and offsite waterbodies.

Runoff from areas of the project area that are directed to riparian buffers can treated for water quality by flowing through the vegetated buffer area. If no riparian buffers exist, a level spreader and vegetated filter strip may be constructed to mimic the riparian buffer. Runoff must be directed to the buffers or filter strip through sheet flow and may require the construction of a level spreader.

6.6.1.2 Bioretention Areas and Infiltration

Runoff from the proposed development will be directed to bioretention areas with infiltration capacity, and an underground infiltration/detention system thereby providing 100% RRv capacity.

6.6.2 Five Step Process for Stormwater Site Planning and Selection Design

Stormwater management using GI is summarized in the five-step process described below.

Step 1: Site Planning
The site design will incorporate the preservation of natural resources including protection of natural areas, avoidance of sensitive areas, minimizing grading and soil disturbance, minimizing impervious areas on roads, driveways and parking lots. The site layout will avoid wetlands, waterways, buffers, areas of highly erodible soils and critical areas. The site design will also maintain natural drainage design points.

Step 2: Determine Water Quality Volume (WQv)
The WQv will be calculated for the site prior to implementation of GI practices. The calculated WQv must be reduced by implementation of GI & SMP's.

Step 3: Runoff Reduction by Applying Green Infrastructure Techniques
Green infrastructure practices will be implemented wherever possible to reduce runoff from the site. GI for this site will consist of reduction of roadway widths, providing parking beneath buildings and the use of infiltration practices.

Step 4: Apply Standard SMP's to Address Remaining WQv
Standard SMP's such as ponds, filtering practices or stormwater wetlands to meet additional water quality volume requirements. It is not anticipated that additional standard SMP's will be required for this project based upon the reduction of impervious surfaces.

Step 5: Apply Volume and Peak Rate Control Practices (if needed)
Cpv, Qp and Qf must also be met, either by standard practices, or other accepted techniques such as meeting criteria set forth in the NYS SWDM, where Cpv, Qp and Qf are required. Cpv, Qp and Qf are met by the installation of the stormwater pond with an outlet control structure on the east side and bioretention basin with outlet control structure on the west side which reduce the peak flows associated with each criterion.

6.7 Qualitative Practices

Small sized, frequently occurring storms account for the majority of runoff events that generate stormwater runoff. As a result, the runoff from these storms is recognized as a major contributor of pollutants. Therefore, treating these frequently occurring smaller rainfall events and a portion of the larger events offers an opportunity to minimize the water quality impacts associated with developed areas.

The water quality volume, denoted as WQ_v, specifies a treatment volume required to be captured and treated by intercepting 90% of the average annual stormwater runoff volume. This criterion strives to achieve an 80% Total Suspended Solids (TSS) removal and 40% Total Phosphorous (TP) removal on an annual basis.

In numerical terms, it is calculated using the formula below which was obtained from Section 4.2 of the New York State Stormwater Management Design Manual, January 2015:

$$WQ_v = (P \times R_v \times A) / 12$$

Where:

WQ_v = Water Quality Volume (acre-feet)

P = 90% Rainfall Event Number

$R_v = 0.05+0.009 \times I$, where I is percent impervious (minimum $R_v = 0.2$)

A = Site area in acres (contributing area)

The following table has been developed summarizing the pre-treatment volume, water quality volume and treatment practices for the main project area. Areas 11, 12 and 31 are mainly undeveloped portions of the site that are diverted around treatment areas.

Watershed	Total Required WQv (cf)	Required Pre-Treatment Volume (cf)	Pre-Treatment Practice	Treatment Practice	WQv Provided (cf)
11	11,246	11,246	Hydrodynamic Device	Underground Detention/Infiltration A	18,023
12	7,288	7,288	Plunge Pool	Bioretention A	21,234
13	485	485	Grass Filter Strip	Bioretention B	2,203
14	285	285	Grass Filter Strip	Bioretention C	2,819
Green Roof	1,059	-	-	Green Roof	1,059
Total	**240,363**				**45,338**

A major concern with runoff into waterbodies is phosphorus loading. Phosphorus, like nitrogen, is an essential nutrient for aquatic life in waterbodies. However, increased amounts of phosphorus entering surface waters promotes excessive algae growth, which decreases water clarity, causes

variations in dissolved oxygen, disagreeable odors, habitat loss and fish kills. The protection of waterbodies from the harmful effects of phosphorus can be accomplished from reducing the runoff volume entering surface waters. Reduction of runoff volume reduces the concentrations of pollutants entering the surface water and thus decreases harmful effects. The removal of enhanced phosphorus can be accomplished using stormwater management practices. Whether in particulate or dissolved speciation, phosphorus can be removed using unit operations. Particulate phosphorus in particular can be removed using bioretention areas and through sedimentation of runoff before entering surface water. Primarily, reducing the WQv entering a surface water body will lower phosphorus pollutant loading.

6.7.2 Pre-Treatment Practices

The following pre-treatment practices have been incorporated into the design of this project. Preventative and corrective maintenance measures to provide long-term effectiveness of stormwater attenuation practices if properly implemented will be included in Appendix L.

6.7.2.1 Forebays and Plunge Pools

Forebays and plunge pools are depressions located within a drainage path, adjacent to an inlet, which are designed to promote the deposition of sediment from the runoff, prior to entering the stormwater management facility. Tow (2) forebays have been incorporated into the design – one each at bioretention area A & B.

6.7.2.2 Overland Flow

A significant portion of the runoff will flow overland to receiving water bodies or offsite properties. Much of the site's existing natural vegetation is proposed to remain, and the post developed land cover will be restored to turf grass and landscaped areas. The meadow and landscaped areas will capture sediment and floatables prior to discharge at the stormwater discharge point.

6.7.2.3 Grass Filter Strips

Grass filter strips are gently sloped vegetated areas designed to treat sheet flow runoff from adjacent impervious areas. Filter strips (also known as vegetated filter strips and grassed filters) function by slowing runoff velocities, filtering out sediment and other pollutants, and providing some infiltration into underlying soils. Because they use sheet flow and not channelized flow, filter strips are often more effective than swales at removing suspended solids and trash from runoff.

6.7.2.4 Hydrodynamic Devices

Hydrodynamic devices are designed to intercept and store pollutants such as sediment and floatables for later removal and safe disposal.

6.7.3 Treatment Practices

The following treatment practices have been incorporated into the design of this project. Preventative and corrective maintenance measures to provide long-term effectiveness of stormwater attenuation practices if properly implemented are included in Appendix L.

6.7.3.1 Bioretention Areas

Bioretention areas are shallow landscaped stormwater basins which utilize engineered soils and vegetation to capture and treat runoff. A standard profile would show an aged shredded hardwood mulch layer above 30 to 48 inches of planting media, with underdrain in gravel jacket below. Native plants (grasses, shrubs, trees) are provided in the bioretention area. Bioretention areas provide water quality treatment, and in cases with soils exhibiting high infiltrative rates, are capable of handling the CPv. In most cases, flows from larger storms are diverted to other practices more suited to attenuate flows for larger storm events. Underdrains are required elements in HSG C & D, but may not be necessary in those soil types if infiltration testing proves adequate infiltrative capacity exists. All bioretention areas are located in A & B soils. Therefore, they are equipped with underdrains and provide 40% runoff reduction.

6.7.3.2 Underground Infiltration

Stormwater infiltration practices capture and temporarily store the water quality volume before allowing it to infiltrate through the floor of each practice into the soil over a two-day period. In areas where the subsurface soils exhibit high infiltration rates, the channel protection volume may also be infiltrated. Infiltration facilities are not typically capable of infiltrating the overbank flood or extreme flood volumes. Adequate outflows are required for these larger storm events. Soil testing to obtain infiltration rates are required as part of the design of infiltration facilities. Varying degrees of pre-treatment of the water quality are required based on the field determined infiltration rate of the subsurface soils. 100% of the water quality volume is required where the infiltration rate exceeds 5 inches per hour, 50% for infiltration rates between 2 and 5 inches per hour, and 25% for infiltration rates less than 2 inches per hour. Pre-treatment is typically accomplished through installation of plunge pools and other filtering methods. Infiltration practices must be isolated and protected from stormwater run-off during construction. The contributory drainage area shall be completely constructed and stabilized before connection of the stormwater conveyance system to the infiltration practice. Infiltration basins are typically landscaped by providing a hardy, drought tolerant grass species that is capable of tolerating periodic inundation. The established grass requires mowing twice annually (or as needed). Proper maintenance of the contributing conveyance system and pre-treatment practice are important in maintaining infiltration rates.

6.7.3.3 Green Roofs

Green roofs are a green infrastructure technique that consist of a layer of vegetation and soil installed on top of a conventional flat or sloped roof. The rooftop vegetation captures rainwater allowing evaporation and evapotranspiration processes to reduce the amount of runoff entering downstream systems, effectively reducing stormwater runoff volumes and attenuating peak flows. Green roof designs are characterized as extensive or intensive, depending on storage depth. Extensive green roofs have a thin soil layer and are lighter, less expensive and generally require low maintenance. Intensive green roofs often have pedestrian access and are characterized by a deeper soil layer with greater weight, higher capital cost, increased plant diversity and more maintenance requirements.

6.8 Runoff Reduction Volume (RRv)

RRv is not required for re-development projects. Typically, RRv is met with the use of individual treatment practices since the re-development project meets the criteria set forth in the NYS SWDM

§9.3.3. A bioretention area, infiltration basin, underground infiltration area, and rooftop disconnects are proposed to manage and treat the runoff generated from the sites impervious areas.

RRv (measured in acre-feet) is reduction of the total WQv by application of GI techniques and SMP's to replicate the pre-development hydrology. The minimum required RRv is defined as the specified Reduction Factor (S), provided objective technical justification is documented.

RRv must be achieved by infiltration, groundwater recharge, reuse, recycle, evaporation/evapotranspiration of 100% of the post-developed WQv's to replicate pre-development hydrology by maintaining pre-construction infiltration, peak runoff flow, discharge volume, as well as minimizing concentrated flow by using runoff control techniques to provide treatment in a distributed manner before runoff reaches the collection system.

RRv is calculated based upon three methods:

1. Reduction of the practice contributing area in WQv computation.
2. Reduction of runoff volume by storage capacity of the practice.
3. Reduction using standard SMP's with runoff reduction capacity.

Projects that cannot meet 100% of the runoff reduction requirement must provide a justification that evaluates each of the GI planning and reduction techniques and identify the specific limitations of the site according to which application of this criterion is technically infeasible. Projects that do not achieve runoff reduction to pre-construction must, at a minimum, reduce a percentage of the runoff from impervious areas to be constructed on the site. The percent reduction is based on the Hydrologic Soil Group(s) (HSG) of the site and is defined as Specific Reduction Factor (S).

The following lists the specific reduction factors for the HSG's.

HSG A = 0.55

HSG B = 0.40

HSG C = 0.30

HSG D = 0.20

The specific reduction factor (S) is based on the HSG's present at the site. The values are defined based on a hydrology analysis of low, medium, and high imperviousness. The reduction is achieved when runoff from a percentage of the impervious area on a site is captured, routed through GI or an SMP, infiltrated to the ground, reused, reduced by evapotranspiration, and eventually removed from the stormwater discharge from the site.

The following equation is used to determine the minimum RRv:

$$RRv \text{ (in acre-feet of storage)} = [(P)(Rv^*)(Ai)]/12$$

$$Ai = (S)(Aic)$$

Ai = impervious cover targeted for runoff reduction

(Aic) = total area of new impervious cover

$$Rv * = 0.05+0.009(I) \text{ where I is 100\% impervious}$$

$$S = \text{Hydrologic Soil Group (HSG) Specific Reduction Factor (S)}$$

The goal of the SWPPP is to utilize as many runoff reduction methods as possible on a site. All GI practices will be quantified and compared to the overall WQv for the site. If the RRv is greater than or equal to the WQv, then standard SMP's can be implemented to control peak rate leaving the site if applicable.

The following table summarizes required 100% RRv, minimum RRv, RRv reduced by use of runoff reduction techniques, RRv provided by standard SMP's with RRv and provided RRv for the main project area. The table will be completed after calculation of RRv for the approved layout.

Watershed	Required Total RRv (cf)	Required Minimum RRv (cf)	RRv reduced by use of runoff reduction techniques (cf)	RRv provided by standard SMP with RRv (cf)*	RRv (cf) Provided*
11	11,246	4,075	-	11,246	11,246
12	7,288	3,085	-	7,288	7,288
13	485	174	485	-	485
14	285	106	407	-	285
Green Roof	1,059	583	1,059	-	1,059
Total	**20,363**	**8,023**	**1,951**	**18,534**	**20,363**

* Treatment practices can be oversized to provide additional runoff reduction (RRv); however, they can only be oversized to provide up to 100% of the RRv. No additional credit can be taken for RRv for practices that provide greater than 100% RRv.

6.9 Soil Restoration

Soils within disturbed areas tend to over compact as a result of heavy construction traffic; thus, limiting their infiltrative capacity. Under the GP-0-020-001 permit, soil restoration is required in disturbed areas that will be vegetated in order to recover the original properties and porosity of the soil, especially in areas that receive high construction traffic, or areas that have soils that are poorly drained.

Many runoff reduction practices need Soil Restoration measures applied over and adjacent to the practice to achieve runoff reduction performance. Some key benefits of soil restoration are less runoff, better water quality; healthier, aesthetically pleasing landscapes; increased porosity on redevelopment sites where impervious cover is converted to pervious; decreases runoff volume generated and lowers the demand on runoff control structures; enhances direct groundwater recharge; promotes successful long-term re-vegetation by restoring soil organic matter, permeability, drainage and water holding capacity for healthy root system development of trees, shrubs and deep-rooted ground covers, minimizing lawn chemical requirements, plant drowning during wet periods, and burnout during dry periods.

Soil restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area.

6.9.1 Soil Restoration Methods

- Topsoil Application – Applying 6" of topsoil in soils with an HSG of A & B and have only been stripped, cut or filled. Soils with HSG of C or D that have only been stripped require aeration in addition to topsoil.
- Aeration - Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a mini-subsoiler.
- Tilling – Tilling includes the use of a cat-mounted ripper, tractor mounted disc, or tiller in order to expose the compacted soil devoid of oxygen to air an recreates temporary air space which allows for infiltration.
- Full Soil Restoration - Consists of Deep Ripping and De-Compaction, Compost Enhancement, and/or Deep Subsoiling. Deep Ripping includes the use of a cat mounted ripper, and is typically done at 12" to 24" depths. Compost Enhancement is done by using a deep subsoiler after topsoil has been applied. The goal is to alleviate the compaction that may have occurred during the placement of topsoil. This method mixes the topsoil and compost with subsoils.

Restoration techniques shall not be done until construction is complete and traffic will not travel through green areas. It is expected that full soil restoration will be required in areas around residential dwellings where undisturbed soil existed proposed to landscaped. These areas are shown on the erosion and sediment control plan. Other soil restoration techniques are shown where light grading, or minor cuts and fills are proposed. The type of soil restoration in these areas depends on the hydrologic soil group.

7.0 EROSION AND SEDIMENT CONTROL

7.1 Overview

The most sensitive stage of the development cycle is the period when vegetation is cleared and a site is graded. The potential impacts to on-site and off-site receiving waters and adjoining properties are particularly high at this stage. For example, trees and topsoil are removed, soils are exposed to erosion, and natural topography and drainage patterns are altered. Control of erosion and sediment during these periods is an essential function of this SWPPP and accompanying plans.

Effective and practical measures employed to minimize the erosion potential and prevent sediment from leaving the construction site and reaching streams or other water bodies have been recommended in accordance with:

- New York State Standards and Specifications for Erosion and Sediment Control, November, 2016

In order to ensure the effectiveness of the measures recommended herein, routine inspections and documentation, along with procedures for monitoring the findings, maintenance, and corrective actions resulting from each inspection are outlined within this section of the SWPPP.

7.2 Temporary Erosion and Sediment Control Measures

The following temporary measures have been incorporated into the erosion and sediment control plans for the site construction activities. These measures are also detailed on the site plans.

7.2.1 Silt Fence

A silt fence is a temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts, entrenched, and supported with woven wire fence. Silt fences are installed on the contours across a slope and used to trap sediment by intercepting and detaining sediment laden runoff from disturbed areas in order to promote sedimentation on the uphill side of the fence.

Silt fences are suitable for perimeter and interior control, placed below areas where runoff may occur in the form of sheet flow. It should not be placed in channels or areas where flow is concentrated. In addition to interior and perimeter control a silt fence can be applied in the following applications:

- Below the toe or down slope of exposed and erodible slopes.
- Along streams and channels banks.
- Around temporary spoil area and stockpiles.

7.2.2 Stabilized Construction Entrance

A stabilized construction entrance consists of a pad of aggregate overlaying a geotextile fabric located at a point where construction vehicles enter or exit a site to reduce or eliminate the tracking of sediment onto public right of ways, street, alleys or parking areas, thereby preventing the transportation of sediment into local stormwater collection systems. Efficiency is greatly increased when a washing area is included as part of a stabilized construction entrance.

Stabilized construction entrances shall be a minimum of fifty (50) feet long and twelve (12) feet wide, but not less than the full width of points where vehicles enter and exit the site. Where there is only one access point to the site, the stabilized construction entrance shall be a minimum of twenty-four (24) feet wide. Stabilized construction entrances shall be a minimum of six (6) inches in depth consisting of one (1) to four (4) inch stone or reclaimed or recycled equivalent.

7.2.3 Check Dams

Check dams shall be placed in channels to reduce scour and erosion by reducing flow velocity and promoting sediment settlement. Check dams shall be spaced in the channel so that the crest of the downstream dam is at the elevation of the toe of the upstream dam. Check dams, consisting of a well-graded stone two (2) – nine (9) inches in size (NYSDOT – Light Stone) shall maintain a height of two (2) feet with side slopes of 2:1 extending beyond the bank of the channel by a minimum of one and a half (1.5) feet. Check dams shall be anchored in the channel by a cutoff trench of one and a half (1.5) feet in width by a half (0.5) foot in depth.

7.2.4 Inlet Protection

Inlet protection consists of a filtering measure placed around or upstream of a storm drain used to trap sediment by temporary ponding runoff before it enters the storm drain. Inlet protection is not considered to be a primary means of sediment control and should be used with an overall integrated

sediment control program. There are four types of storm drain inlet protection consisting of: excavated drop inlet protection, fabric drop inlet protection, stone and block drop inlet protection and curb drop inlet protection.

Inlet protection shall be implemented for all inlets that could potentially be impacted by sediment laden runoff.

7.2.5 Temporary Channels

Temporary channels in the form of diversion swales or berms may be used to intercept and direct runoff under the following applications:

- Above disturbed areas in order to direct and prevent clean runoff from flowing over disturbed areas until the area is permanently stabilized.
- Below disturbed areas to convey sediment laden runoff to sediment traps.
- Across disturbed slopes to reduce slope lengths.

Where used to convey sediment laden runoff, temporary channels shall be equipped with check dams.

7.2.6 Sediment Traps & Sediment Basins

A sediment trap or basin is a containment area, where sediment laden runoff collected from disturbed areas is temporarily detained allowing sediment to settle out before the runoff is discharged. Sediment traps and basins are formed by excavating an area or constructing an earthen embankment where sediment control is needed.

There are several types of sediment traps. The outlet of a rip rap outlet sediment traps shall be through a partially excavated channel through the embankment lined with rip rap. Pipe outlet sediment traps are equipped with an outlet structure including a perforated riser. The pipe outlet typically is installed through the embankment.

Sediment traps and basins are designed to treat 3,600 cubic feet per acre of drainage area collected. Pipe outlet sediment traps are limited to drainage areas of less than five (5) acres, rip rap outlet sediment traps are limited to fifteen (15) acres of drainage area, and sediment basins can accommodate upwards of one hundred (100) acres.

Sediment shall be removed, and the trap or basin shall be restored to the original dimensions when the sediment has accumulated to ½ of the design depth. The required and provided storage/cleanout elevations have been provided on the plan set. Calculations for sizing the facilities will be provided in the final SWPPP if necessary.

7.2.7 Water Bars

Water bars are temporary earth barriers constructed across construction roads used to intercept and divert roadway runoff toward temporary sediment traps or channels, prevent runoff from concentrating, and minimize the potential of gullies from forming. Spacing of water bars is dependent upon the road slope and shall be installed in accordance with the schedule depicted on the Erosion and Sediment Control detail sheet.

7.2.8 Straw Bale Barriers

Straw bale barriers are used to intercept and contain sediment from disturbed areas of limited size in order to prevent sediment from exiting the site. Bales should be placed in a single row lengthwise along the contour, with ends abutting one another. Straw bales shall be bound and installed so that the bindings are oriented around the sides. Straw bales shall be entrenched a minimum of four (4) inches, backfilled, and anchored using either two stakes or rebar driven through the straw bales to a depth of one and a half (1.5) to two (2) feet below grade.

Straw bales shall be used where no other measure is feasible. They shall not be used where there is a concentration of flow within a channel or other area.

The useful life of a straw bale barrier is three (3) months.

7.2.9 Temporary Soil Stockpiles

Stockpiling of soil is a method of preserving soil and topsoil for regrading and vegetating disturbed areas. Stockpiles shall be located away from environmentally sensitive areas (i.e. wetlands and associated buffers, streams, water bodies) and shall be protected with a peripheral silt fence. Slopes of stockpiles shall not exceed 2:1. Temporary stabilization measures shall be completed within fourteen (14) days of stockpile formation.

7.2.10 Dust Control

Dust control measures reduce the surface and air transport of dust, thereby preventing pollutants from mixing into stormwater. Dust control measures for the construction activities associated within this project consist of windbreaks, minimization of soil disturbance (preserving buffer areas of vegetation where practical), mulching, temporary and permanent vegetation cover, barriers (i.e. geotextile on driving surfaces) and water spraying.

Construction activities shall be scheduled to minimize the amount of area disturbed at any one time.

7.2.11 Temporary Soil Stabilization Practices

Stabilization practices reduce the potential for soil detachment by shielding the soil surface from the impact of rainfall and reducing overland flow velocity.

The Contractor shall initiate stabilization measures as soon as possible in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. This requirement does not apply where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions.

Temporary stabilization practices may include:

7.2.11.1 Mulching

Mulching is a temporary soil stabilization practice. Mulching prevents erosion by protecting soil from raindrop impact and by reducing the velocity of overland flow. Mulching also retains moisture within the soil surface and prevents germination. Where mulching consists of wood chips or shavings, it shall be applied at a rate of 500-900 lbs per 1000 s.f. Where mulching consists of

straw, it shall be applied at a rate of 90-100 lbs. per 1000 s.f. All temporary grass areas shall receive a standard application of mulch consisting of straw, unless the area is hydroseeded.

7.2.11.2 Temporary Seeding

Temporary seeding provides additional benefits over other stabilization practices by creating a vegetation system holding soil particles in place with root systems and maintaining the soils capacity to absorb runoff. Temporary vegetation shall be placed in accordance with project plans. Irrigation shall be used when the soil is dry or when summer plantings are done.

7.2.11.3 Temporary Erosion Control Blanket

A temporary erosion control blanket is a degradable erosion control blanket used to hold seed and soil in place until vegetation is established in disturbed areas. Temporary erosion control blankets insulate and conserve seed moisture thus reducing evaporation and increasing germination rates and protect seeds from birds. Temporary erosion control blankets may consist of straw blankets, excelsior blankets (curled wood excelsior), coconut fiber blankets, or wood fiber blankets (reprocessed wood fibers which do not possess or contain any growth or germination inhibiting factors).

7.3 Permanent Erosion and Sediment Control Measures

The following permanent measures have been incorporated into the erosion and sediment control plans for the site construction activities.

7.3.1 Outlet Protection

Outlet protection is used to reduce stormwater velocity and dissipate the energy of flow exiting a culvert before discharging into receiving channels. Rip-rap treatment extends between the point where flows exit the culvert and where the velocity and/or energy from runoff is dissipated to a degree where there is minimal erosion downstream of the discharge point.

A geotextile fabric shall be placed beneath the rip-rap to prevent soil movement into and through the rip-rap.

7.3.2 Permanent Soil Stabilization Practices

Stabilization practices reduce the potential for soil detachment by shielding the soil surface from the impact of rainfall and reducing overland flow velocity.

The Contractor shall initiate stabilization measures as soon as possible in portions of the site where construction activities have permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has permanently ceased.

Permanent stabilization practices may include:

7.3.2.1 Sod

Where exposed soils have the potential to generate off-site sediment loading, sod can provide a immediate form of stabilization and extra protection to a disturbed area. Where applied, sod shall be blue grass or a bluegrass/red fescue mixture or a perennial ryegrass and machine cut with a uniform soil thickness of ¾ inch, plus or minus ¼ inch. Sod shall be used at the discretion of the Owner, unless specifically required by the plans.

7.3.2.2 Permanent Vegetation

Permanent vegetation shall be used to provide a protective cover for exposed areas that have received final grading. Permanent stabilization shall be applied where topsoil has been placed or returned and incorporated into the soil surface. When used, this process shall be followed with the application of straw mulch to protect soil from erosion and seed from drying out. Irrigation shall be used when the soil is dry or when summer plantings are done. Permanent vegetation shall be placed in accordance with project plans.

7.3.2.3 Hydroseeding

Hydroseeding is the hydraulic application of seed and fertilizer onto prepared seed beds. When used, this process shall be followed with the application of straw mulch to protect soil from erosion and seed from drying out. Irrigation shall be used when the soil is dry or when summer plantings are done. Hydroseeding shall be used at the discretion of the Contractor, unless specifically required by the plans.

7.3.2.4 Permanent Erosion Control Blankets

Permanent erosion control blankets are comprised of synthetic materials that form a high strength mat that helps prevent soil erosion in channels and on steep slopes. Stems and roots become intertwined within the matrix, thus reinforcing the vegetation and anchoring the mat. Permanent erosion control blankets insulate and conserve seed moisture thus reducing evaporation and increasing germination rates and protect seeds from birds. When used within channels, permanent erosion control blankets can aid in the establishment of vegetation and increase the maximum permissible velocity of the given channel by reinforcing the soil and vegetation to resist the forces of erosion during runoff events.

7.4 Erosion and Sediment Control Sequencing Schedule

Implementation schedules for the installation of erosion and sediment control measures prior to and during the course of construction will depend greatly on the actual construction schedule and the varying field conditions that may warrant temporary construction stops and/or work commencing in other locations. A construction sequence is provided demonstrating how the project will be phased to limit to soil disturbance to less than 5-acres at any one time.

Erosion control measures shall be inspected and repaired as needed during construction activities and based on the maintenance schedule. Additional erosion control measures based on site conditions shall be provided as necessary in order to protect adjacent parcels and waters.

7.5 Maintenance Schedules

Maintenance of the erosion and sediment controls incorporated into this project shall be performed on a regular basis to assure continued effectiveness. This includes repairs and replacement to all erosion and sediment control practices, including cleanout of all sediment retaining measures. Those measures found to be ineffective during routine inspections shall be repaired or replaced and cleaned out (where applicable) before the next anticipated storm event or within 24-hours of being notified, whichever comes first. A more detailed description of the maintenance procedures for the site-specific erosion and sediment control practices has been provided on the plan set.

7.6 Construction Staging Areas

Construction staging areas are areas designated within construction sites where most equipment and materials are stored. The locations of the construction staging areas for this project have been shown on the plan set.

7.7 Site Assessments, Inspections and Reporting

Regular inspections of the construction site shall be performed by a qualified professional who is familiar with all aspects of the SWPPP and the implemented control practices. Inspections are intended to identify areas where the pollutant control measures at the site are ineffective and have the potential to allow pollutants to enter water bodies or adjoining properties.

7.7.1 Prior to Construction

Prior to the commencement of construction, a qualified professional shall conduct an inspection of the site and certify in an inspection report that the appropriate erosion and sediment control measures have been installed as indicated by the project plan set and SWPPP. This certification shall be forwarded to the Owner's Representative and Contractor for filing in the construction logbook.

A copy of the "Pre-Construction Site Assessment Checklist" has been provided in Appendix G.

7.7.2 During Construction

Following the commencement of construction, a qualified professional shall perform inspections of site construction activities in accordance with the SPDES General Permit. Inspections shall occur every seven (7) calendar days. Refer to Section 1.2 of this SWPPP for additional inspection requirements associated with disturbance of greater than five (5) acres at any time.

For project areas where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the qualified inspector shall conduct a site inspection at least once every thirty (30) calendar days. The owner or operator shall notify the Regional Office stormwater contact person in writing prior to reducing the frequency of inspections.

For project areas where soil disturbance activities have been shut down with partial project completion, the qualified inspector can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved final stabilization and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The owner or operator shall notify the Regional Office stormwater contact person in writing prior to the shutdown.

The inspections shall include observation of installed and maintained erosion and sediment control measures for consistency with project specifications and documentation of items to be corrected and recommendations for mitigating concerns. The following information, at minimum, shall be recorded during each inspection:

- Date and time of inspection;
- Name and title of person(s) performing inspection;

- A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;

- A description of the condition of the runoff at all points of discharge from the construction site. This shall include identification of any discharges of sediment from the construction site. Include discharges from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;

- A description of the condition of all-natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site which receive runoff from disturbed areas. This shall include identification of any discharges of sediment to the surface waterbody.

- Identification of all erosion and sediment control practices that need repair or maintenance.

- Identification of all erosion and sediment control practices that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;

- Description and sketch of areas that are disturbed at the time of the inspection and areas that have been stabilized (temporary and/or final) since the last inspection;

- Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;

- Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water (where applicable);

- Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of the sediment storage volume;

- Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);

- Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report being maintained on site within seven (7) calendar days of the date of the inspection. The qualified inspector

shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection;

- A brief description of any erosion and sediment control practice repairs, maintenance or installations made as a result of previous inspection; and

- All deficiencies that are identified with the implementation of the SWPPP.

Summary reports shall be forwarded to the Owner's Representative and Contractor. Reports shall be incorporated into the construction logbook. Within one business day of the completion of an inspection, the qualified inspector shall notify the owner or operator and appropriate contractor or subcontractor of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.

A copy of the "Construction" inspection report has been provided in Appendix M.

7.7.3 Quarterly Report

The Owner shall prepare a written summary of its status with respect to compliance with the SPDES General Permit at a minimum frequency of every three months during which coverage under the permit exists. The summary should address the status of achieving each component of the SWPPP. The report shall include the overall performance of the stormwater facilities, average, minimum and maximum depths of sediment within the stormwater facilities, the physical condition of all drainage structures, maintenance reports from the previous year, and any recommendations for any repairs, modifications or adjustments to the stormwater facilities.

7.7.4 End of Term

Termination of coverage under SPDES General Permit is accomplished by filing a Notice of Termination with the NYSDEC. Prior to the filing of the Notice of Termination (NOT), the Owner shall have a qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization using either vegetative or structural stabilization methods, that all temporary erosion and sediment control structures have been removed, and that all permanent erosion control and stormwater facilities have been installed and are operational in conformance with the SWPPP by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice" certification statements on the NOT. The owner or operator shall then submit the completed NOT form to the NYSDEC. "Final stabilization" means that all soil disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextile) have been employed on all unpaved areas and area not covered by permanent structures.

A NOT is provided in Appendix N.

7.8 Construction Logbook

The construction logbook shall be maintained on-site from the date of initiation of construction activities to the date of final stabilization and shall be made available to the permitting authority upon request. The construction logbook shall contain a record of all inspections; preparer's, qualified professional's, owner's/operator's, contractor's, and sub-contractor's (if applicable) certifications; and weekly and quarterly reports.

7.9 Long Term Operation and Maintenance Plan of Stormwater System and Landscape Areas

All stormwater facilities and infrastructure shall be inspected on a yearly basis by a licensed professional engineer. A copy of the inspection report, along with findings and recommendations, shall be submitted to the Beacon Building Department and City Engineer's office.

7.9.1 Catch Basins and Piping

Catch basins shall be inspected after every storm event and remove trash and debris that may be blocking the flow capability of the structure. The owner should pay close attention during the fall months where leave debris will be heavy. The catch basins and piping shall be inspected for sediment accumulation at least once a year, and utilize vacuum trucks as necessary to remove the accumulated sediment.

7.9.2 Hydrodynamic Separators (Hydro International Units)

The manufacture recommends that the Hydro International units be inspected bi-annually (once in the spring and once in the fall). The structure shall be visually inspected for blockages or obstructions in the inlet or separation screen. The inspection should also quantify accumulation of hydrocarbons, sediment and trash within the system. Inspections and maintenance shall be performed by qualified personnel with adequate training in these types of units. A record of inspections and scheduled cleanings shall be kept on site at all times. Manufacture's inspection recommendations and a sample report is provided in Appendix H.

7.9.3 Infiltration Basins

Infiltration basins shall be inspected monthly for sediment and debris accumulation. Inflow pipes, outlet structures and spillways should also be inspected for sediment and debris monthly. Any accumulated sediment or debris should be removed as necessary. After storm events, the infiltration basin's dewatering duration should also be monitored. The basin floor shall be mowed when the grass reaches a height of 18". Sediment shall be cleaned out of the basin annually.

7.9.4 Underground Detention/Infiltration Chambers

CULTEC recommends inspection of the Separator Row to be performed every six months for the first year of service. Future inspection frequency can be adjusted based upon previous inspection observations. However annual inspections are recommended. Inspection of the Separator Row can be achieved via an inspection port riser installed during construction. This inspection port riser will connect the top of the Separator Row chambers to finished grade with a removable lid.

To inspect:

• Remove the inspection port lid from the floor box frame.
• Remove the riser pipe cap.
• With a flashlight and stadia rod, measure the depth of sediment.
• Record results in a maintenance log.
• When depth of sediment exceeds 3" (76 mm), use the JetVac procedure described below.

The JetVac process utilizes a high pressure water nozzle controlled from the surface. The high pressure nozzle is introduced down the Separator Row via the access manhole(s). The high pressure water cleans all sediment and debris from the Separator Row as the nozzle is retrieved. Captured pollutants are flushed into the sumped access manhole for vacuuming. This process is repeated until the Separator Row is completely free of sediment and debris. A small diameter culvert cleaning nozzle is recommended for this procedure. Manufacture's inspection recommendations and a sample report is provided in Appendix H.

7.9.5 Bioretention Areas

Bioretention areas shall be inspected monthly for sediment and debris accumulation. Inflow pipes, outlet structures and spillways should also be inspected for sediment and debris monthly. Any accumulated sediment or debris should be removed as necessary. Plantings shall be inspected monthly for height, fertilizer, quantity and unauthorized invasive or inappropriate species. Grass height shall be kept below 6" in height. After storm events, the bioretention's dewatering duration should also be monitored. Sediment shall be cleaned out of the bioretention area annually.

7.9.6 Pre-treatment Forebays and Plunge Pools

Pre-treatment forebays or plunge pools shall be inspected annually for overall performance and sediment accumulation. Sediment shall be removed when sediment accumulation reaches 50% of the design capacity volume. Inspection checklists for infiltration, bioretention and sediment forebays are included in Appendix R.

8.0 GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES

The following good housekeeping and material management practices shall be followed to reduce the risk of spills or exposure of materials to stormwater runoff.

8.1 Waste Materials

All waste material, including but not limited to trash and construction debris, generated during construction shall be collected and stored in a proper receptacle in accordance with Federal, State, County and Local regulations. No waste material shall be buried on-site. All collected waste material shall be hauled to an approved waste disposal facility.

8.2 Chemical

Chemicals used on-site shall be kept in small quantities and stored in closed watertight containers undercover in a neat and orderly manner and kept out of direct contact with stormwater. Chemical products shall not be mixed with one another unless recommended by manufacturer.

All on-site personnel shall have access to material safety data sheets (MSDS) and National Institute for Occupational Safety and Health (NIOSH) Guide to Chemical Hazards (latest edition) for all chemicals stored and used on-site.

Manufacturer's and/or Federal, State, County and Local guidelines for proper use and disposal shall be followed. Any spills or contamination of runoff with chemicals shall be contained, collected, cleaned up immediately and disposed of in accordance with Federal, State, County and Local regulations.

8.3 Fuels and Oil

All on-site vehicles, tools, and construction equipment shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. On-site vehicle and equipment refueling shall be conducted at a location away from access to surface waters and runoff. Any on-site storage tanks shall have a means of secondary containment. Oil products shall be kept in their original containers with original manufacturer's label. In the event of a spill, it shall be contained, cleaned up immediately and the material, including any contaminated soil, shall be disposed of in accordance with Federal, State, County and Local regulations.

Fuel and oil spills in excess of reportable quantities shall be reported to the NYSDEC as soon as the discharge is discovered.

8.4 Fertilizers

Fertilizers used on-site shall be stored in closed watertight containers undercover in a neat orderly manner and kept out of direct contact with stormwater. Manufacturer's and/or Federal, State, County and Local guidelines for proper use and disposal shall be followed. Any spills or contamination of runoff with fertilizers shall be contained, collected, cleaned up immediately, and disposed of in accordance with Federal, State, County and Local regulations.

8.5 Paint

Paints used on-site shall be stored in closed, watertight containers undercover in a neat and orderly manner and kept out of direct contact with stormwater. Manufacturer's and/or Federal, State, County and Local guidelines for proper use and disposal shall be followed. Any spills or contamination of runoff with paint shall be contained, collected, cleaned up immediately, and disposed of in accordance with Federal, State, County and Local regulations.

8.6 Sanitary Waste Facilities

Should portable units be located on-site, they shall be placed in upland areas away from direct contact with surface waters. They shall be serviced and cleaned on a weekly basis by a licensed portable toilet and septic disposal service. Any spills occurring during service shall be cleaned up immediately and disposed of in accordance with Federal, State, County, and Local regulations.

8.7 Container Disposal

All of a product shall be used up before disposal of the container. Empty containers that may contain chemical residue shall be disposed of in accordance with Federal, State, County and Local regulations.

8.8 Concrete and Asphalt Trucks

Concrete and asphalt trucks shall not be allowed to wash out or discharge surplus material on-site.

8.9 Site Supervisor

It shall be the responsibility of the Contractor's Site Supervisor to inspect daily and ensure the proper use, storage and disposal of all on-site materials.

9.0 SWPPP AMENDMENT

The SWPPP shall be updated by a licensed professional engineer whenever any of the following apply:

1) There is a significant change in design, construction, operation or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP.
2) The SWPPP proves to be ineffective in:
    - Eliminating or significantly minimizing pollutants from sources identified in the SWPPP required by the SPDES Permit; or
    - Achieving the general objective of controlling pollutants in stormwater discharges from permitted construction activity.
3) Identify any new contractor or subcontractor that will implement any measure of the SWPPP.
4) NYSDEC notifies the Permittee that the SWPPP does not meet one or more of the minimum requirements of the SPDES Permit. Within seven (7) days of such notification or as provided for by the NYSDEC, the Permittee shall make amendments to the SWPPP and submit to the NYSDEC a written certification that the requested changes have been made.

Since this project is subject to the requirements of a regulated, traditional land use control MS4, the owner or operator shall notify the MS4 in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP. Unless otherwise notified by the MS4, the owner or operator shall have the SWPPP amendments or modifications reviewed and accepted by the MS4 prior to commencing construction of the post-construction stormwater management practice.

10.0 CONTRACTOR CERTIFICATIONS

All contractors and subcontractors that have any responsibility to install, inspect or maintain erosion or sediment control measures shall sign a copy of the certification statement included in Appendix I before undertaking any construction activity at the site identified in the SWPPP.

11.0 OWNER/OPERATOR CERTIFICATION

The Owner/Operator must review and sign the owner/operator certification statement included in Appendix K.

12.0 CONCLUSIONS

This SWPPP demonstrates that the proposed project generally meets the requirements of SPDES GP-0-20-001, as follows:

- An erosion and sediment control plan in accordance with the latest revision to the New York State Standards and Specifications for Erosion and Sediment Control, November 2016, has been developed for the project and is included in the site plan set.
- Hydrologic and Hydraulic calculations for all storm events modeled will demonstrate that the resulting stormwater runoff from the development, exiting the site will not adversely impact offsite properties, stormwater conveyance systems or receiving water bodies. Temporary and permanent stormwater systems and facilities are designed in accordance with the latest revision to the New York State Stormwater Management Design Manual, January 2015.
- The project has been designed to capture and treat 90% of the average annual stormwater runoff from the development through approved water quality measures in all available areas.
- The standard stormwater management practices provide more than the required minimum runoff reduction volume (RRv).

APPENDIX A

NOTICE OF INTENT & MS4 ACCEPTANCE FORM

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Water, Bureau of Water Permits
625 Broadway, Albany, New York 12233-3505
P: (518) 402-8111 F: (518) 402-9029
www.dec.ny.gov

10/24/2023

Mirbeau of Beacon, LLC.
Edward Kellogg Kellogg
53 Spring Street
Saratoga Springs, New York 12866

RE: ACKNOWLEDGMENT of NOTICE OF INTENT for Coverage Under SPDES General Permit for Storm Water Discharges from CONSTRUCTION ACTIVITY – General Permit No. GP-0-20-001

Dear Prospective Permittee:

This is to acknowledge that the New York State Department of Environmental Conservation (Department) has received a complete Notice of Intent (NOI) for coverage under General Permit No. GP-0-20-001 for the construction activities located at:

Mirbeau Beacon Inn & Spa
11 Mirbeau Lane
City of Beacon, NY 12508 **County: DUTCHESS**

Pursuant to Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, and ECL Article 70, coverage under GP-0-20-001 for the above construction site is effective five (5) business days from **10/12/2023**, which is the date the Department received your complete eNOI.

The permit identification number for this site is: **NYR11L797**. Be sure to include this permit identification number on any forms or correspondence you send the Department. When coverage under GP-0-20-001 is no longer needed, you must submit a Notice of Termination to the Department.

Additionally, authorization to discharge under GP-0-20-001 is conditioned upon compliance with Part II.C. of GP-0-20-001, specifically the following:

1. A final Storm Water Pollution Prevention Plan has been prepared;

2. When applicable, project review pursuant to the State Environmental Quality Review Act (SEQRA) has been satisfied;

3. Where required, all necessary Department permits subject to the Uniform Procedures Act (UPA) (see 6 NYCRR Part 621), or the equivalent from another New York State agency, have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4).

If other UPA permits, or the equivalent, are required, you must submit a preliminary SWPPP to the appropriate Permit Administrator at the Regional Office listed in Appendix F to GP-0-20-001. The preliminary SWPPP must be submitted at the time that the applications for all other UPA permits, or the equivalent, are submitted to the Department.

Note: Construction cannot commence until all of the above have been satisfied.

Please be advised that there is an annual regulatory fee of $110, which is billed by the Department in the late fall. The regulatory fee covers a period of one calendar year. In addition, since September 1, 2004, construction stormwater permittees have been assessed an initial authorization fee which is now $110 per acre of land disturbed and $675 per acre of future impervious area. The initial authorization fee covers the duration of the authorized disturbance.

Should you have any questions regarding any aspect of the requirements specified in GP-0-20-001, please contact me at (518) 402-8114.

Sincerely,

David Gasper

David Gasper
Environmental Engineer

cc: RWE - **3**
SWPPP Preparer
Hudson Land Design
Bodendorf Michael
174 Main Street
Beacon , New York 12508

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit
*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information	
1. Owner/Operator Name:	Mirbeau of Beacon, LLC.
2. Contact Person:	Edward Kellogg
3. Street Address:	53 Spring Street
4. City/State/Zip:	Saratoga Springs, New York, 12866
II. Project Site Information	
5. Project/Site Name:	Mirbeau Inn & Spa at Beacon
6. Street Address:	11 Mirbeau Lane
7. City/State/Zip:	Beacon, New York, 12508
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information	
8. SWPPP Reviewed by:	John Russo, P.E.
9. Title/Position:	City Engineer
10. Date Final SWPPP Reviewed and Accepted:	04/14/2023
IV. Regulated MS4 Information	
11. Name of MS4:	City of Beacon
12. MS4 SPDES Permit Identification Number: NYR20A	040
13. Contact Person:	Michael Manzi
14. Street Address:	1 Municipal Plaza
15. City/State/Zip:	Beacon, New York, 12508
16. Telephone Number:	(845) 831-0932

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name: Michael Manzi

Title/Position: Highway Superintendent/Stormwater Management Officer

Signature: Michael M

Date: 10/11/2023

VI. Additional Information

(NYS DEC - MS4 SWPPP Acceptance Form - January 2015)

APPENDIX B

SOILS DATA

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Dutchess County, New York

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

73° 58' 38" W
73° 57' 40" W
41° 29' 33" N
41° 29' 5" N
585400
585500
585600
585700
585800
585900
586000
586100
586200
586300
586400
586500
586600
586700
4593900
4593800
4593700
4593600
4593500
4593400
4593300
4593200
4593100
Cherry St
South Ave
Fishkill Creek
High Goal Ln
ESB
HsA
ChB
DwB
W
NwC
NwD
HsB
BeC
9d
Soil Map may not be valid at this scale.
Map Scale: 1:6,090 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0 50 100 200 300
Feet
0 250 500 1000 1500
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dutchess County, New York
Survey Area Data: Version 18, Sep 1, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 8, 2020—Oct 14, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BeC	Bernardston silt loam, 8 to 15 percent slopes	5.6	7.7%
ChB	Charlton fine sandy loam, 3 to 8 percent slopes	8.4	11.5%
DwB	Dutchess-Cardigan complex, undulating, rocky	15.5	21.3%
HsA	Hoosic gravelly loam, nearly level	11.5	15.9%
HsB	Hoosic gravelly loam, undulating	10.3	14.2%
NwC	Nassau-Cardigan complex, rolling, very rocky	2.7	3.7%
NwD	Nassau-Cardigan complex, hilly, very rocky	13.6	18.8%
W	Water	4.9	6.8%
Totals for Area of Interest		**72.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a

given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Dutchess County, New York

BeC—Bernardston silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9rdn
Elevation: 0 to 1,000 feet
Mean annual precipitation: 41 to 47 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 115 to 195 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Bernardston and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bernardston

Setting

Landform: Till plains, hills, drumlinoid ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy, acid, dense till derived mainly from phyllite, shale, slate, and schist

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 27 inches: silt loam
H3 - 27 to 80 inches: silt loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 15 to 30 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D
Ecological site: F144AY007CT - Well Drained Dense Till Uplands
Hydric soil rating: No

Minor Components

Punsit

Percent of map unit: 5 percent
Hydric soil rating: No

Pittstown
Percent of map unit: 5 percent
Hydric soil rating: No

Stockbridge
Percent of map unit: 5 percent
Hydric soil rating: No

Unnamed soils, fine-loamy
Percent of map unit: 3 percent
Hydric soil rating: No

Sun
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Canandaigua
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

ChB—Charlton fine sandy loam, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 2wh0n
Elevation: 0 to 1,440 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Charlton and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton

Setting
Landform: Ridges, ground moraines, hills
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Side slope, crest, nose slope
Down-slope shape: Convex, linear
Across-slope shape: Convex
Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile
Ap - 0 to 7 inches: fine sandy loam
Bw - 7 to 22 inches: gravelly fine sandy loam

C - 22 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Sutton

Percent of map unit: 8 percent
Landform: Hills, ground moraines
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Paxton

Percent of map unit: 5 percent
Landform: Ground moraines, hills, drumlins
Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Convex, linear
Across-slope shape: Convex
Hydric soil rating: No

Chatfield

Percent of map unit: 1 percent
Landform: Ridges, hills
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Crest, side slope, nose slope
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Leicester

Percent of map unit: 1 percent
Landform: Depressions, drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

DwB—Dutchess-Cardigan complex, undulating, rocky

Map Unit Setting

National map unit symbol: 9rfn
Elevation: 0 to 1,330 feet
Mean annual precipitation: 41 to 47 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 115 to 195 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Dutchess and similar soils: 40 percent
Cardigan and similar soils: 30 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dutchess

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from phyllite, slate, schist, and shale

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 28 inches: silt loam
H3 - 28 to 86 inches: channery silt loam

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Description of Cardigan

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till or colluvium derived from phyllite, slate, shale, and schist

Typical profile

H1 - 0 to 8 inches: channery silt loam
H2 - 8 to 20 inches: channery loam
H3 - 20 to 30 inches: channery silt loam
H4 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Georgia

Percent of map unit: 10 percent
Hydric soil rating: No

Nassau

Percent of map unit: 9 percent
Hydric soil rating: No

Massena

Percent of map unit: 9 percent
Hydric soil rating: No

Sun

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Rock outcrop

Percent of map unit: 1 percent
Hydric soil rating: Unranked

HsA—Hoosic gravelly loam, nearly level

Map Unit Setting

National map unit symbol: 9rgj
Elevation: 100 to 1,100 feet
Mean annual precipitation: 41 to 47 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 115 to 195 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hoosic and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hoosic

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and gravelly glaciofluvial deposits

Typical profile

H1 - 0 to 9 inches: gravelly loam
H2 - 9 to 24 inches: very gravelly sandy loam
H3 - 24 to 70 inches: extremely gravelly loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Knickerbocker
Percent of map unit: 5 percent
Hydric soil rating: No

Copake
Percent of map unit: 5 percent
Hydric soil rating: No

Haven
Percent of map unit: 5 percent
Hydric soil rating: No

Fredon
Percent of map unit: 4 percent
Landform: Depressions
Hydric soil rating: Yes

Halsey
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

HsB—Hoosic gravelly loam, undulating

Map Unit Setting
National map unit symbol: 9rgk
Elevation: 100 to 1,100 feet
Mean annual precipitation: 41 to 47 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 115 to 195 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Hoosic and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hoosic

Setting
Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and gravelly glaciofluvial deposits

Typical profile
H1 - 0 to 9 inches: gravelly loam

H2 - 9 to 24 inches: very gravelly sandy loam
H3 - 24 to 70 inches: extremely gravelly loamy sand

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Knickerbocker

Percent of map unit: 5 percent
Hydric soil rating: No

Haven

Percent of map unit: 5 percent
Hydric soil rating: No

Copake

Percent of map unit: 5 percent
Hydric soil rating: No

Fredon

Percent of map unit: 4 percent
Landform: Depressions
Hydric soil rating: Yes

Halsey

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

NwC—Nassau-Cardigan complex, rolling, very rocky

Map Unit Setting

National map unit symbol: 9rhd
Elevation: 0 to 1,800 feet
Mean annual precipitation: 41 to 47 inches
Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 115 to 195 days
Farmland classification: Not prime farmland

Map Unit Composition

Nassau and similar soils: 45 percent
Cardigan and similar soils: 35 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nassau

Setting

Landform: Till plains, ridges, benches
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Channery loamy till derived mainly from local slate or shale

Typical profile

H1 - 0 to 5 inches: channery silt loam
H2 - 5 to 16 inches: very channery silt loam
H3 - 16 to 20 inches: unweathered bedrock

Properties and qualities

Slope: 5 to 15 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: F144AY033MA - Shallow Dry Till Uplands
Hydric soil rating: No

Description of Cardigan

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till or colluvium derived from phyllite, slate, shale, and schist

Typical profile

H1 - 0 to 8 inches: channery silt loam
H2 - 8 to 20 inches: channery loam
H3 - 20 to 30 inches: channery silt loam

H4 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 5 to 15 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Dutchess

Percent of map unit: 9 percent
Hydric soil rating: No

Rock outcrop

Percent of map unit: 5 percent
Hydric soil rating: Unranked

Unnamed soils, very shallow

Percent of map unit: 5 percent
Hydric soil rating: No

Sun

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

NwD—Nassau-Cardigan complex, hilly, very rocky

Map Unit Setting

National map unit symbol: 9rhf
Elevation: 0 to 1,800 feet
Mean annual precipitation: 41 to 47 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 115 to 195 days
Farmland classification: Not prime farmland

Map Unit Composition

Nassau and similar soils: 45 percent

Cardigan and similar soils: 30 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nassau

Setting

Landform: Till plains, ridges, benches
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Channery loamy till derived mainly from local slate or shale

Typical profile

H1 - 0 to 5 inches: channery silt loam
H2 - 5 to 16 inches: very channery silt loam
H3 - 16 to 20 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: F144AY033MA - Shallow Dry Till Uplands
Hydric soil rating: No

Description of Cardigan

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till or colluvium derived from phyllite, slate, shale, and schist

Typical profile

H1 - 0 to 8 inches: channery silt loam
H2 - 8 to 20 inches: channery loam
H3 - 20 to 30 inches: channery silt loam
H4 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Dutchess

Percent of map unit: 10 percent
Hydric soil rating: No

Sun

Percent of map unit: 10 percent
Landform: Depressions
Hydric soil rating: Yes

Rock outcrop

Percent of map unit: 5 percent
Hydric soil rating: Unranked

W—Water

Map Unit Setting

National map unit symbol: 9rjc
Mean annual precipitation: 41 to 47 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 115 to 195 days
Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Erosion Factors

Soil Erosion Factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

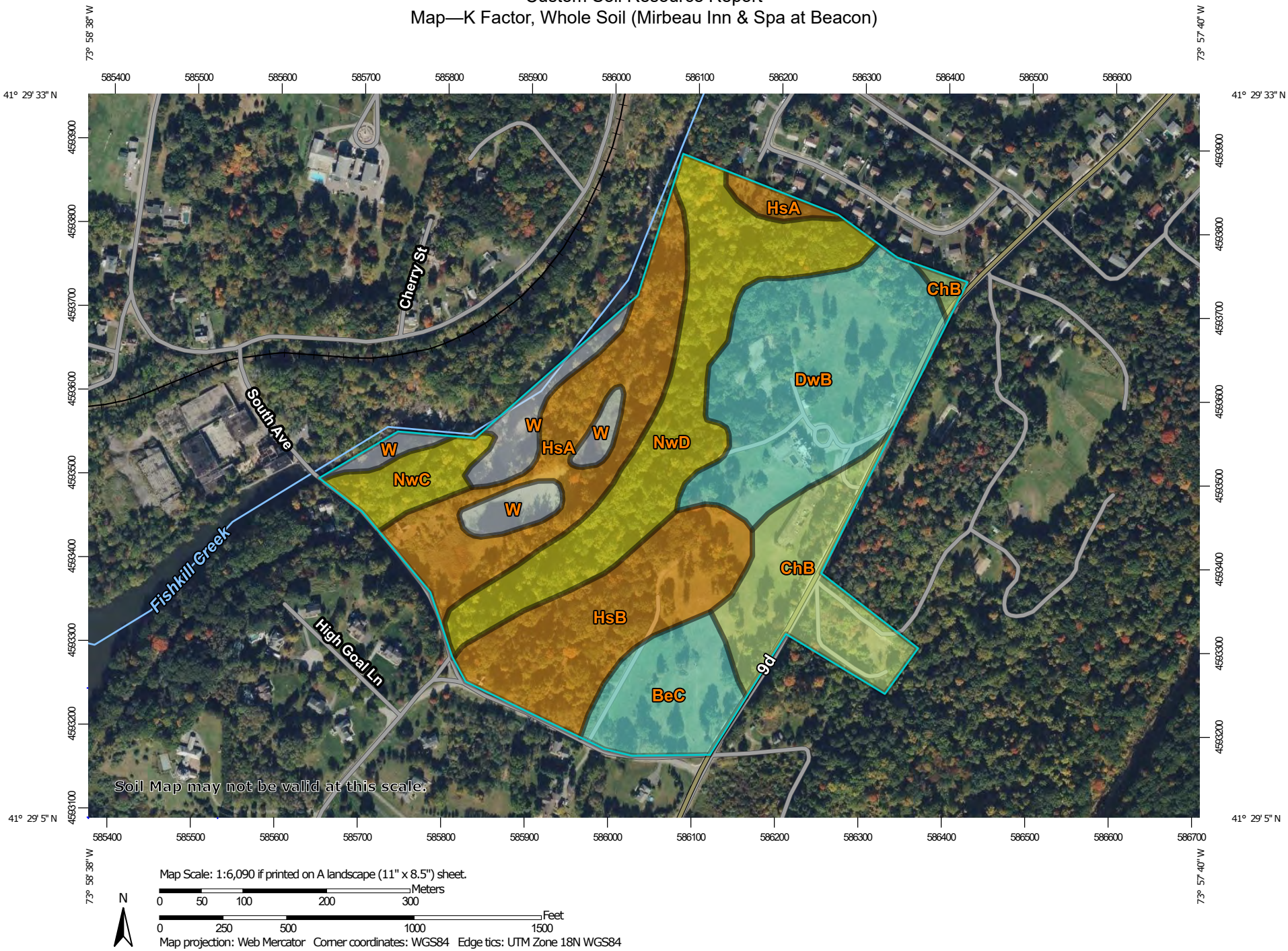
K Factor, Whole Soil (Mirbeau Inn & Spa at Beacon)

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Factor K does not apply to organic horizons and is not reported for those layers.

Map—K Factor, Whole Soil (Mirbeau Inn & Spa at Beacon)



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Soil Rating Lines

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Soil Rating Points

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dutchess County, New York
Survey Area Data: Version 18, Sep 1, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 8, 2020—Oct 14, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—K Factor, Whole Soil (Mirbeau Inn & Spa at Beacon)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BeC	Bernardston silt loam, 8 to 15 percent slopes	.32	5.6	7.7%
ChB	Charlton fine sandy loam, 3 to 8 percent slopes	.24	8.4	11.5%
DwB	Dutchess-Cardigan complex, undulating, rocky	.32	15.5	21.3%
HsA	Hoosic gravelly loam, nearly level	.10	11.5	15.9%
HsB	Hoosic gravelly loam, undulating	.10	10.3	14.2%
NwC	Nassau-Cardigan complex, rolling, very rocky	.17	2.7	3.7%
NwD	Nassau-Cardigan complex, hilly, very rocky	.17	13.6	18.8%
W	Water		4.9	6.8%
Totals for Area of Interest			**72.4**	**100.0%**

Rating Options—K Factor, Whole Soil (Mirbeau Inn & Spa at Beacon)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group (Mirbeau Inn & Spa at Beacon)

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

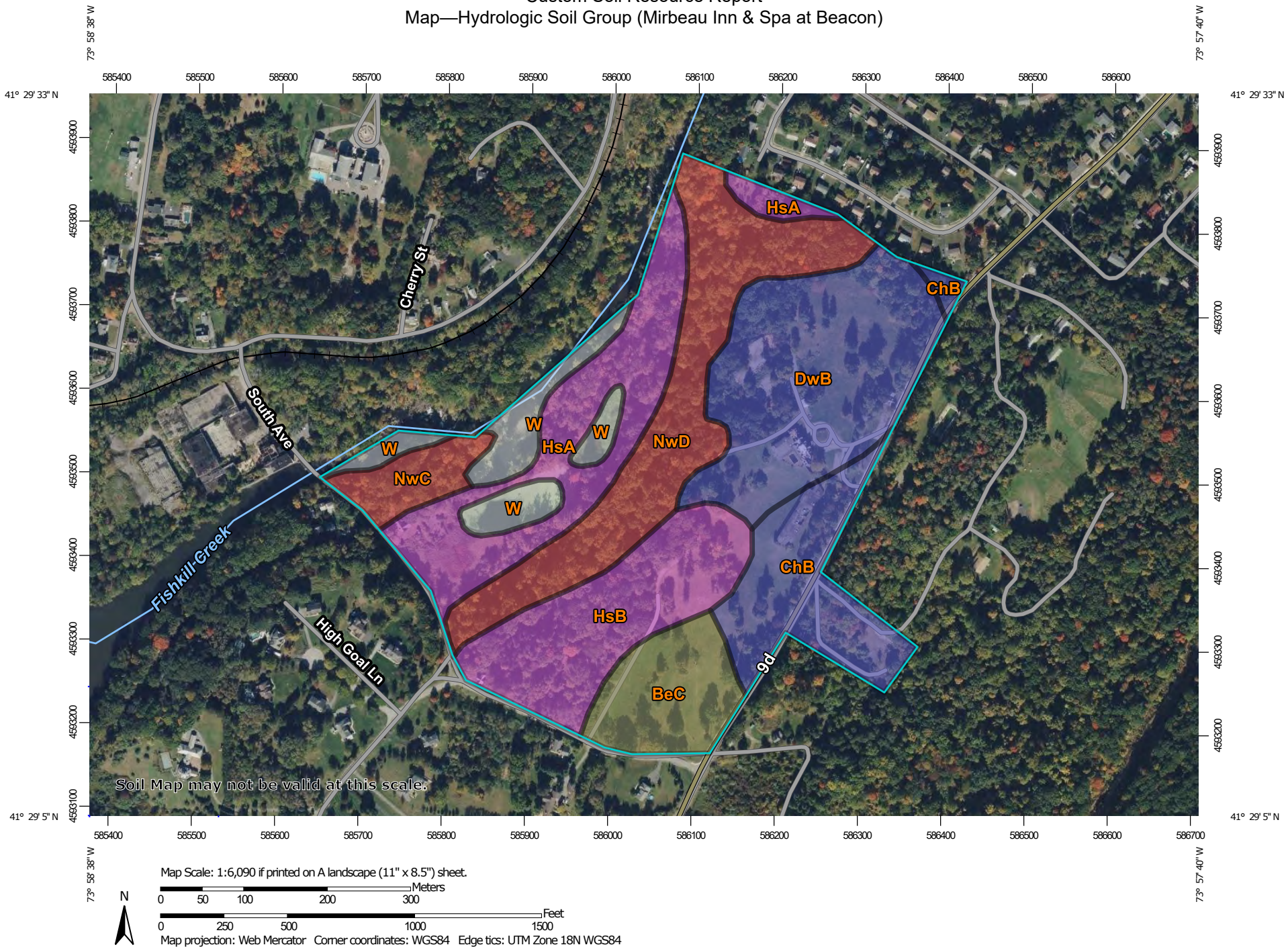
Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Map—Hydrologic Soil Group (Mirbeau Inn & Spa at Beacon)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dutchess County, New York
Survey Area Data: Version 18, Sep 1, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 8, 2020—Oct 14, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydrologic Soil Group (Mirbeau Inn & Spa at Beacon)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BeC	Bernardston silt loam, 8 to 15 percent slopes	C/D	5.6	7.7%
ChB	Charlton fine sandy loam, 3 to 8 percent slopes	B	8.4	11.5%
DwB	Dutchess-Cardigan complex, undulating, rocky	B	15.5	21.3%
HsA	Hoosic gravelly loam, nearly level	A	11.5	15.9%
HsB	Hoosic gravelly loam, undulating	A	10.3	14.2%
NwC	Nassau-Cardigan complex, rolling, very rocky	D	2.7	3.7%
NwD	Nassau-Cardigan complex, hilly, very rocky	D	13.6	18.8%
W	Water		4.9	6.8%
Totals for Area of Interest			**72.4**	**100.0%**

Rating Options—Hydrologic Soil Group (Mirbeau Inn & Spa at Beacon)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

References

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APPENDIX C

RAINFALL DATA, NYSDEC ERM, FLOOD MAP, WETLAND MAP, AND SHPO INFORMATION

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New York
Location	
Longitude	73.967 degrees West
Latitude	41.489 degrees North
Elevation	0 feet
Date/Time	Tue, 22 Mar 2022 11:31:04 -0400

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.33	0.50	0.62	0.82	1.02	1.27	**1yr**	0.88	1.20	1.45	1.77	2.15	2.61	2.96	**1yr**	2.31	2.85	3.30	3.96	4.60	**1yr**
2yr	0.39	0.60	0.74	0.98	1.23	1.53	**2yr**	1.06	1.43	1.76	2.15	2.62	3.17	3.58	**2yr**	2.80	3.44	3.94	4.65	5.29	**2yr**
5yr	0.46	0.71	0.89	1.19	1.52	1.92	**5yr**	1.32	1.77	2.20	2.71	3.29	3.98	4.53	**5yr**	3.52	4.36	5.01	5.79	6.55	**5yr**
10yr	0.51	0.80	1.02	1.38	1.79	2.27	**10yr**	1.55	2.07	2.62	3.22	3.92	4.72	5.42	**10yr**	4.18	5.21	6.01	6.84	7.70	**10yr**
25yr	0.60	0.95	1.21	1.67	2.23	2.85	**25yr**	1.92	2.56	3.30	4.07	4.94	5.93	6.88	**25yr**	5.25	6.62	7.65	8.53	9.54	**25yr**
50yr	0.68	1.09	1.39	1.95	2.62	3.38	**50yr**	2.26	3.01	3.93	4.85	5.88	7.06	8.24	**50yr**	6.25	7.93	9.19	10.09	11.22	**50yr**
100yr	0.77	1.24	1.60	2.27	3.10	4.02	**100yr**	2.67	3.53	4.68	5.79	7.02	8.40	9.88	**100yr**	7.43	9.50	11.04	11.93	13.22	**100yr**
200yr	0.87	1.42	1.85	2.65	3.66	4.79	**200yr**	3.16	4.15	5.58	6.91	8.37	10.00	11.85	**200yr**	8.85	11.39	13.27	14.12	15.58	**200yr**
500yr	1.05	1.73	2.25	3.27	4.58	6.02	**500yr**	3.95	5.15	7.04	8.72	10.57	12.61	15.07	**500yr**	11.16	14.49	16.95	17.66	19.37	**500yr**

Lower Confidence Limits

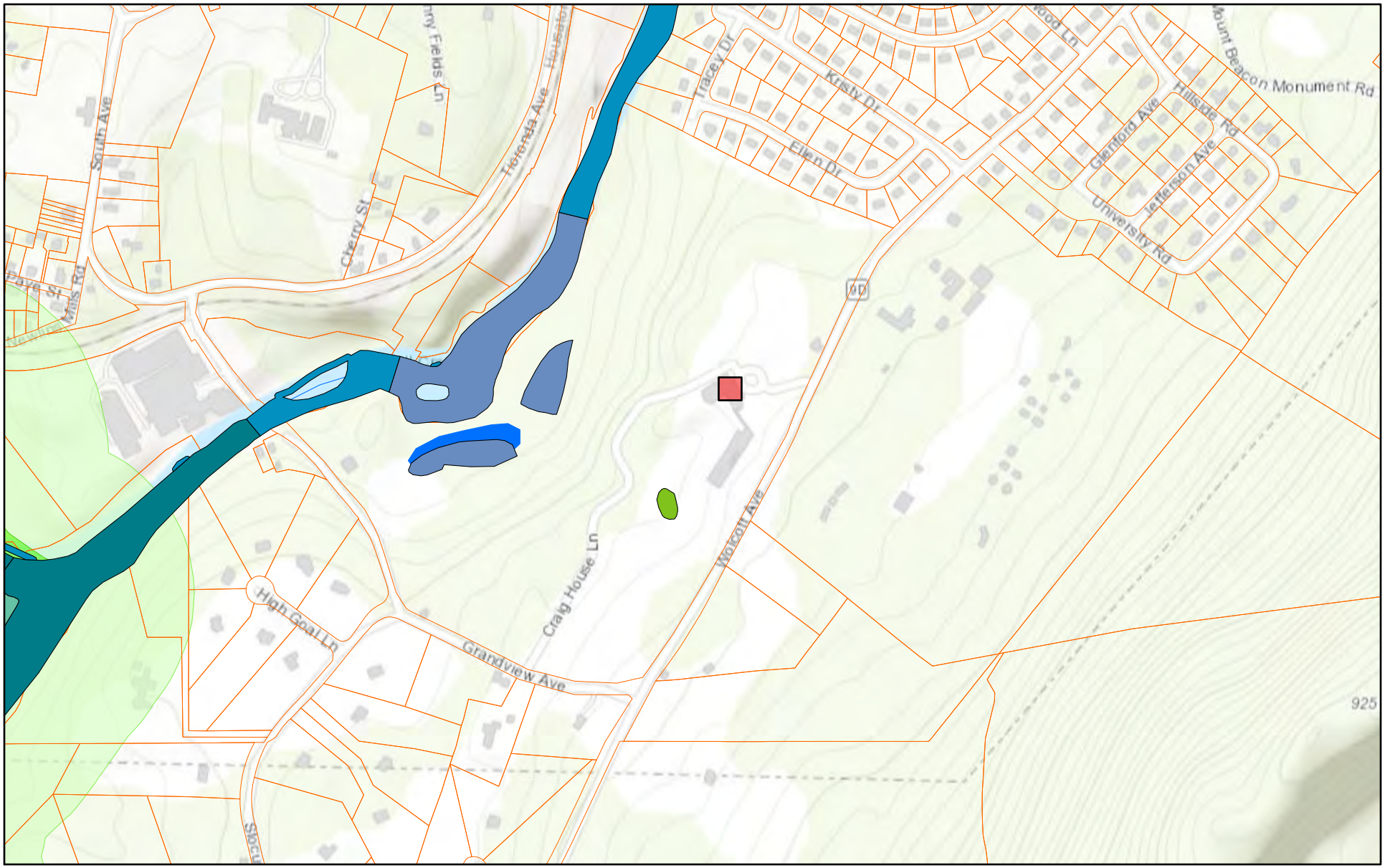
	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.44	0.53	0.72	0.88	1.09	**1yr**	0.76	1.07	1.25	1.60	2.01	2.08	2.36	**1yr**	1.84	2.27	2.64	3.38	4.15	**1yr**
2yr	0.37	0.58	0.71	0.97	1.19	1.42	**2yr**	1.03	1.39	1.61	2.06	2.59	3.08	3.46	**2yr**	2.73	3.33	3.79	4.49	5.15	**2yr**
5yr	0.42	0.65	0.81	1.11	1.41	1.66	**5yr**	1.22	1.62	1.89	2.42	3.02	3.68	4.19	**5yr**	3.26	4.03	4.60	5.33	6.10	**5yr**
10yr	0.47	0.72	0.89	1.25	1.62	1.86	**10yr**	1.39	1.81	2.12	2.72	3.39	4.18	4.84	**10yr**	3.70	4.66	5.30	6.05	6.93	**10yr**
25yr	0.54	0.82	1.02	1.46	1.93	2.14	**25yr**	1.66	2.09	2.46	3.07	3.95	4.92	5.86	**25yr**	4.36	5.63	6.39	7.16	8.23	**25yr**
50yr	0.60	0.92	1.14	1.64	2.21	2.39	**50yr**	1.91	2.33	2.78	3.43	4.45	5.59	6.77	**50yr**	4.94	6.51	7.37	8.13	9.38	**50yr**
100yr	0.68	1.03	1.29	1.86	2.55	2.68	**100yr**	2.20	2.62	3.14	3.83	5.04	6.31	7.84	**100yr**	5.58	7.54	8.49	9.23	10.70	**100yr**
200yr	0.77	1.16	1.47	2.13	2.97	3.00	**200yr**	2.56	2.93	3.54	4.30	5.69	7.09	9.11	**200yr**	6.27	8.76	9.81	10.47	12.23	**200yr**
500yr	0.92	1.37	1.76	2.55	3.63	3.49	**500yr**	3.13	3.41	4.19	5.01	6.73	8.28	11.11	**500yr**	7.33	10.69	11.87	12.37	14.60	**500yr**

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.36	0.56	0.68	0.92	1.13	1.36	**1yr**	0.97	1.33	1.53	1.97	2.43	2.81	3.21	**1yr**	2.49	3.09	3.58	4.25	4.95	**1yr**
2yr	0.40	0.62	0.77	1.04	1.28	1.54	**2yr**	1.11	1.51	1.75	2.25	2.80	3.34	3.71	**2yr**	2.96	3.57	4.10	4.82	5.47	**2yr**
5yr	0.49	0.76	0.94	1.29	1.65	1.96	**5yr**	1.42	1.91	2.26	2.89	3.66	4.27	4.88	**5yr**	3.78	4.69	5.41	6.28	7.01	**5yr**
10yr	0.58	0.89	1.11	1.55	2.00	2.37	**10yr**	1.73	2.32	2.74	3.54	4.49	5.21	6.01	**10yr**	4.61	5.78	6.69	7.67	8.48	**10yr**
25yr	0.72	1.10	1.37	1.95	2.57	3.05	**25yr**	2.22	2.98	3.57	4.73	5.88	6.81	7.92	**25yr**	6.03	7.61	8.89	10.01	10.92	**25yr**
50yr	0.85	1.29	1.61	2.32	3.12	3.71	**50yr**	2.69	3.62	4.35	5.83	7.20	8.35	9.75	**50yr**	7.39	9.38	11.04	12.26	13.22	**50yr**
100yr	1.01	1.52	1.91	2.75	3.78	4.50	**100yr**	3.26	4.40	5.30	7.19	8.83	10.24	12.00	**100yr**	9.06	11.54	13.71	15.03	16.01	**100yr**
200yr	1.19	1.79	2.27	3.28	4.57	5.46	**200yr**	3.95	5.34	6.47	8.84	10.81	12.58	14.80	**200yr**	11.13	14.23	17.03	18.42	19.41	**200yr**
500yr	1.49	2.22	2.85	4.14	5.89	7.06	**500yr**	5.08	6.91	8.40	11.67	14.15	16.53	19.49	**500yr**	14.63	18.74	22.72	24.14	25.01	**500yr**

Powered by ACIS Northeast Regional Climate Center

NYSDEC Wetland Mapper-DEC & NWI Wetlands near 7 Craig House Ln., Beacon NY



March 22, 2022

1:9,028

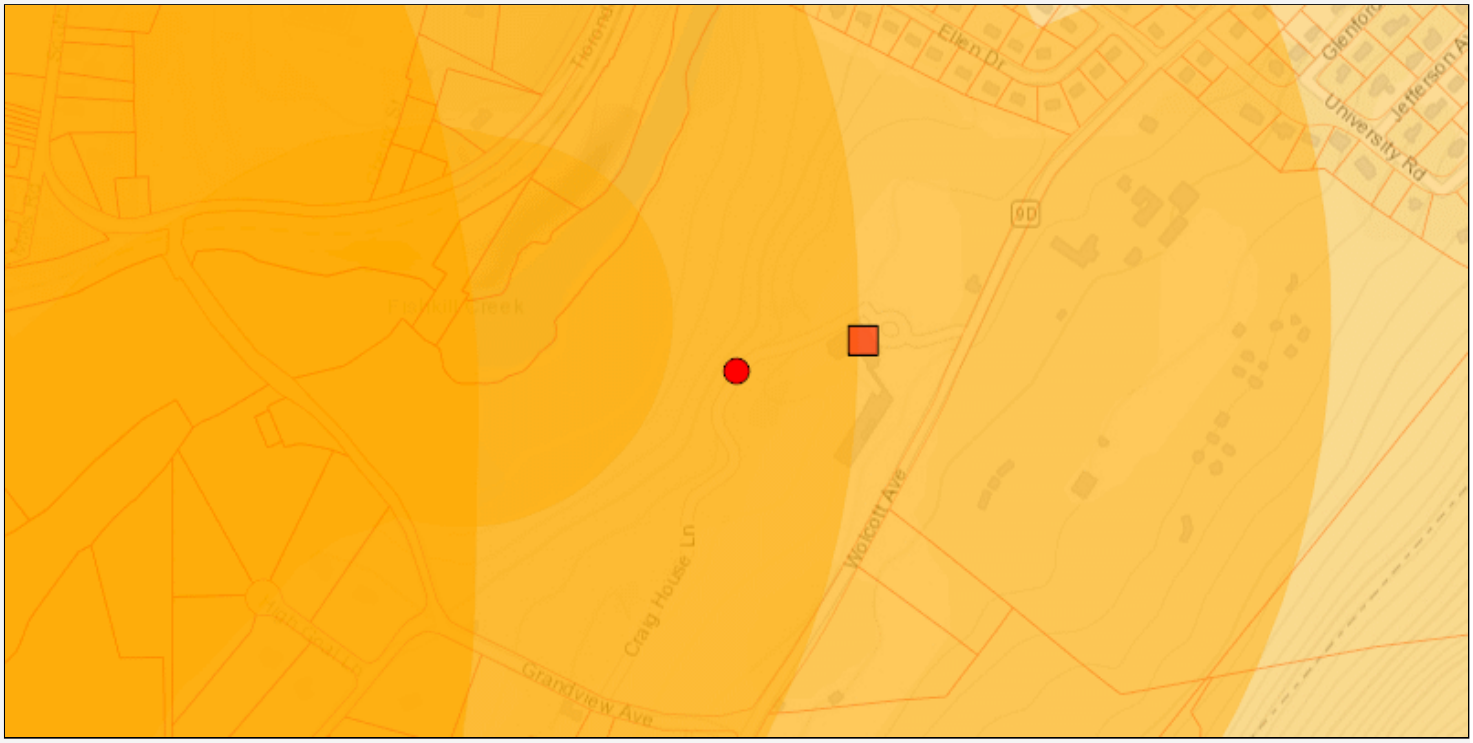
0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri

NYS Department of Environmental Conservatio
Not a legal documer

Environmental Resource Mapper



The coordinates of the point you clicked on are:

UTM 18	**Easting:**	586101.2766505829	**Northing:**	4593511.069399186
Longitude/Latitude	**Longitude:**	-73.96857643571313	**Latitude:**	41.48859965420632

The approximate address of the point you clicked on is:
1-53 Craig House Ln, Beacon, New York, 12508

County: Dutchess
City: Beacon
USGS Quad: WEST POINT

Natural Communities in the Vicinity

Natural Community Name: Appalachian oak-hickory forest
Location: Breakneck Scofield Fishkill Ridge
Significance: High Quality Occurrence

Natural Community Name: Brackish intertidal mudflats
Location: Fishkill Creek Mouth
Significance: Rare Community Type

Natural Community Name: Brackish tidal marsh
Location: Fishkill Creek Mouth
Significance: High Quality Occurrence of Rare Community Type

Natural Community Name: Tidal river
Location: Hudson River Estuary

Significance: High Quality Occurrence of Uncommon Community Type

Rare Plants and Rare Animals

This location is in the vicinity of Rare Plants Listed as Endangered, Threatened, or Rare by NYS

This location is in the vicinity of Significant Anadromous Fish Concentration Area – Contact NYSDEC

This location is in the vicinity of Animals Listed as Endangered or Threatened - Contact NYSDEC Regional Office

If your project or action is within or near an area with a rare animal, a permit may be required if the species is listed as endangered or threatened and the department determines the action may be harmful to the species or its habitat.

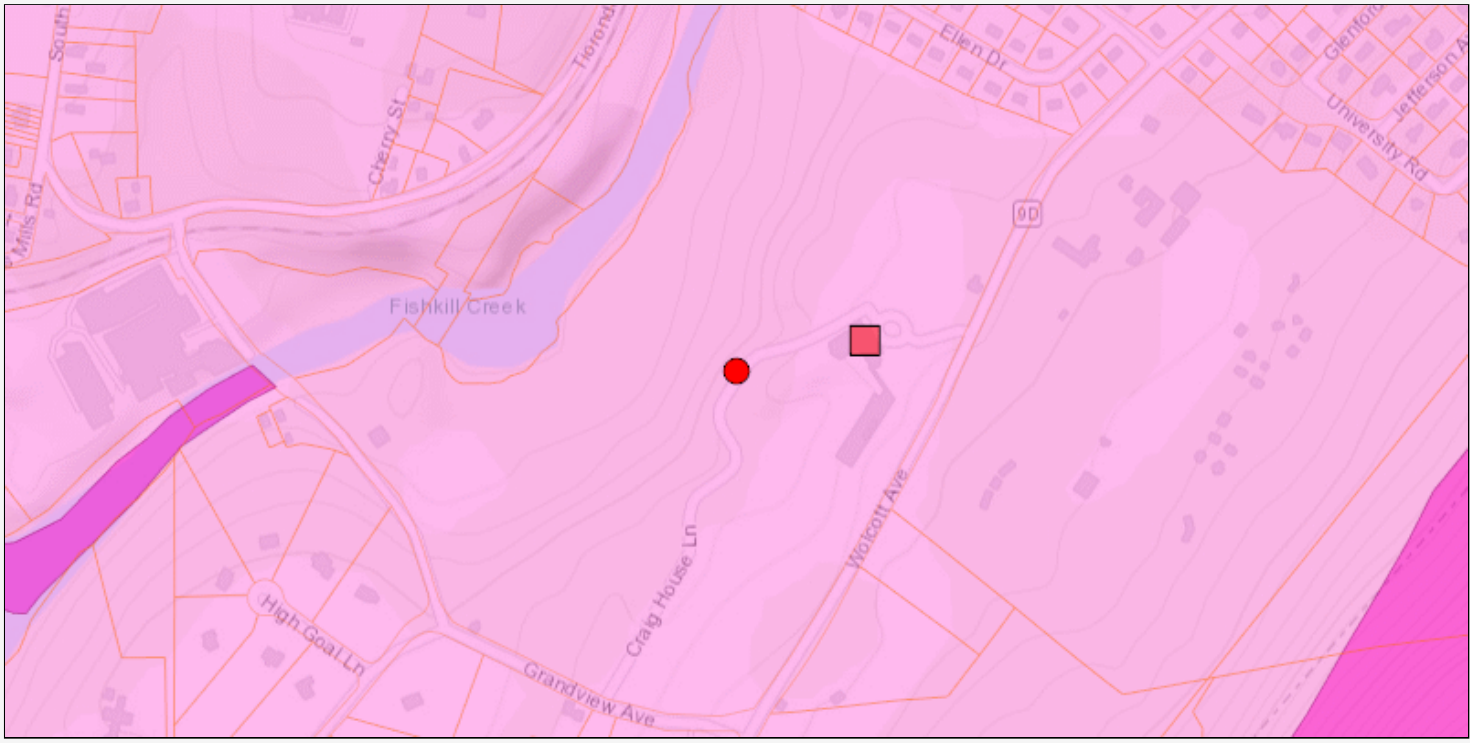
If your project or action is within or near an area with rare plants and/or significant natural communities, the environmental impacts may need to be addressed.

The presence of a unique geological feature or landform near a project, unto itself, does not trigger a requirement for a NYS DEC permit. Readers are advised, however, that there is the chance that a unique feature may also show in another data layer (ie. a wetland) and thus be subject to permit jurisdiction.

Please refer to the "Need a Permit?" tab for permit information or other authorizations regarding these natural resources.

Disclaimer: If you are considering a project or action in, or near, a wetland or a stream, a NYS DEC permit may be required. The Environmental Resources Mapper does not show all natural resources which are regulated by NYS DEC, and for which permits from NYS DEC are required. For example, Regulated Tidal Wetlands, and Wild, Scenic, and Recreational Rivers, are currently not included on the maps.

Environmental Resource Mapper



The coordinates of the point you clicked on are:

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The approximate address of the point you clicked on is:
1-53 Craig House Ln, Beacon, New York, 12508

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Significance: Rare Community Type

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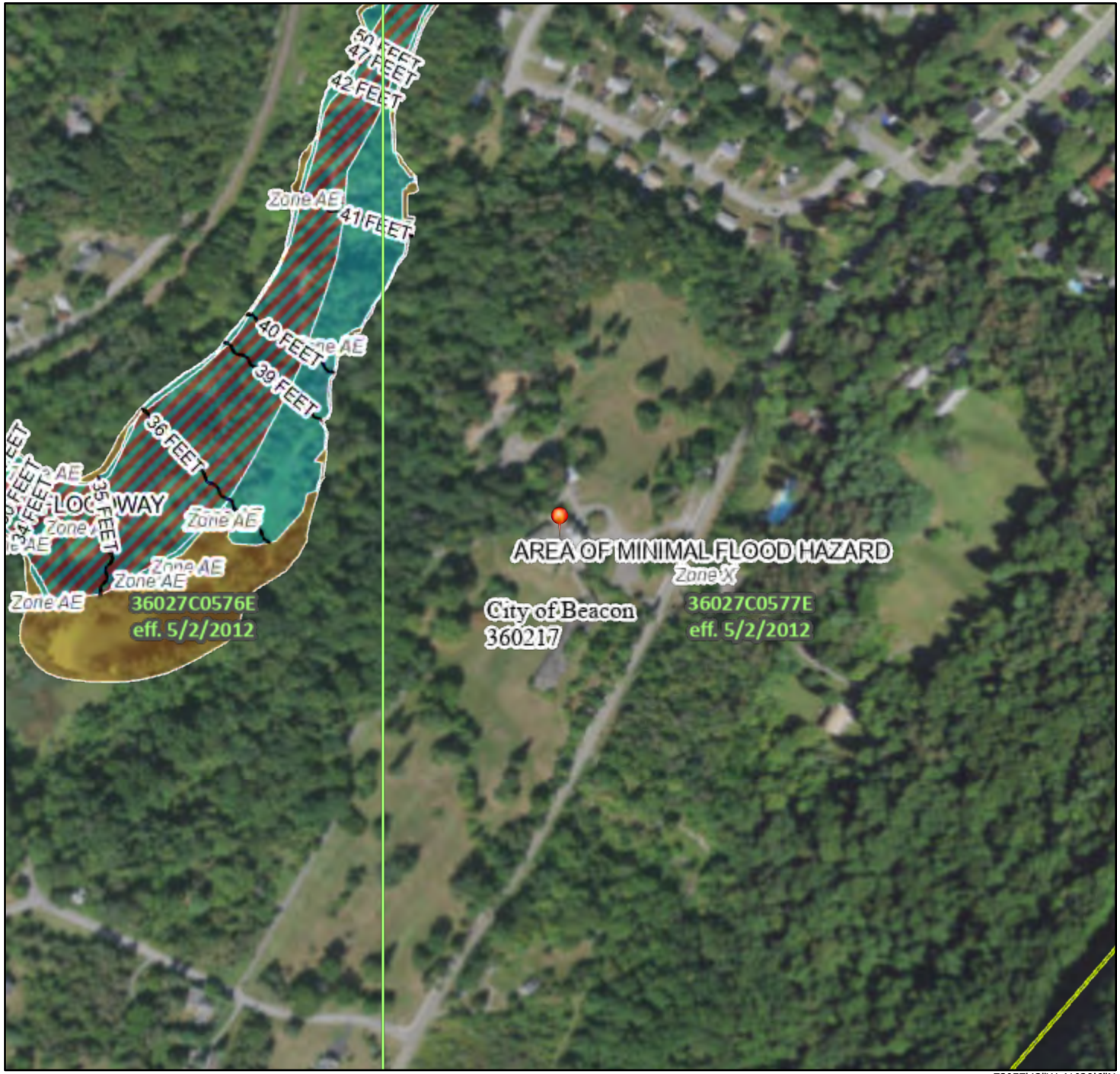
National Flood Hazard Layer FIRMette

FEMA

73°58'20"W 41°29'33"N



73°57'43"W 41°29'6"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/22/2022 at 11:36 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

U.S. Fish and Wildlife Service
National Wetlands Inventory

Mirbeau Inn & Spa at Beacon

March 22, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

CRIS Cultural Resource Information System

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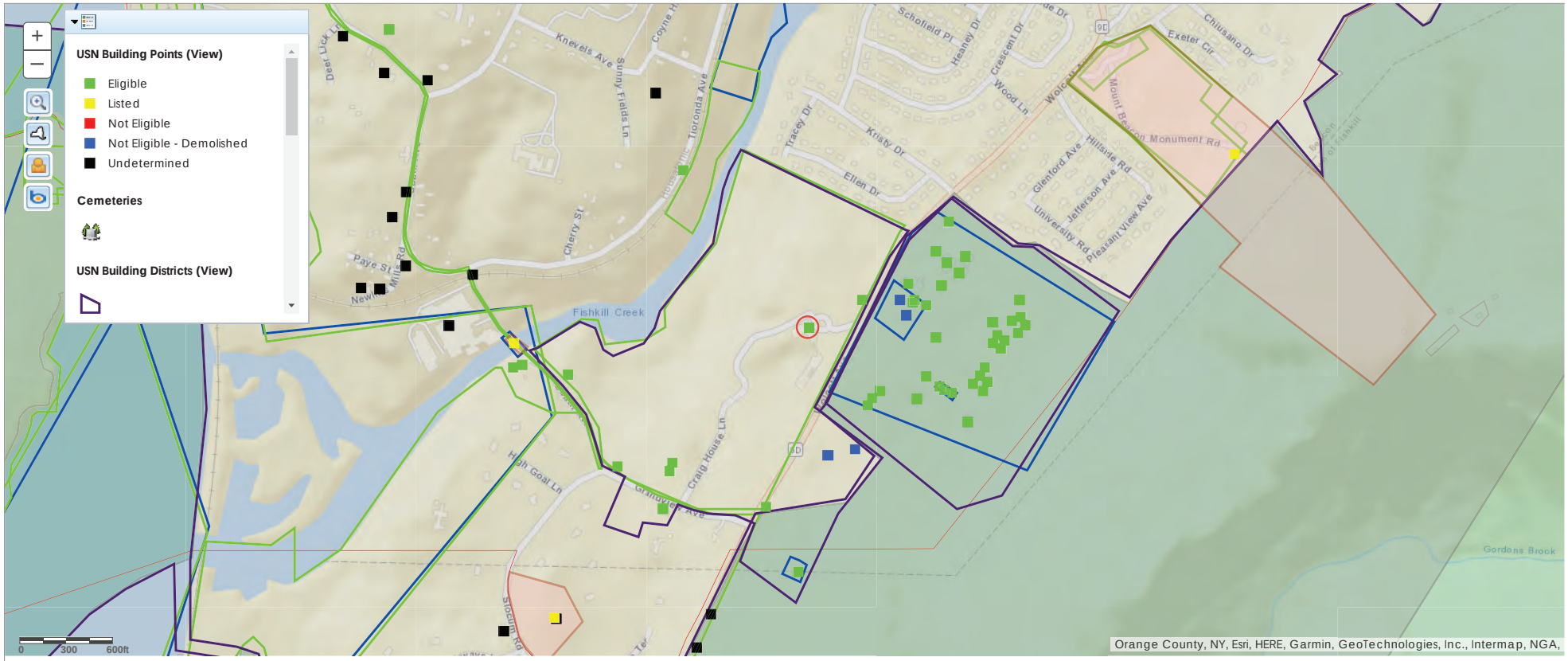

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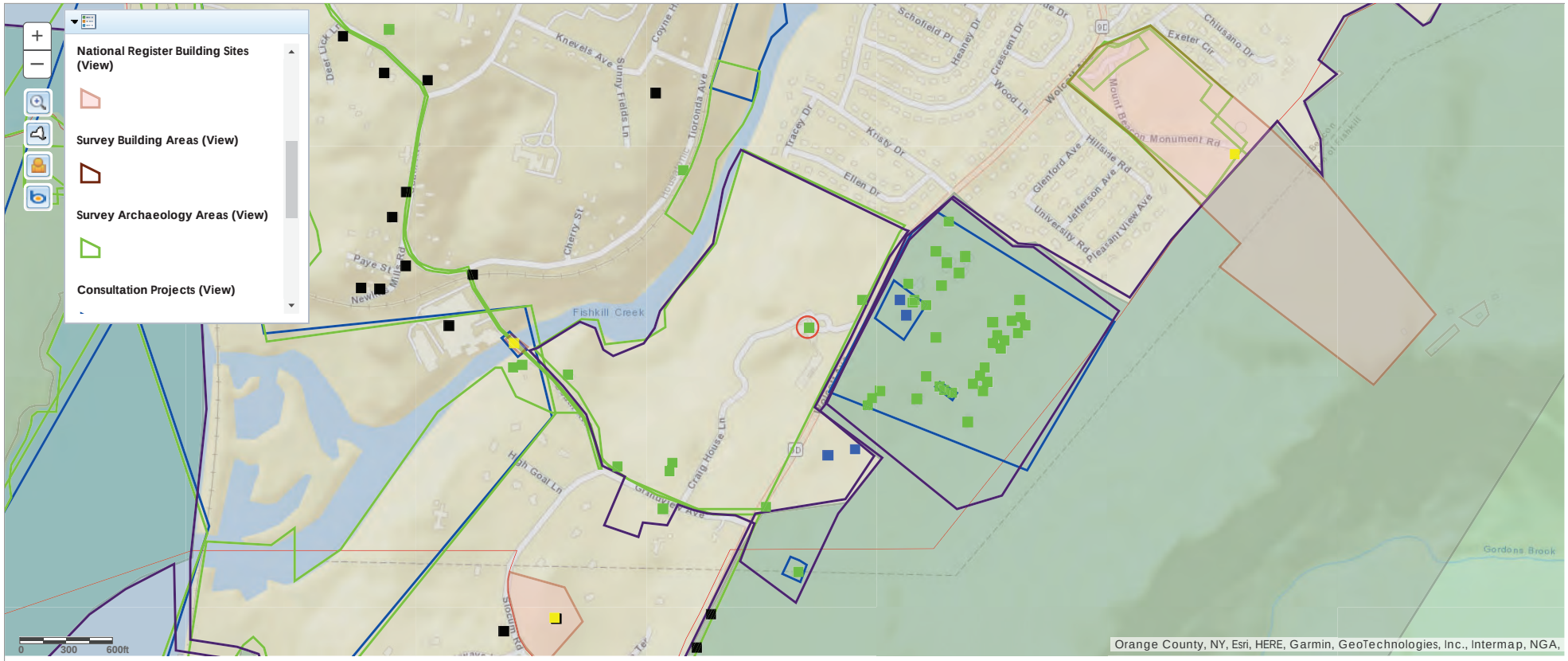

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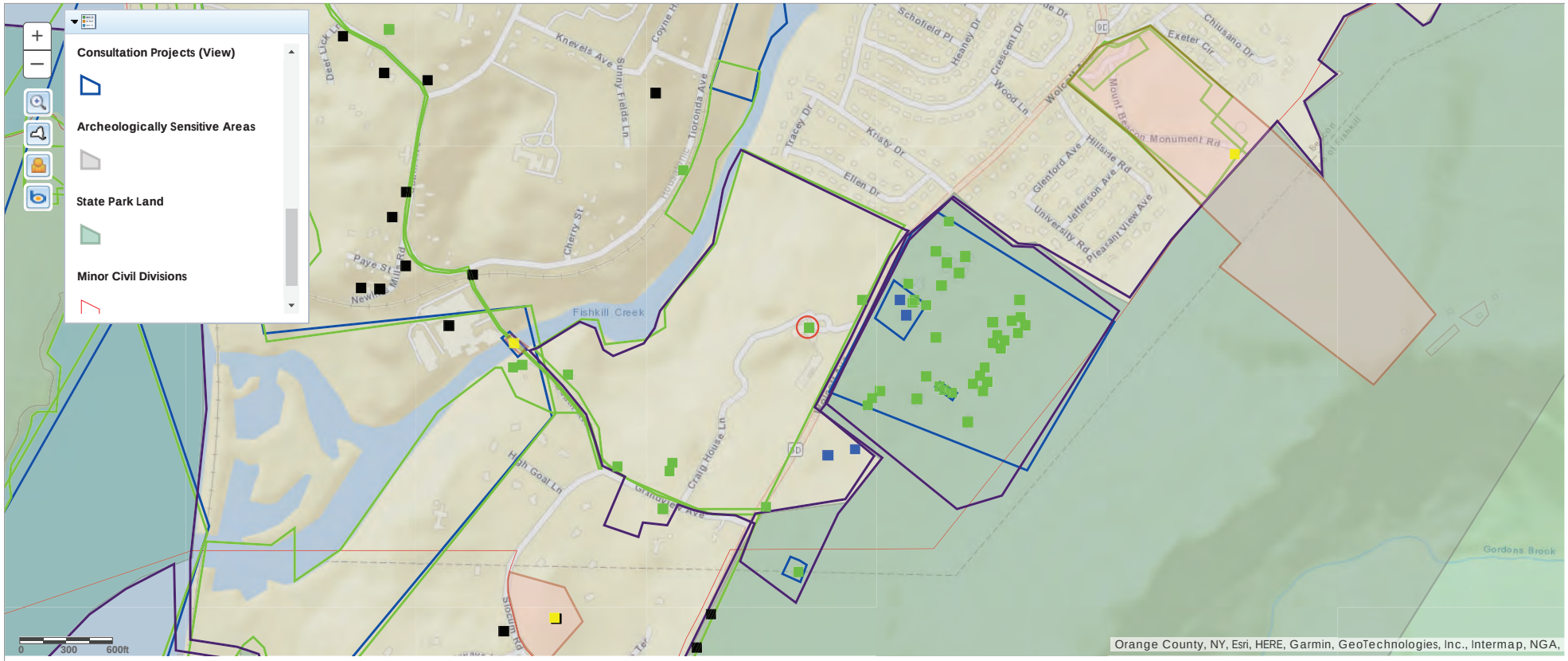

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APPENDIX D

PRE-DEVELOPMENT HYDROCAD MODEL & FISHKILL CREEK OVERALL WATERSHED

Summary for Subcatchment 1: DA1

Runoff = 4.31 cfs @ 12.61 hrs, Volume= 0.910 af, Depth> 0.17"

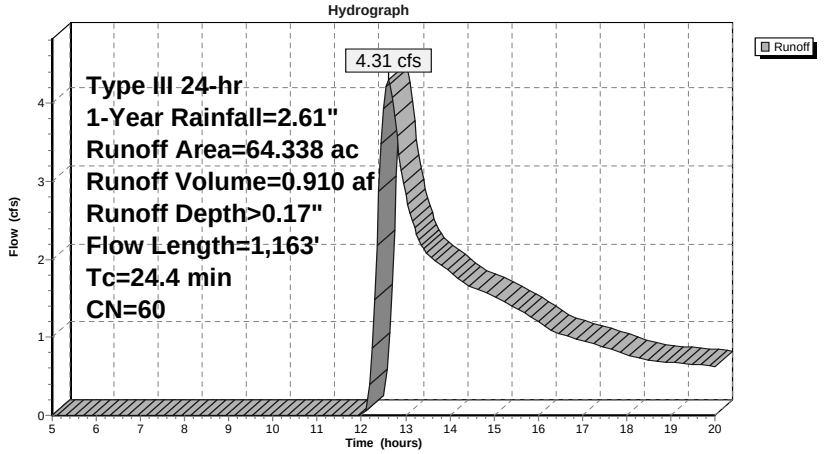
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.61"

Area (ac)	CN	Description
3.287	98	Paved parking, HSG A
3.706	98	Water Surface, HSG C
9.055	30	Woods, Good, HSG A
3.928	55	Woods, Good, HSG B
13.778	70	Woods, Good, HSG C
0.901	30	Brush, Good, HSG A
0.325	48	Brush, Good, HSG B
0.569	65	Brush, Good, HSG C
8.884	39	>75% Grass cover, Good, HSG A
12.834	61	>75% Grass cover, Good, HSG B
7.071	74	>75% Grass cover, Good, HSG C
64.338	60	Weighted Average
57.345		89.13% Pervious Area
6.993		10.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.7	100	0.0190	0.11		**Sheet Flow, S1** Grass: Dense n= 0.240 P2= 3.16"
9.7	1,063	0.1330	1.82		**Shallow Concentrated Flow, S2** Woodland Kv= 5.0 fps
24.4	1,163	Total			

Mirbeau model_2024-0227 *Type III 24-hr 1-Year Rainfall=2.61"*
Prepared by Hudson Land Design Revised 3/26/24 Printed 3/21/2024
HydroCAD® 10.00-24 s/n 04797 © 2018 HydroCAD Software Solutions LLC Page 2

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

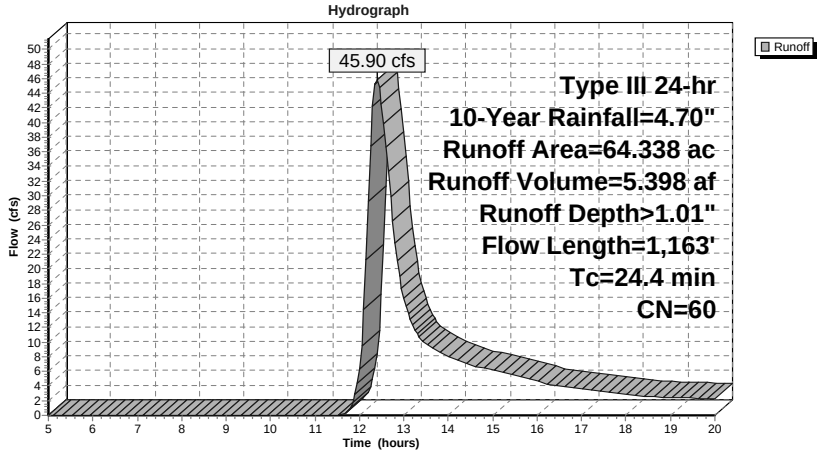
Runoff = 45.90 cfs @ 12.39 hrs, Volume= 5.398 af, Depth> 1.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.70"

Area (ac)	CN	Description
3.287	98	Paved parking, HSG A
3.706	98	Water Surface, HSG C
9.055	30	Woods, Good, HSG A
3.928	55	Woods, Good, HSG B
13.778	70	Woods, Good, HSG C
0.901	30	Brush, Good, HSG A
0.325	48	Brush, Good, HSG B
0.569	65	Brush, Good, HSG C
8.884	39	>75% Grass cover, Good, HSG A
12.834	61	>75% Grass cover, Good, HSG B
7.071	74	>75% Grass cover, Good, HSG C
64.338	60	Weighted Average
57.345		89.13% Pervious Area
6.993		10.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.7	100	0.0190	0.11		**Sheet Flow, S1** Grass: Dense n= 0.240 P2= 3.16"
9.7	1,063	0.1330	1.82		**Shallow Concentrated Flow, S2** Woodland Kv= 5.0 fps
24.4	1,163	Total			

Subcatchment 1: DA1



Summary for Subcatchment 1: DA1

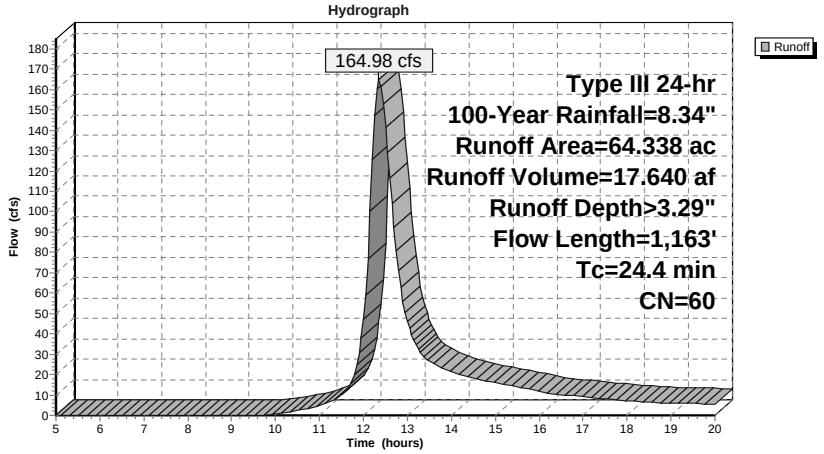
Runoff = 164.98 cfs @ 12.35 hrs, Volume= 17.640 af, Depth> 3.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.34"

Area (ac)	CN	Description
3.287	98	Paved parking, HSG A
3.706	98	Water Surface, HSG C
9.055	30	Woods, Good, HSG A
3.928	55	Woods, Good, HSG B
13.778	70	Woods, Good, HSG C
0.901	30	Brush, Good, HSG A
0.325	48	Brush, Good, HSG B
0.569	65	Brush, Good, HSG C
8.884	39	>75% Grass cover, Good, HSG A
12.834	61	>75% Grass cover, Good, HSG B
7.071	74	>75% Grass cover, Good, HSG C
64.338	60	Weighted Average
57.345		89.13% Pervious Area
6.993		10.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.7	100	0.0190	0.11		**Sheet Flow, S1** Grass: Dense n= 0.240 P2= 3.16"
9.7	1,063	0.1330	1.82		**Shallow Concentrated Flow, S2** Woodland Kv= 5.0 fps
24.4	1,163	Total			

Subcatchment 1: DA1



Mirbeau - Fishkill Creek Drainage Area

Region ID: NY
Workspace ID: NY20220323210841193000
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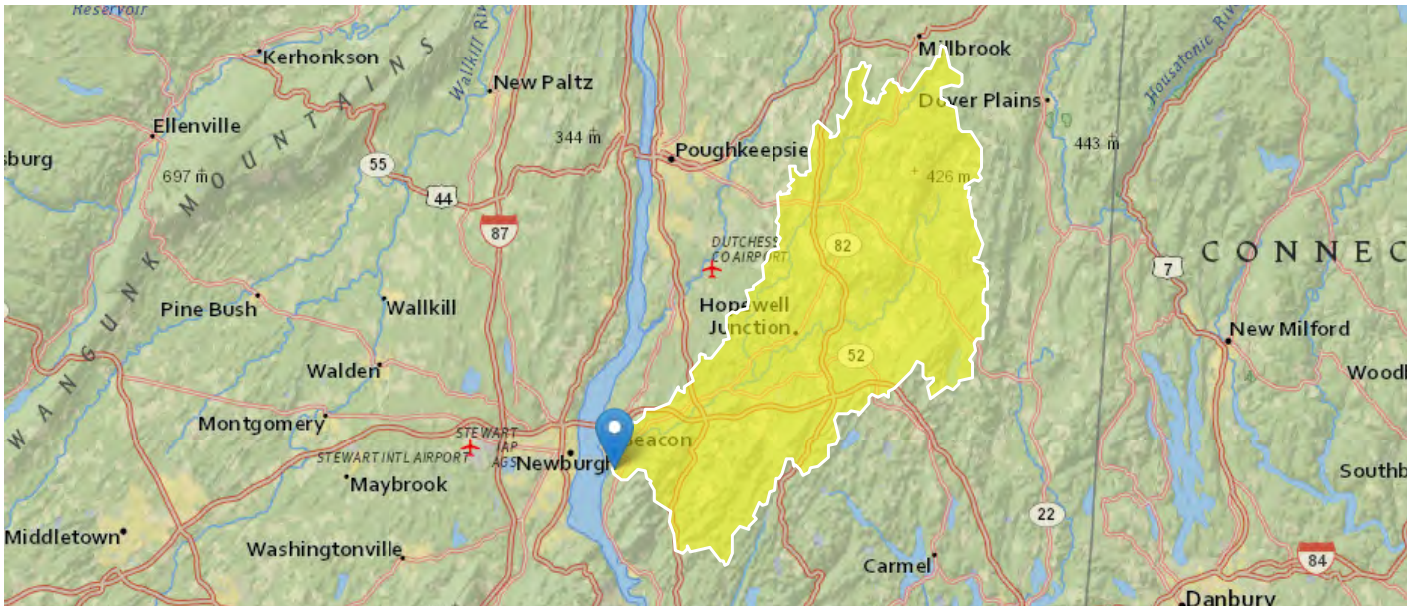

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	193	square miles
LAGFACTOR	Lag Factor as defined in SIR 2006-5112	1.99	dimensionless
STORAGE	Percentage of area of storage (lakes ponds reservoirs wetlands)	4.86	percent
MAR	Mean annual runoff for the period of record in inches	21.6	inches
BSLOPCM	Mean basin slope determined by summing lengths of all contours in basin mulitplying by contour interval and dividing product by drainage area	586	feet per mi
CENTROIDX	Basin centroid horizontal (x) location in state plane coordinates	601893.5	meters
CENTROIDY	Basin centroid vertical (y) location in state plane units	4605697.8	meters
CONTOUR	Total length of all elevation contours in drainage area in miles	1133.67	miles
CSL1085LO	10-85 slope of lower half of main channel in feet per mile.	8.16	feet per mi
CSL1085UP	10-85 slope of upper half of main channel in feet per mile.	34.9	feet per mi
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	18.7	feet per mi
EL1200	Percentage of basin at or above 1200 ft elevation	1.62	percent
FOREST	Percentage of area covered by forest	67.7	percent
JULAVPRE	Mean July Precipitation	4.61	inches
JUNAVPRE	Mean June Precipitation	4.18	inches
JUNMAXTMP	Maximum June Temperature, in degrees F	78.4	degrees F
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	20.4	percent

Parameter Code	Parameter Description	Value	Unit
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	5.47	percent
LENGTH	Length along the main channel from the measuring location extended to the basin divide	36.1	miles
MAYAVPRE	Mean May Precipitation	4.53	inches
MXSNO	50th percentile of seasonal maximum snow depth from Northeast Regional Climate Center atlas by Cember and Wilks, 1993	12.8	inches
OUTLETX	Basin outlet horizontal (x) location in state plane coordinates	585645	feet
OUTLETY	Basin outlet vertical (y) location in state plane coordinates	4593505	feet
PRECIP	Mean Annual Precipitation	42.5	inches
PRJUNAUG00	Basin average mean precip for June to August from PRISM 1971-2000	13.1	inches
SLOPERATIO	Ratio of main channel slope to basin slope as defined in SIR 2006-5112	0.0319	dimensionless
SSURGOA	Percentage of area of Hydrologic Soil Type A from SSURGO	9.45	percent
SSURGOB	Percentage of area of Hydrologic Soil Type B from SSURGO	36.7	percent

Peak-Flow Statistics Parameters [2006 Full Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	193	square miles	1.93	996
LAGFACTOR	Lag Factor	1.99	dimensionless	0.014	6.997
STORAGE	Percent Storage	4.86	percent	0	11.88
MAR	Mean Annual Runoff in inches	21.6	inches	16.03	33.95

Peak-Flow Statistics Flow Report [2006 Full Region 2]

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	SE	ASEp	Equiv. Yrs.
80-percent AEP flood	2350	ft^3/s	25.5	25.5	4.8
66.7-percent AEP flood	2790	ft^3/s	25.6	25.6	4.3
50-percent AEP flood	3430	ft^3/s	25.8	25.8	4.4
20-percent AEP flood	5290	ft^3/s	27	27	7.3
10-percent AEP flood	6830	ft^3/s	28.2	28.2	10.1
4-percent AEP flood	9080	ft^3/s	29.9	29.9	13.6
2-percent AEP flood	11000	ft^3/s	31.5	31.5	15.8
1-percent AEP flood	13100	ft^3/s	33.3	33.3	17.6
0.5-percent AEP flood	15500	ft^3/s	35.3	35.3	18.9
0.2-percent AEP flood	19000	ft^3/s	38.4	38.4	20.1

Peak-Flow Statistics Citations

Lumia, Richard, Freehafer, D.A., and Smith, M.J.,2006, Magnitude and Frequency of Floods in New York: U.S. Geological Survey Scientific Investigations Report 2006–5112, 152 p. (http://pubs.usgs.gov/sir/2006/5112/)

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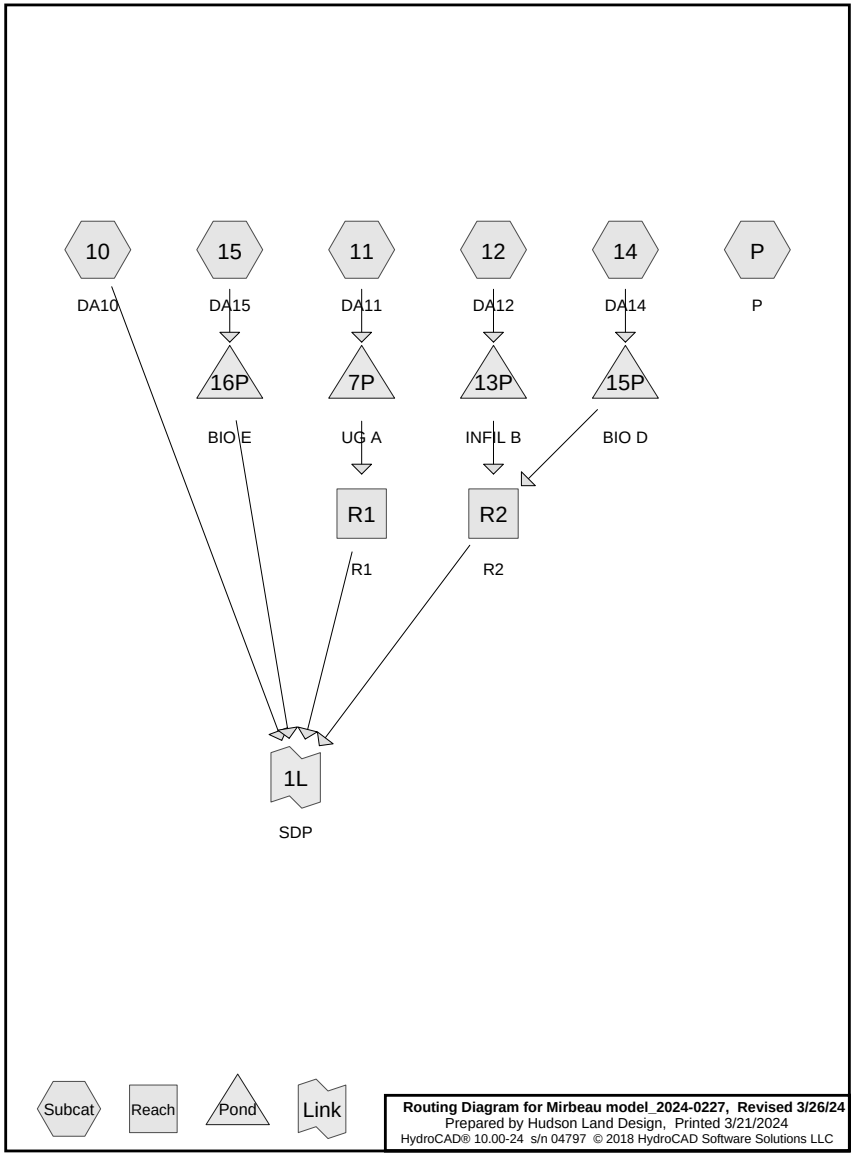
Application Version: 4.7.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.1.2

APPENDIX E

POST-DEVELOPMENT HYDROCAD MODEL



Summary for Subcatchment 10: DA10

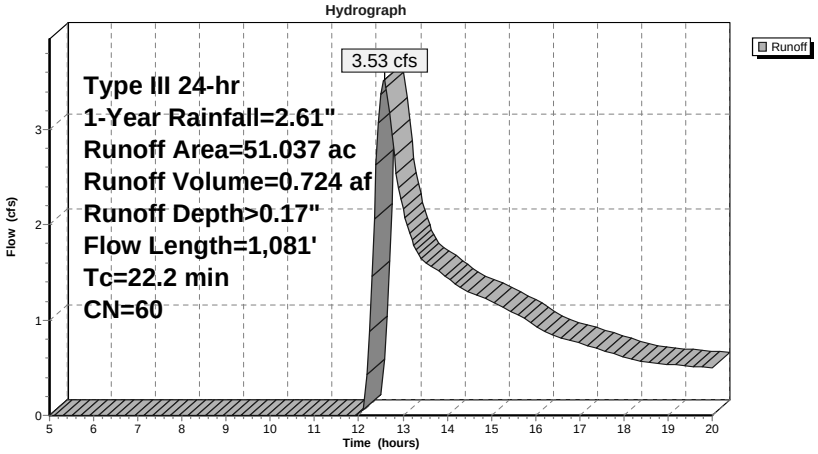
Runoff = 3.53 cfs @ 12.57 hrs, Volume= 0.724 af, Depth> 0.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.61"

Area (ac)	CN	Description
1.123	98	Paved parking, HSG A
3.706	98	Water Surface, HSG C
9.055	30	Woods, Good, HSG A
3.589	55	Woods, Good, HSG B
13.778	70	Woods, Good, HSG C
0.865	30	Brush, Good, HSG A
0.166	48	Brush, Good, HSG B
0.569	65	Brush, Good, HSG C
6.436	39	>75% Grass cover, Good, HSG A
4.679	61	>75% Grass cover, Good, HSG B
7.071	74	>75% Grass cover, Good, HSG C
51.037	60	Weighted Average
46.208		90.54% Pervious Area
4.829		9.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.2	100	0.0300	0.14		**Sheet Flow, S1** Grass: Dense n= 0.240 P2= 3.16"
10.0	981	0.1080	1.64		**Shallow Concentrated Flow, S2** Woodland Kv= 5.0 fps
22.2	1,081	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

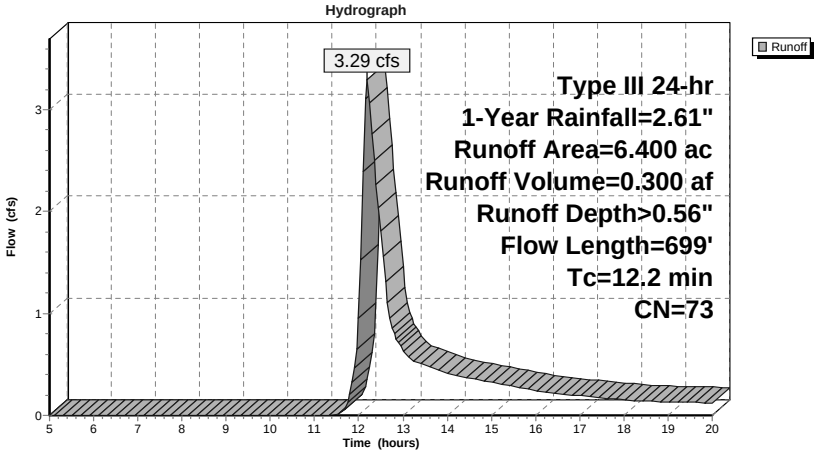
Runoff = 3.29 cfs @ 12.20 hrs, Volume= 0.300 af, Depth> 0.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.61"

Area (ac)	CN	Description
0.320	98	Roofs, HSG B
1.835	98	Paved parking, HSG B
4.245	61	>75% Grass cover, Good, HSG B
6.400	73	Weighted Average
4.245		66.33% Pervious Area
2.155		33.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	100	0.0225	0.18		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
1.5	224	0.0250	2.55		**Shallow Concentrated Flow, S2** Unpaved Kv= 16.1 fps
0.6	150	0.0430	4.21		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.7	225	0.0100	5.70	7.00	**Pipe Channel, S4** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
12.2	699	Total			

Subcatchment 11: DA11



Summary for Subcatchment 12: DA12

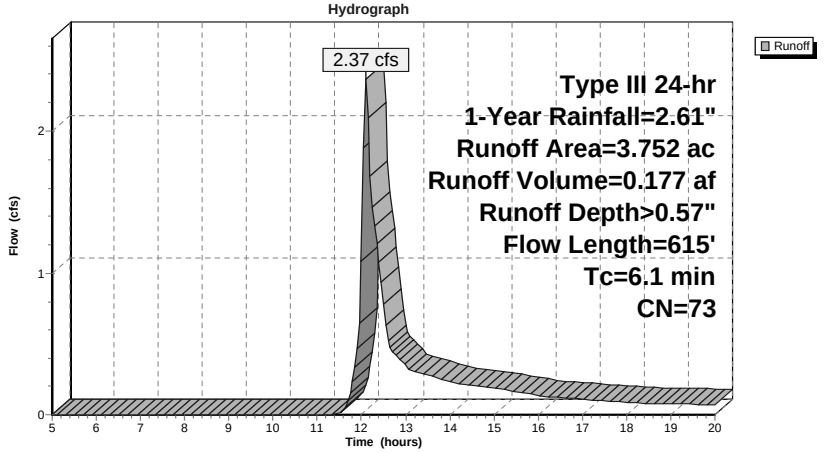
Runoff = 2.37 cfs @ 12.11 hrs, Volume= 0.177 af, Depth> 0.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.61"

Area (ac)	CN	Description
0.712	98	Roofs, HSG B
0.879	98	Paved parking, HSG B
0.616	39	>75% Grass cover, Good, HSG A
1.545	61	>75% Grass cover, Good, HSG B
3.752	73	Weighted Average
2.161		57.60% Pervious Area
1.591		42.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.1100	0.33		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.8	138	0.0180	2.72		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	377	0.0990	21.53	26.42	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
6.1	615	Total			

Subcatchment 12: DA12



Summary for Subcatchment 14: DA14

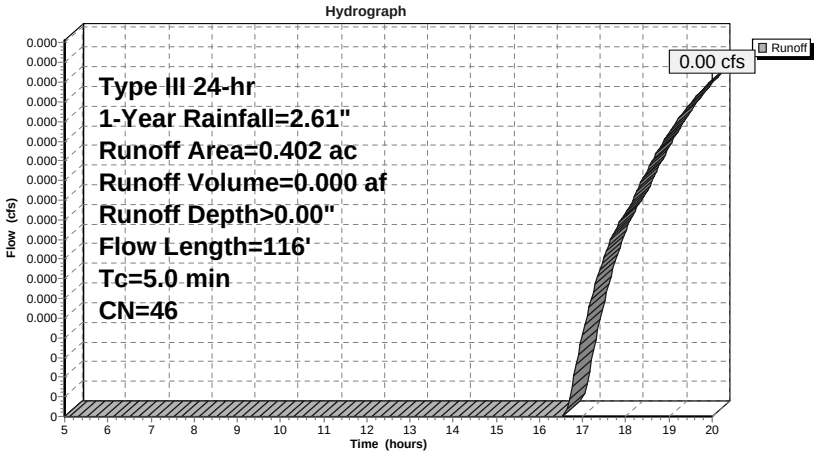
Runoff = 0.00 cfs @ 20.00 hrs, Volume= 0.000 af, Depth> 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.61"

Area (ac)	CN	Description
0.049	98	Roofs, HSG A
0.353	39	>75% Grass cover, Good, HSG A
0.402	46	Weighted Average
0.353		87.81% Pervious Area
0.049		12.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	100	0.1600	0.39		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.0	16	0.2000	7.20		**Shallow Concentrated Flow, S2** Unpaved Kv= 16.1 fps
4.3	116	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 14: DA14



Summary for Subcatchment 15: DA15

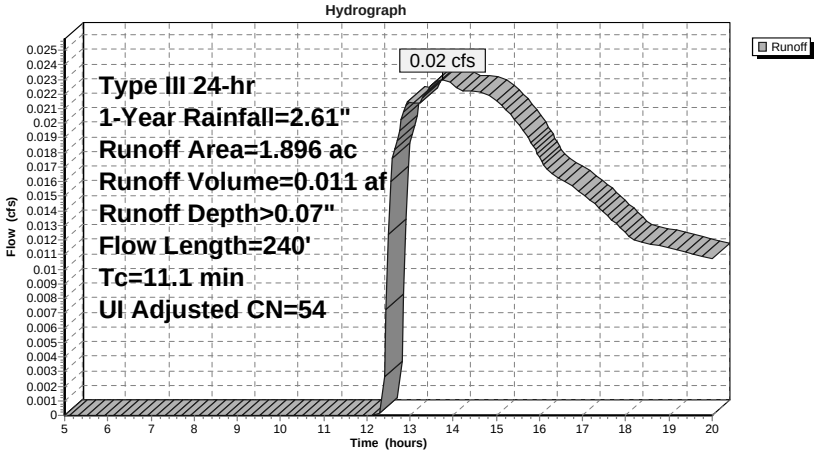
Runoff = 0.02 cfs @ 13.76 hrs, Volume= 0.011 af, Depth> 0.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.61"

Area (ac)	CN	Adj	Description
0.063	98		Roofs, HSG A
0.309	98		Paved parking, HSG A
0.165	98		Unconnected pavement, HSG A
1.095	39		>75% Grass cover, Good, HSG A
0.029	74		>75% Grass cover, Good, HSG C
0.154	30		Woods, Good, HSG A
0.081	70		Woods, Good, HSG C
1.896	57	54	Weighted Average, UI Adjusted
1.359			71.68% Pervious Area
0.537			28.32% Impervious Area
0.165			30.73% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	100	0.0200	0.17		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
1.2	140	0.0140	1.90		**Shallow Concentrated Flow, S2** Unpaved Kv= 16.1 fps
11.1	240	Total			

Subcatchment 15: DA15



Summary for Subcatchment P: P

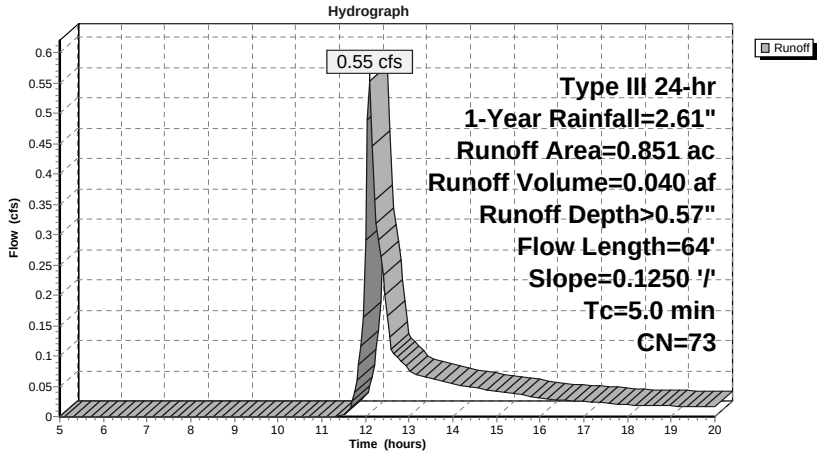
Runoff = 0.55 cfs @ 12.09 hrs, Volume= 0.040 af, Depth> 0.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-Year Rainfall=2.61"

Area (ac)	CN	Description
0.121	98	Water Surface, HSG B
0.151	98	Paved parking, HSG B
0.579	61	>75% Grass cover, Good, HSG B
0.851	73	Weighted Average
0.579		68.04% Pervious Area
0.272		31.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	64	0.1250	0.32		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
3.3	64	Total, Increased to minimum Tc = 5.0 min			

Subcatchment P: P



Summary for Reach R1: R1

Inflow Area = 6.400 ac, 33.67% Impervious, Inflow Depth = 0.00" for 1-Year event
Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

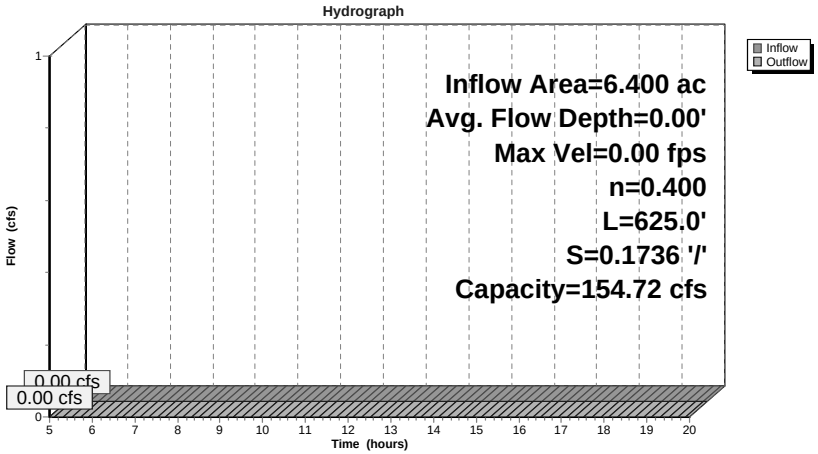
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 5.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 1.50' Flow Area= 100.0 sf, Capacity= 154.72 cfs

100.00' x 1.50' deep Parabolic Channel, n= 0.400
Length= 625.0' Slope= 0.1736 '/'
Inlet Invert= 138.50', Outlet Invert= 30.00'

‡

Reach R1: R1



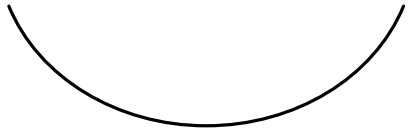
Summary for Reach R2: R2

Inflow Area = 4.154 ac, 39.48% Impervious, Inflow Depth = 0.00" for 1-Year event
Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

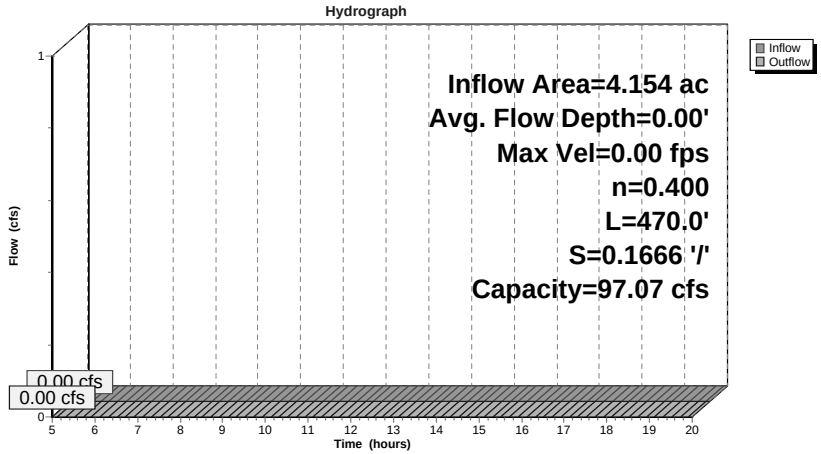
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 5.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 4.00' Flow Area= 37.3 sf, Capacity= 97.07 cfs

14.00' x 4.00' deep Parabolic Channel, n= 0.400
Length= 470.0' Slope= 0.1666 '/'
Inlet Invert= 114.00', Outlet Invert= 35.70'



Reach R2: R2



Summary for Pond 7P: UG A

Inflow Area = 6.400 ac, 33.67% Impervious, Inflow Depth > 0.56" for 1-Year event
Inflow = 3.29 cfs @ 12.20 hrs, Volume= 0.300 af
Outflow = 0.40 cfs @ 11.95 hrs, Volume= 0.268 af, Atten= 88%, Lag= 0.0 min
Discarded = 0.40 cfs @ 11.95 hrs, Volume= 0.268 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 145.76' @ 14.15 hrs Surf.Area= 3,417 sf Storage= 5,302 cf

Plug-Flow detention time= 152.4 min calculated for 0.268 af (89% of inflow)
Center-of-Mass det. time= 119.1 min (955.3 - 836.2)

Volume	Invert	Avail.Storage	Storage Description
#1A	143.50'	4,740 cf	**44.75'W x 76.37'L x 5.75'H Field A** 19,650 cf Overall - 7,801 cf Embedded = 11,849 cf x 40.0% Voids
#2A	144.25'	7,801 cf	**Cultec R-902HD** x 120 Inside #1 Effective Size= 69.8"W x 48.0"H => 17.65 sf x 3.67'L = 64.7 cf Overall Size= 78.0"W x 48.0"H x 4.10'L with 0.44' Overlap 120 Chambers in 6 Rows Cap Storage= +2.8 cf x 2 x 6 rows = 33.1 cf
		12,541 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	146.30'	**24.0" Round Culvert X 2.00** L= 64.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 146.30' / 138.50' S= 0.1219 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Discarded	143.50'	**5.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.40 cfs @ 11.95 hrs HW=143.57' (Free Discharge)
↑**2=Exfiltration** (Exfiltration Controls 0.40 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=143.50' (Free Discharge)
↑**1=Culvert** (Controls 0.00 cfs)

Pond 7P: UG A - Chamber Wizard Field A

Chamber Model = Cultec R-902HD (Cultec Recharger® 902HD)
Effective Size= 69.8"W x 48.0"H => 17.65 sf x 3.67'L = 64.7 cf
Overall Size= 78.0"W x 48.0"H x 4.10'L with 0.44' Overlap
Cap Storage= +2.8 cf x 2 x 6 rows = 33.1 cf

78.0" Wide + 9.0" Spacing = 87.0" C-C Row Spacing

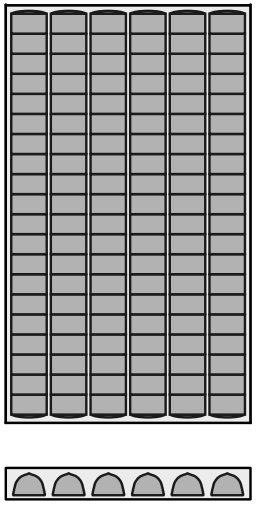
20 Chambers/Row x 3.67' Long +0.52' Cap Length x 2 = 74.37' Row Length +12.0" End Stone x 2 = 76.37' Base Length
6 Rows x 78.0" Wide + 9.0" Spacing x 5 + 12.0" Side Stone x 2 = 44.75' Base Width
9.0" Base + 48.0" Chamber Height + 12.0" Cover = 5.75' Field Height

120 Chambers x 64.7 cf + 2.8 cf Cap Volume x 2 x 6 Rows = 7,801.3 cf Chamber Storage

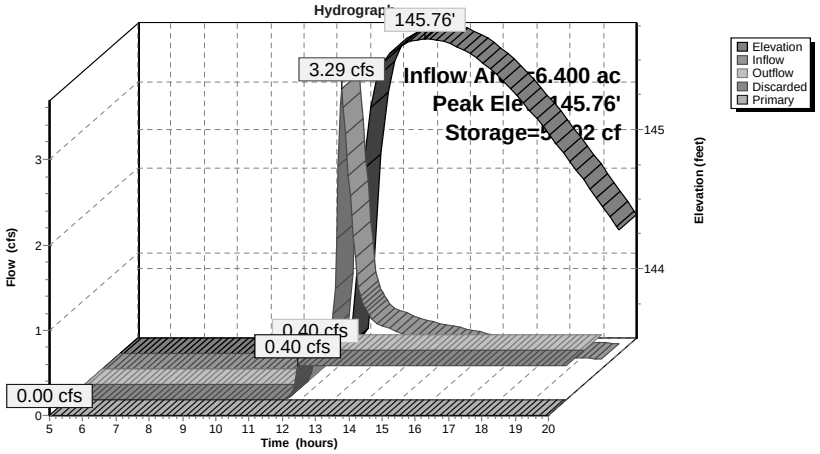
19,650.1 cf Field - 7,801.3 cf Chambers = 11,848.8 cf Stone x 40.0% Voids = 4,739.5 cf Stone Storage

Chamber Storage + Stone Storage = 12,540.8 cf = 0.288 af
Overall Storage Efficiency = 63.8%
Overall System Size = 76.37' x 44.75' x 5.75'

120 Chambers
727.8 cy Field
438.8 cy Stone



Pond 7P: UG A



Summary for Pond 13P: INFIL B

Inflow Area = 3.752 ac, 42.40% Impervious, Inflow Depth > 0.57" for 1-Year event
Inflow = 2.37 cfs @ 12.11 hrs, Volume= 0.177 af
Outflow = 0.30 cfs @ 13.23 hrs, Volume= 0.168 af, Atten= 87%, Lag= 67.5 min
Discarded = 0.30 cfs @ 13.23 hrs, Volume= 0.168 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 134.59' @ 13.23 hrs Surf.Area= 2,617 sf Storage= 2,908 cf

Plug-Flow detention time= 121.2 min calculated for 0.168 af (95% of inflow)
Center-of-Mass det. time= 103.4 min (935.1 - 831.7)

Volume	Invert	Avail.Storage	Storage Description
#1	133.00'	20,758 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

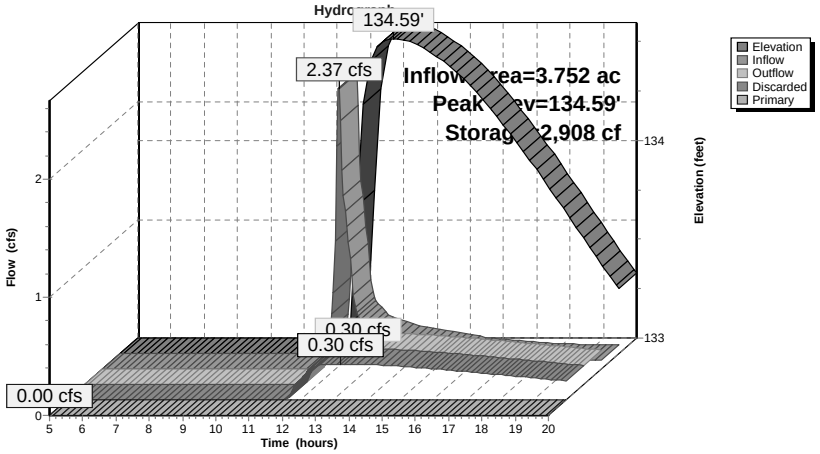
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
133.00	1,092	0	0
134.00	2,003	1,548	1,548
136.00	4,089	6,092	7,640
138.00	5,910	9,999	17,639
138.50	6,567	3,119	20,758

Device	Routing	Invert	Outlet Devices
#1	Primary	135.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 135.00' / 133.00' S= 0.0870 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Device 1	135.00'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	137.00'	**42.0" x 42.0" Horiz. Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	137.50'	**8.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64
#5	Discarded	133.00'	**5.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.30 cfs @ 13.23 hrs HW=134.59' (Free Discharge)
└**5=Exfiltration** (Exfiltration Controls 0.30 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=133.00' (Free Discharge)
└**1=Culvert** (Controls 0.00 cfs)
└**2=Orifice/Grate** (Controls 0.00 cfs)
└**3=Grate** (Controls 0.00 cfs)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 13P: INFIL B



Summary for Pond 15P: BIO D

Inflow Area = 0.402 ac, 12.19% Impervious, Inflow Depth > 0.00" for 1-Year event
Inflow = 0.00 cfs @ 20.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 138.00' @ 20.00 hrs Surf.Area= 2,248 sf Storage= 3 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

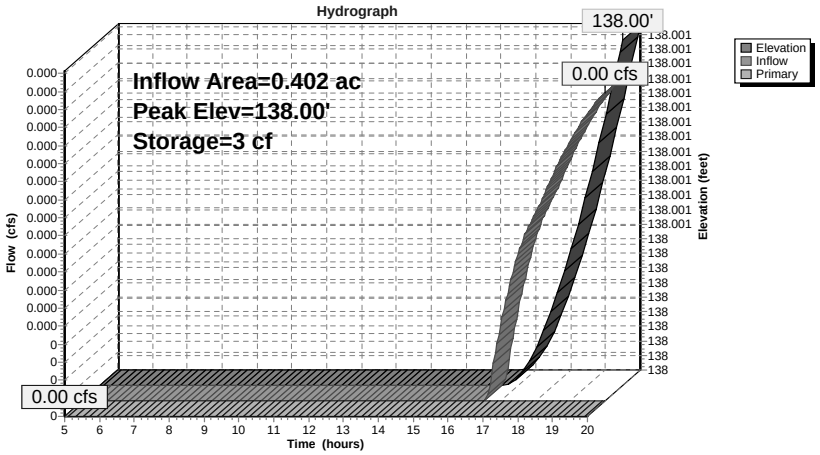
Volume	Invert	Avail.Storage	Storage Description
#1	138.00'	2,658 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
138.00	2,247	0	0
139.00	3,068	2,658	2,658

Device	Routing	Invert	Outlet Devices
#1	Primary	138.50'	**18.0" x 18.0" Horiz. Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=138.00' (Free Discharge)
1=Grate (Controls 0.00 cfs)

Pond 15P: BIO D



Summary for Pond 16P: BIO E

Inflow Area = 1.896 ac, 28.32% Impervious, Inflow Depth > 0.07" for 1-Year event
Inflow = 0.02 cfs @ 13.76 hrs, Volume= 0.011 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 34.17' @ 20.00 hrs Surf.Area= 2,759 sf Storage= 459 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

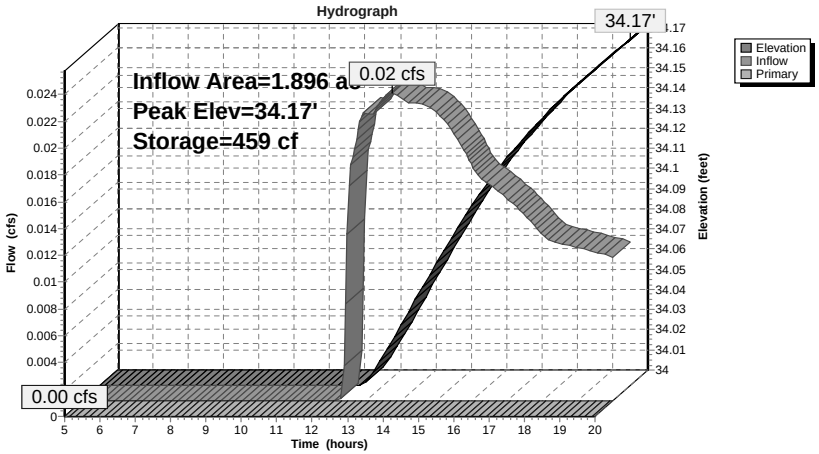
Volume	Invert	Avail.Storage	Storage Description
#1	34.00'	7,056 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
34.00	2,600	0	0
36.00	4,456	7,056	7,056

Device	Routing	Invert	Outlet Devices
#1	Primary	31.50'	**15.0" Round Culvert** L= 62.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 31.50' / 30.00' S= 0.0242 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Device 1	34.50'	**42.0" x 42.0" Horiz. Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=34.00' (Free Discharge)
└─**1=Culvert** (Passes 0.00 cfs of 8.09 cfs potential flow)
└─**2=Grate** (Controls 0.00 cfs)

Pond 16P: BIO E

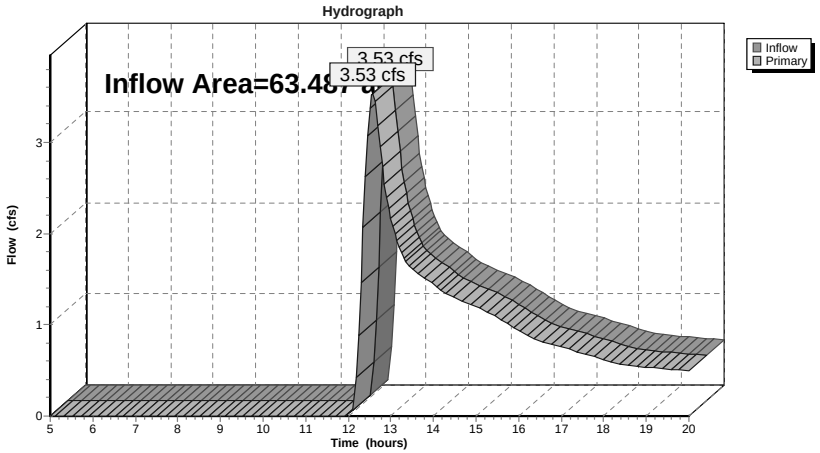


Summary for Link 1L: SDP

Inflow Area = 63.487 ac, 14.43% Impervious, Inflow Depth > 0.14" for 1-Year event
Inflow = 3.53 cfs @ 12.57 hrs, Volume= 0.724 af
Primary = 3.53 cfs @ 12.57 hrs, Volume= 0.724 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: SDP



Summary for Subcatchment 10: DA10

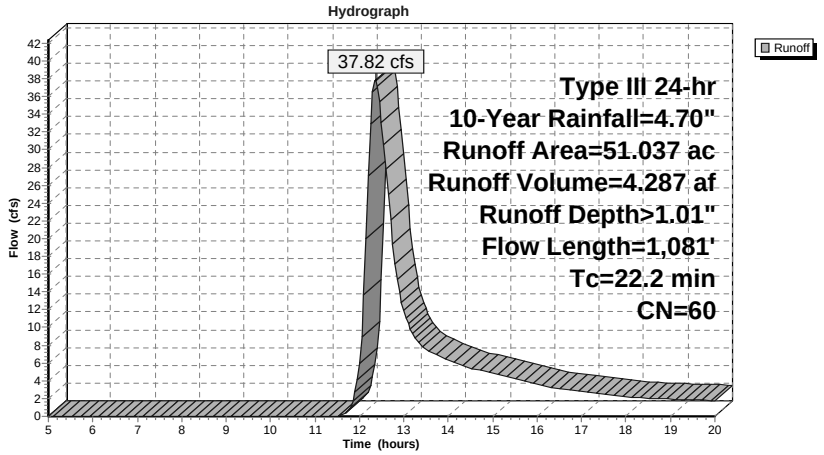
Runoff = 37.82 cfs @ 12.36 hrs, Volume= 4.287 af, Depth> 1.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.70"

Area (ac)	CN	Description
1.123	98	Paved parking, HSG A
3.706	98	Water Surface, HSG C
9.055	30	Woods, Good, HSG A
3.589	55	Woods, Good, HSG B
13.778	70	Woods, Good, HSG C
0.865	30	Brush, Good, HSG A
0.166	48	Brush, Good, HSG B
0.569	65	Brush, Good, HSG C
6.436	39	>75% Grass cover, Good, HSG A
4.679	61	>75% Grass cover, Good, HSG B
7.071	74	>75% Grass cover, Good, HSG C
51.037	60	Weighted Average
46.208		90.54% Pervious Area
4.829		9.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.2	100	0.0300	0.14		**Sheet Flow, S1** Grass: Dense n= 0.240 P2= 3.16"
10.0	981	0.1080	1.64		**Shallow Concentrated Flow, S2** Woodland Kv= 5.0 fps
22.2	1,081	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

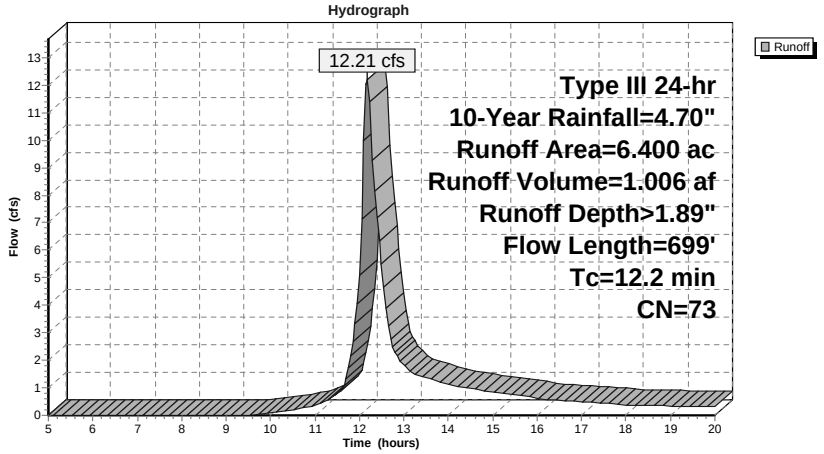
Runoff = 12.21 cfs @ 12.18 hrs, Volume= 1.006 af, Depth> 1.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.70"

Area (ac)	CN	Description
0.320	98	Roofs, HSG B
1.835	98	Paved parking, HSG B
4.245	61	>75% Grass cover, Good, HSG B
6.400	73	Weighted Average
4.245		66.33% Pervious Area
2.155		33.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	100	0.0225	0.18		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
1.5	224	0.0250	2.55		**Shallow Concentrated Flow, S2** Unpaved Kv= 16.1 fps
0.6	150	0.0430	4.21		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.7	225	0.0100	5.70	7.00	**Pipe Channel, S4** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
12.2	699	Total			

Subcatchment 11: DA11



Summary for Subcatchment 12: DA12

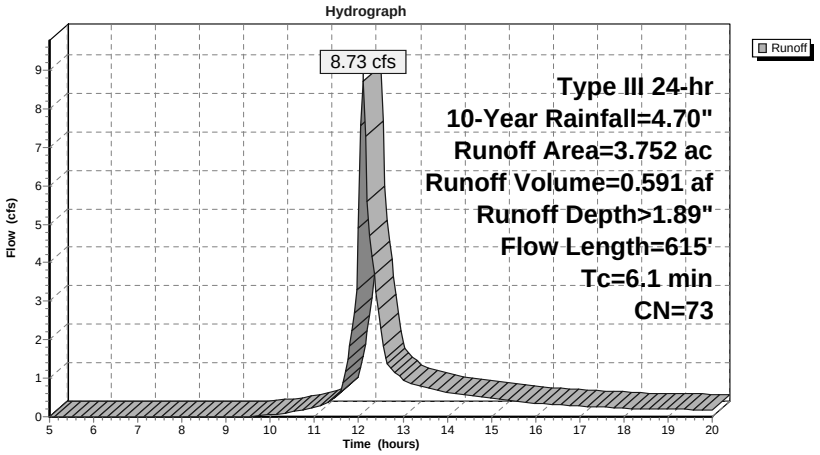
Runoff = 8.73 cfs @ 12.10 hrs, Volume= 0.591 af, Depth> 1.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.70"

Area (ac)	CN	Description
0.712	98	Roofs, HSG B
0.879	98	Paved parking, HSG B
0.616	39	>75% Grass cover, Good, HSG A
1.545	61	>75% Grass cover, Good, HSG B
3.752	73	Weighted Average
2.161		57.60% Pervious Area
1.591		42.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.1100	0.33		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.8	138	0.0180	2.72		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	377	0.0990	21.53	26.42	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
6.1	615	Total			

Subcatchment 12: DA12



Summary for Subcatchment 14: DA14

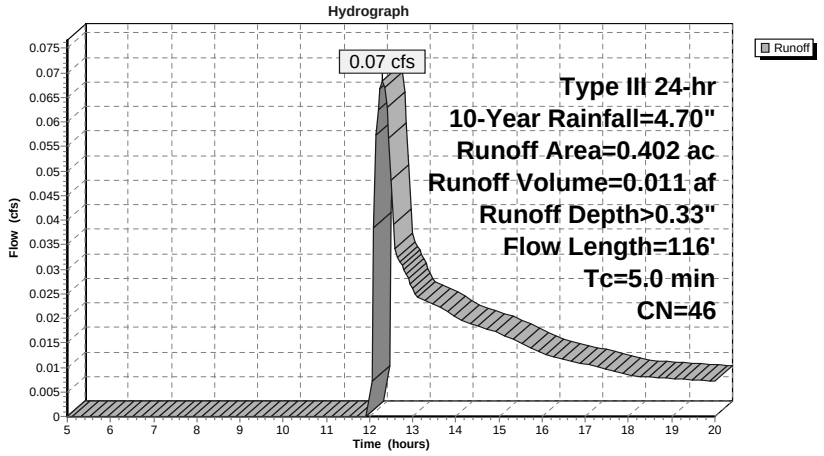
Runoff = 0.07 cfs @ 12.30 hrs, Volume= 0.011 af, Depth> 0.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.70"

Area (ac)	CN	Description
0.049	98	Roofs, HSG A
0.353	39	>75% Grass cover, Good, HSG A
0.402	46	Weighted Average
0.353		87.81% Pervious Area
0.049		12.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	100	0.1600	0.39		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.0	16	0.2000	7.20		**Shallow Concentrated Flow, S2** Unpaved Kv= 16.1 fps
4.3	116	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 14: DA14



Summary for Subcatchment 15: DA15

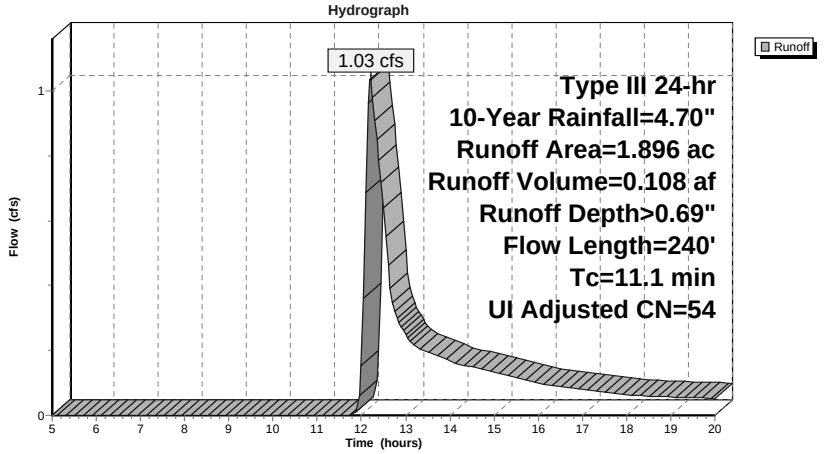
Runoff = 1.03 cfs @ 12.20 hrs, Volume= 0.108 af, Depth> 0.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.70"

Area (ac)	CN	Adj	Description
0.063	98		Roofs, HSG A
0.309	98		Paved parking, HSG A
0.165	98		Unconnected pavement, HSG A
1.095	39		>75% Grass cover, Good, HSG A
0.029	74		>75% Grass cover, Good, HSG C
0.154	30		Woods, Good, HSG A
0.081	70		Woods, Good, HSG C
1.896	57	54	Weighted Average, UI Adjusted
1.359			71.68% Pervious Area
0.537			28.32% Impervious Area
0.165			30.73% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	100	0.0200	0.17		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
1.2	140	0.0140	1.90		**Shallow Concentrated Flow, S2** Unpaved Kv= 16.1 fps
11.1	240	Total			

Subcatchment 15: DA15



Summary for Subcatchment P: P

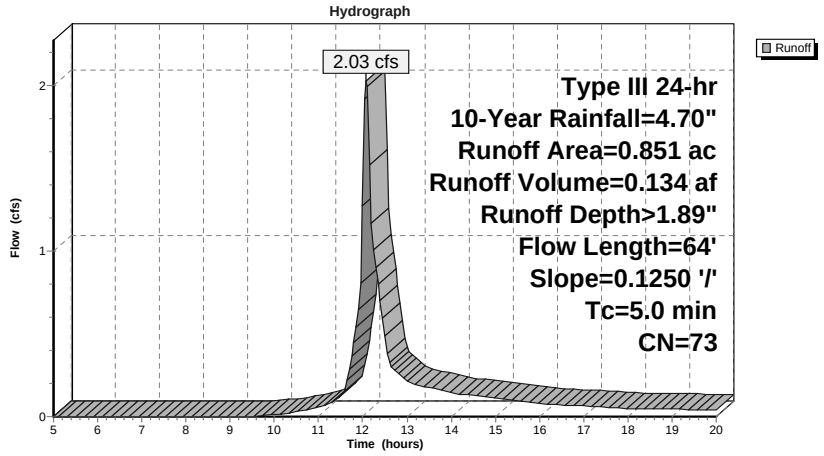
Runoff = 2.03 cfs @ 12.08 hrs, Volume= 0.134 af, Depth> 1.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.70"

Area (ac)	CN	Description
0.121	98	Water Surface, HSG B
0.151	98	Paved parking, HSG B
0.579	61	>75% Grass cover, Good, HSG B
0.851	73	Weighted Average
0.579		68.04% Pervious Area
0.272		31.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	64	0.1250	0.32		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
3.3	64	Total, Increased to minimum Tc = 5.0 min			

Subcatchment P: P



Summary for Reach R1: R1

Inflow Area = 6.400 ac, 33.67% Impervious, Inflow Depth = 1.02" for 10-Year event
Inflow = 10.16 cfs @ 12.27 hrs, Volume= 0.546 af
Outflow = 5.35 cfs @ 12.86 hrs, Volume= 0.544 af, Atten= 47%, Lag= 35.0 min

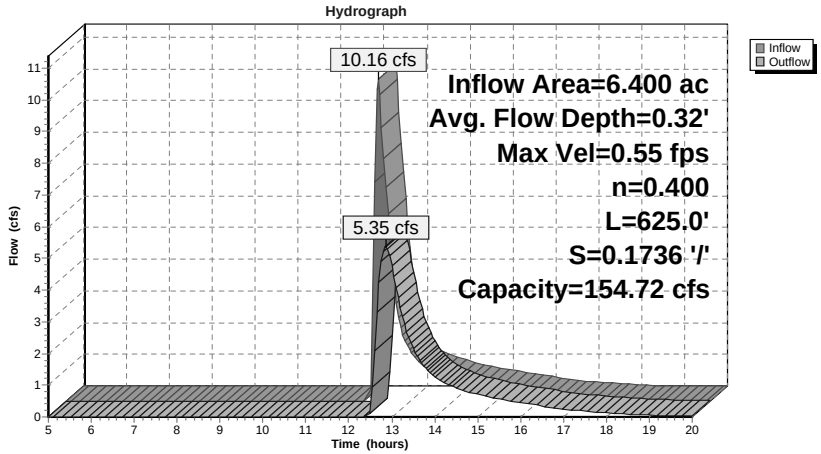
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.55 fps, Min. Travel Time= 18.9 min
Avg. Velocity = 0.25 fps, Avg. Travel Time= 41.0 min

Peak Storage= 6,096 cf @ 12.54 hrs
Average Depth at Peak Storage= 0.32'
Bank-Full Depth= 1.50' Flow Area= 100.0 sf, Capacity= 154.72 cfs

100.00' x 1.50' deep Parabolic Channel, n= 0.400
Length= 625.0' Slope= 0.1736 '/'
Inlet Invert= 138.50', Outlet Invert= 30.00'

‡

Reach R1: R1



Summary for Reach R2: R2

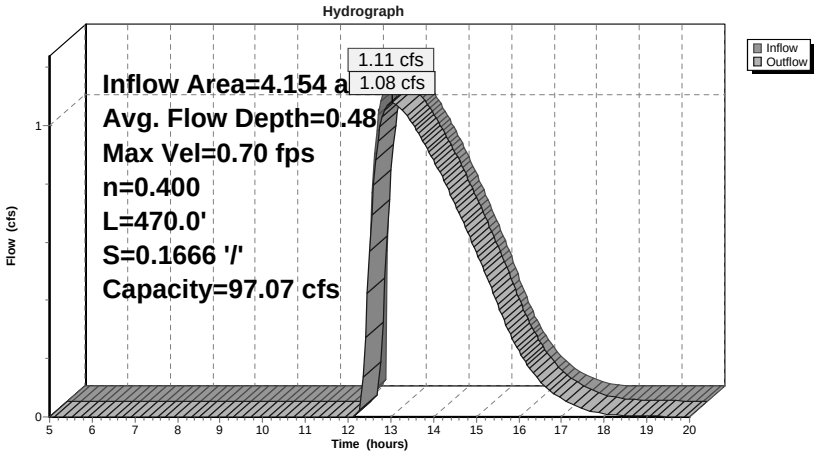
Inflow Area = 4.154 ac, 39.48% Impervious, Inflow Depth = 0.67" for 10-Year event
Inflow = 1.11 cfs @ 12.58 hrs, Volume= 0.233 af
Outflow = 1.08 cfs @ 13.03 hrs, Volume= 0.233 af, Atten= 2%, Lag= 26.8 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.70 fps, Min. Travel Time= 11.2 min
Avg. Velocity = 0.39 fps, Avg. Travel Time= 19.9 min

Peak Storage= 729 cf @ 12.84 hrs
Average Depth at Peak Storage= 0.48'
Bank-Full Depth= 4.00' Flow Area= 37.3 sf, Capacity= 97.07 cfs

14.00' x 4.00' deep Parabolic Channel, n= 0.400
Length= 470.0' Slope= 0.1666 '/'
Inlet Invert= 114.00', Outlet Invert= 35.70'

Reach R2: R2



Summary for Pond 7P: UG A

Inflow Area = 6.400 ac, 33.67% Impervious, Inflow Depth > 1.89" for 10-Year event
Inflow = 12.21 cfs @ 12.18 hrs, Volume= 1.006 af
Outflow = 10.56 cfs @ 12.27 hrs, Volume= 0.858 af, Atten= 14%, Lag= 5.8 min
Discarded = 0.40 cfs @ 11.15 hrs, Volume= 0.311 af
Primary = 10.16 cfs @ 12.27 hrs, Volume= 0.546 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 147.41' @ 12.27 hrs Surf.Area= 3,417 sf Storage= 9,580 cf

Plug-Flow detention time= 69.3 min calculated for 0.855 af (85% of inflow)
Center-of-Mass det. time= 26.9 min (835.7 - 808.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	143.50'	4,740 cf	**44.75'W x 76.37'L x 5.75'H Field A** 19,650 cf Overall - 7,801 cf Embedded = 11,849 cf x 40.0% Voids
#2A	144.25'	7,801 cf	**Cultec R-902HD** x 120 Inside #1 Effective Size= 69.8"W x 48.0"H => 17.65 sf x 3.67'L = 64.7 cf Overall Size= 78.0"W x 48.0"H x 4.10'L with 0.44' Overlap 120 Chambers in 6 Rows Cap Storage= +2.8 cf x 2 x 6 rows = 33.1 cf
		12,541 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	146.30'	**24.0" Round Culvert X 2.00** L= 64.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 146.30' / 138.50' S= 0.1219 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Discarded	143.50'	**5.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.40 cfs @ 11.15 hrs HW=143.56' (Free Discharge)
↑└**2=Exfiltration** (Exfiltration Controls 0.40 cfs)

Primary OutFlow Max=9.77 cfs @ 12.27 hrs HW=147.39' (Free Discharge)
↑└**1=Culvert** (Inlet Controls 9.77 cfs @ 2.80 fps)

Pond 7P: UG A - Chamber Wizard Field A

Chamber Model = Cultec R-902HD (Cultec Recharger® 902HD)
Effective Size= 69.8"W x 48.0"H => 17.65 sf x 3.67'L = 64.7 cf
Overall Size= 78.0"W x 48.0"H x 4.10'L with 0.44' Overlap
Cap Storage= +2.8 cf x 2 x 6 rows = 33.1 cf

78.0" Wide + 9.0" Spacing = 87.0" C-C Row Spacing

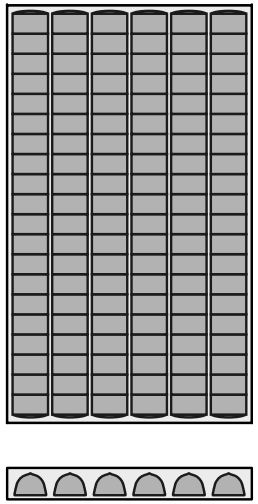
20 Chambers/Row x 3.67' Long +0.52' Cap Length x 2 = 74.37' Row Length +12.0" End Stone x 2 = 76.37' Base Length
6 Rows x 78.0" Wide + 9.0" Spacing x 5 + 12.0" Side Stone x 2 = 44.75' Base Width
9.0" Base + 48.0" Chamber Height + 12.0" Cover = 5.75' Field Height

120 Chambers x 64.7 cf + 2.8 cf Cap Volume x 2 x 6 Rows = 7,801.3 cf Chamber Storage

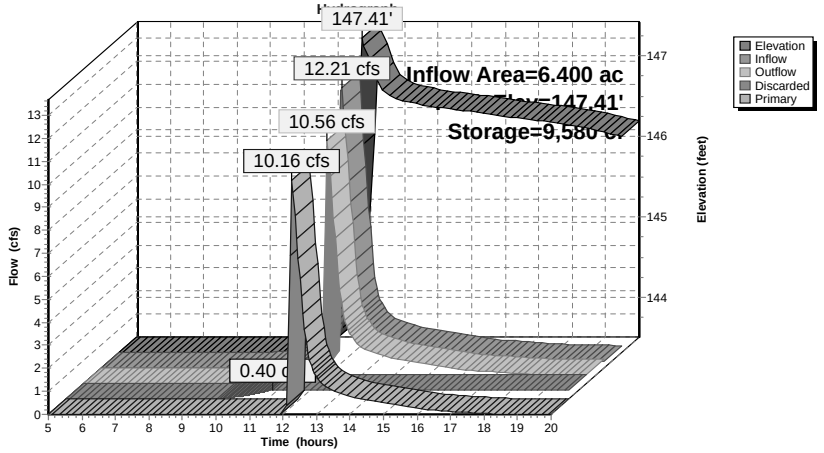
19,650.1 cf Field - 7,801.3 cf Chambers = 11,848.8 cf Stone x 40.0% Voids = 4,739.5 cf Stone Storage

Chamber Storage + Stone Storage = 12,540.8 cf = 0.288 af
Overall Storage Efficiency = 63.8%
Overall System Size = 76.37' x 44.75' x 5.75'

120 Chambers
727.8 cy Field
438.8 cy Stone



Pond 7P: UG A



Summary for Pond 13P: INFIL B

Inflow Area = 3.752 ac, 42.40% Impervious, Inflow Depth > 1.89" for 10-Year event
Inflow = 8.73 cfs @ 12.10 hrs, Volume= 0.591 af
Outflow = 1.65 cfs @ 12.58 hrs, Volume= 0.523 af, Atten= 81%, Lag= 29.0 min
Discarded = 0.54 cfs @ 12.58 hrs, Volume= 0.290 af
Primary = 1.11 cfs @ 12.58 hrs, Volume= 0.233 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 136.62' @ 12.58 hrs Surf.Area= 4,656 sf Storage= 10,363 cf

Plug-Flow detention time= 104.7 min calculated for 0.523 af (88% of inflow)
Center-of-Mass det. time= 68.5 min (872.6 - 804.1)

Volume	Invert	Avail.Storage	Storage Description
#1	133.00'	20,758 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

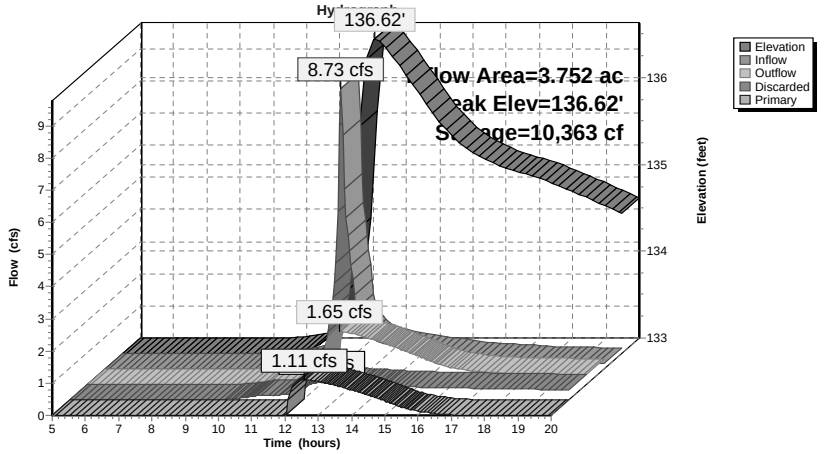
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
133.00	1,092	0	0
134.00	2,003	1,548	1,548
136.00	4,089	6,092	7,640
138.00	5,910	9,999	17,639
138.50	6,567	3,119	20,758

Device	Routing	Invert	Outlet Devices
#1	Primary	135.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 135.00' / 133.00' S= 0.0870 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Device 1	135.00'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	137.00'	**42.0" x 42.0" Horiz. Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	137.50'	**8.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64
#5	Discarded	133.00'	**5.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.54 cfs @ 12.58 hrs HW=136.62' (Free Discharge)
└**5=Exfiltration** (Exfiltration Controls 0.54 cfs)

Primary OutFlow Max=1.11 cfs @ 12.58 hrs HW=136.62' (Free Discharge)
└**1=Culvert** (Passes 1.11 cfs of 7.94 cfs potential flow)
  └**2=Orifice/Grate** (Orifice Controls 1.11 cfs @ 5.64 fps)
    └**3=Grate** (Controls 0.00 cfs)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 13P: INFIL B



Summary for Pond 15P: BIO D

Inflow Area = 0.402 ac, 12.19% Impervious, Inflow Depth > 0.33" for 10-Year event
Inflow = 0.07 cfs @ 12.30 hrs, Volume= 0.011 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 138.21' @ 20.00 hrs Surf.Area= 2,417 sf Storage= 484 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

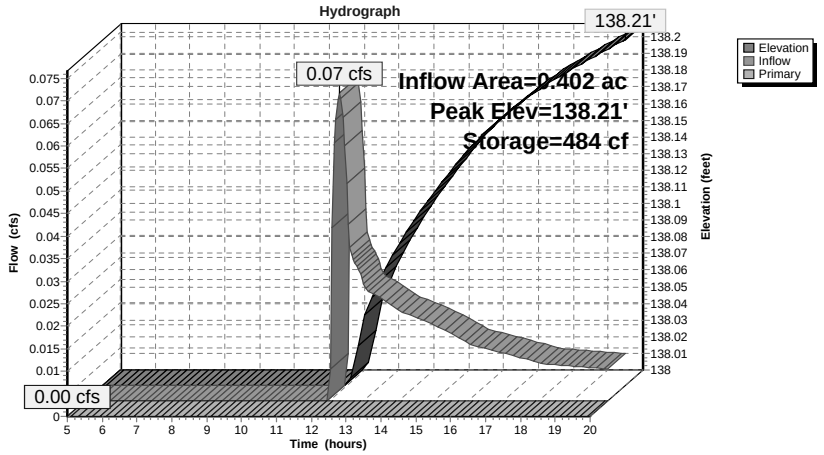
Volume	Invert	Avail.Storage	Storage Description
#1	138.00'	2,658 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
138.00	2,247	0	0
139.00	3,068	2,658	2,658

Device	Routing	Invert	Outlet Devices
#1	Primary	138.50'	**18.0" x 18.0" Horiz. Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=138.00' (Free Discharge)
└**1=Grate** (Controls 0.00 cfs)

Pond 15P: BIO D



Summary for Pond 16P: BIO E

Inflow Area = 1.896 ac, 28.32% Impervious, Inflow Depth > 0.69" for 10-Year event
Inflow = 1.03 cfs @ 12.20 hrs, Volume= 0.108 af
Outflow = 0.40 cfs @ 12.66 hrs, Volume= 0.075 af, Atten= 61%, Lag= 27.3 min
Primary = 0.40 cfs @ 12.66 hrs, Volume= 0.075 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 34.54' @ 12.66 hrs Surf.Area= 3,103 sf Storage= 1,546 cf

Plug-Flow detention time= 129.1 min calculated for 0.075 af (69% of inflow)
Center-of-Mass det. time= 54.7 min (906.8 - 852.0)

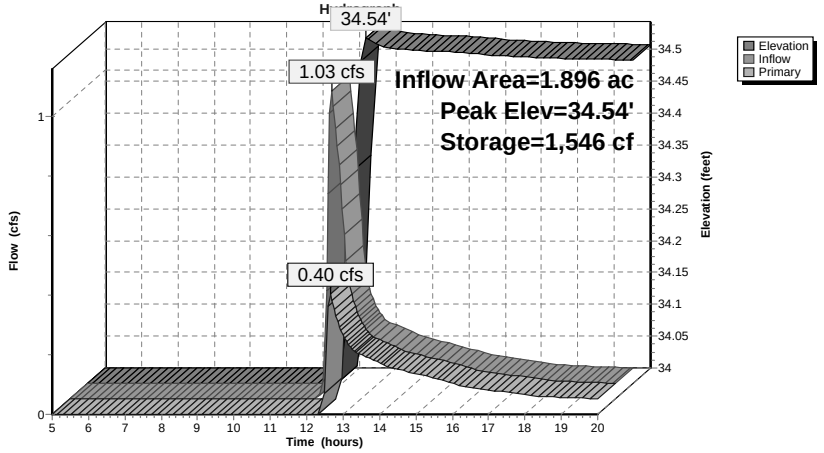
Volume	Invert	Avail.Storage	Storage Description
#1	34.00'	7,056 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
34.00	2,600	0	0
36.00	4,456	7,056	7,056

Device	Routing	Invert	Outlet Devices
#1	Primary	31.50'	**15.0" Round Culvert** L= 62.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 31.50' / 30.00' S= 0.0242 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Device 1	34.50'	**42.0" x 42.0" Horiz. Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.39 cfs @ 12.66 hrs HW=34.54' (Free Discharge)
↑**1=Culvert** (Passes 0.39 cfs of 9.19 cfs potential flow)
↑**2=Grate** (Weir Controls 0.39 cfs @ 0.67 fps)

Pond 16P: BIO E

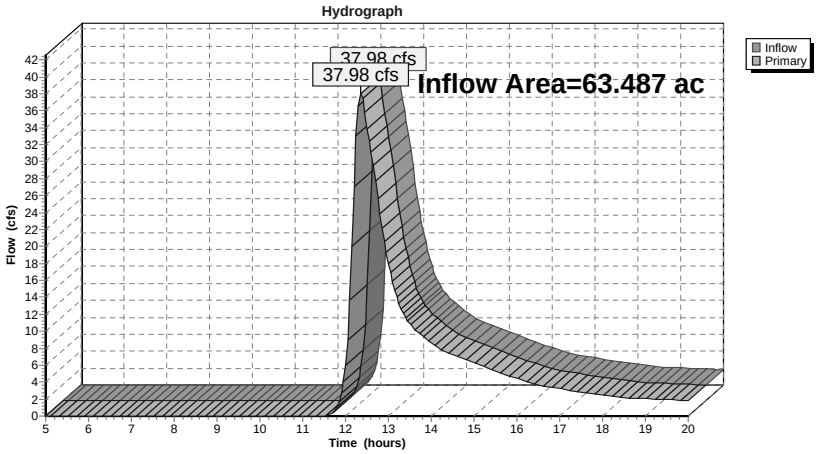


Summary for Link 1L: SDP

Inflow Area = 63.487 ac, 14.43% Impervious, Inflow Depth > 0.97" for 10-Year event
Inflow = 37.98 cfs @ 12.36 hrs, Volume= 5.138 af
Primary = 37.98 cfs @ 12.36 hrs, Volume= 5.138 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: SDP



Summary for Subcatchment 10: DA10

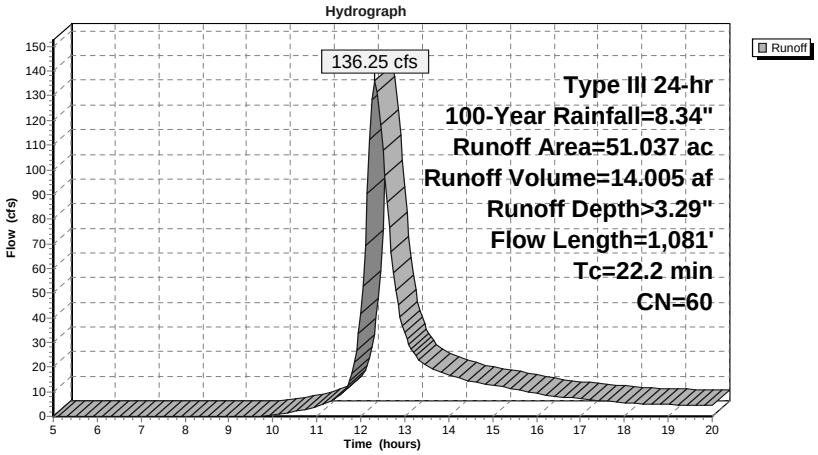
Runoff = 136.25 cfs @ 12.32 hrs, Volume= 14.005 af, Depth> 3.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.34"

Area (ac)	CN	Description
1.123	98	Paved parking, HSG A
3.706	98	Water Surface, HSG C
9.055	30	Woods, Good, HSG A
3.589	55	Woods, Good, HSG B
13.778	70	Woods, Good, HSG C
0.865	30	Brush, Good, HSG A
0.166	48	Brush, Good, HSG B
0.569	65	Brush, Good, HSG C
6.436	39	>75% Grass cover, Good, HSG A
4.679	61	>75% Grass cover, Good, HSG B
7.071	74	>75% Grass cover, Good, HSG C
51.037	60	Weighted Average
46.208		90.54% Pervious Area
4.829		9.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.2	100	0.0300	0.14		**Sheet Flow, S1** Grass: Dense n= 0.240 P2= 3.16"
10.0	981	0.1080	1.64		**Shallow Concentrated Flow, S2** Woodland Kv= 5.0 fps
22.2	1,081	Total			

Subcatchment 10: DA10



Summary for Subcatchment 11: DA11

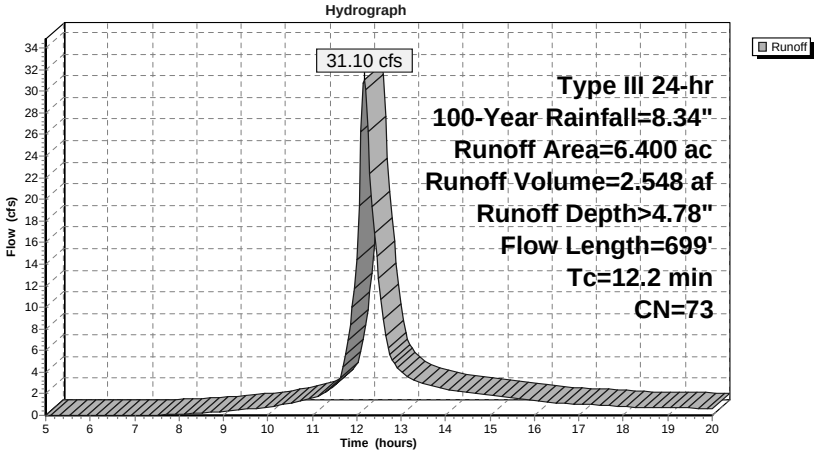
Runoff = 31.10 cfs @ 12.17 hrs, Volume= 2.548 af, Depth> 4.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.34"

Area (ac)	CN	Description
0.320	98	Roofs, HSG B
1.835	98	Paved parking, HSG B
4.245	61	>75% Grass cover, Good, HSG B
6.400	73	Weighted Average
4.245		66.33% Pervious Area
2.155		33.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	100	0.0225	0.18		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
1.5	224	0.0250	2.55		**Shallow Concentrated Flow, S2** Unpaved Kv= 16.1 fps
0.6	150	0.0430	4.21		**Shallow Concentrated Flow, S3** Paved Kv= 20.3 fps
0.7	225	0.0100	5.70	7.00	**Pipe Channel, S4** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
12.2	699	Total			

Subcatchment 11: DA11



Summary for Subcatchment 12: DA12

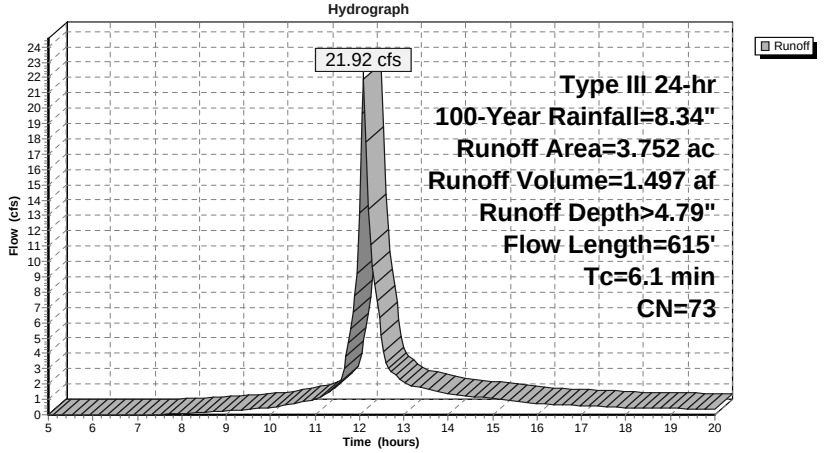
Runoff = 21.92 cfs @ 12.09 hrs, Volume= 1.497 af, Depth> 4.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.34"

Area (ac)	CN	Description
0.712	98	Roofs, HSG B
0.879	98	Paved parking, HSG B
0.616	39	>75% Grass cover, Good, HSG A
1.545	61	>75% Grass cover, Good, HSG B
3.752	73	Weighted Average
2.161		57.60% Pervious Area
1.591		42.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.1100	0.33		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.8	138	0.0180	2.72		**Shallow Concentrated Flow, S2** Paved Kv= 20.3 fps
0.3	377	0.0990	21.53	26.42	**Pipe Channel, S3** 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
6.1	615	Total			

Subcatchment 12: DA12



Summary for Subcatchment 14: DA14

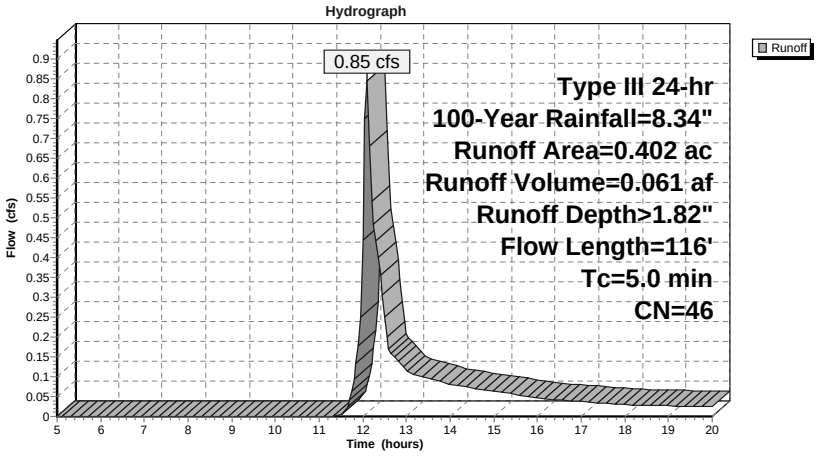
Runoff = 0.85 cfs @ 12.09 hrs, Volume= 0.061 af, Depth> 1.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.34"

Area (ac)	CN	Description
0.049	98	Roofs, HSG A
0.353	39	>75% Grass cover, Good, HSG A
0.402	46	Weighted Average
0.353		87.81% Pervious Area
0.049		12.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	100	0.1600	0.39		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
0.0	16	0.2000	7.20		**Shallow Concentrated Flow, S2** Unpaved Kv= 16.1 fps
4.3	116	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 14: DA14



Summary for Subcatchment 15: DA15

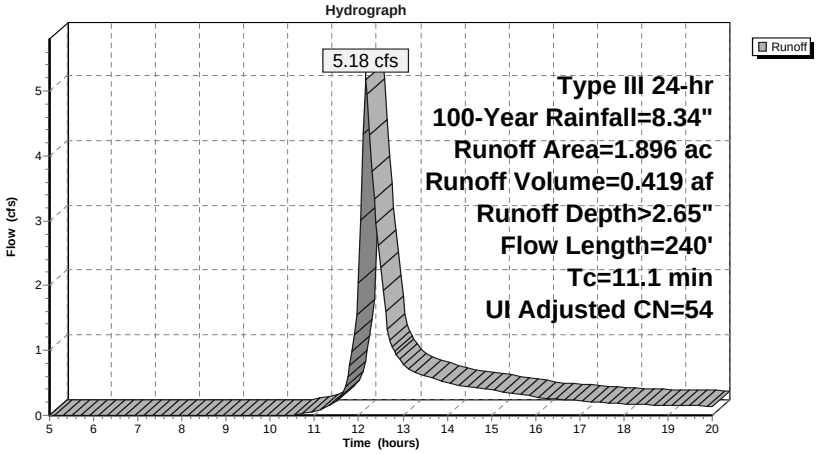
Runoff = 5.18 cfs @ 12.17 hrs, Volume= 0.419 af, Depth> 2.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.34"

Area (ac)	CN	Adj	Description
0.063	98		Roofs, HSG A
0.309	98		Paved parking, HSG A
0.165	98		Unconnected pavement, HSG A
1.095	39		>75% Grass cover, Good, HSG A
0.029	74		>75% Grass cover, Good, HSG C
0.154	30		Woods, Good, HSG A
0.081	70		Woods, Good, HSG C
1.896	57	54	Weighted Average, UI Adjusted
1.359			71.68% Pervious Area
0.537			28.32% Impervious Area
0.165			30.73% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	100	0.0200	0.17		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
1.2	140	0.0140	1.90		**Shallow Concentrated Flow, S2** Unpaved Kv= 16.1 fps
11.1	240	Total			

Subcatchment 15: DA15



Summary for Subcatchment P: P

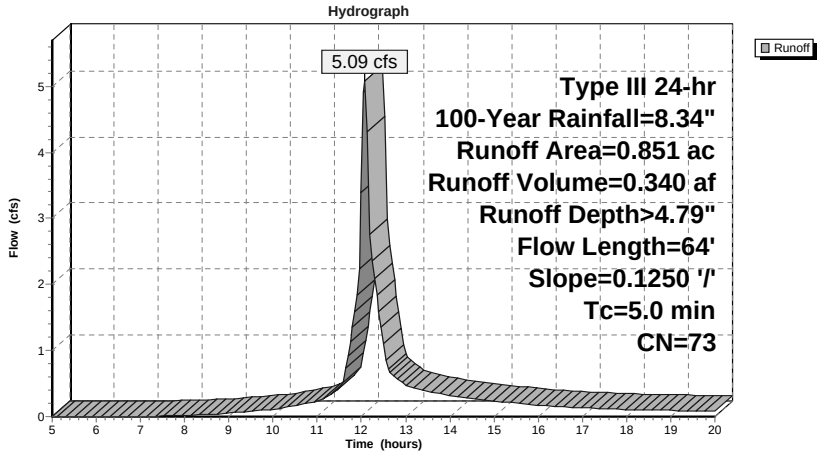
Runoff = 5.09 cfs @ 12.08 hrs, Volume= 0.340 af, Depth> 4.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.34"

Area (ac)	CN	Description
0.121	98	Water Surface, HSG B
0.151	98	Paved parking, HSG B
0.579	61	>75% Grass cover, Good, HSG B
0.851	73	Weighted Average
0.579		68.04% Pervious Area
0.272		31.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	64	0.1250	0.32		**Sheet Flow, S1** Grass: Short n= 0.150 P2= 3.16"
3.3	64	Total, Increased to minimum Tc = 5.0 min			

Subcatchment P: P



Summary for Reach R1: R1

Inflow Area = 6.400 ac, 33.67% Impervious, Inflow Depth > 3.75" for 100-Year event
Inflow = 29.48 cfs @ 12.21 hrs, Volume= 2.002 af
Outflow = 22.55 cfs @ 12.54 hrs, Volume= 1.978 af, Atten= 24%, Lag= 19.7 min

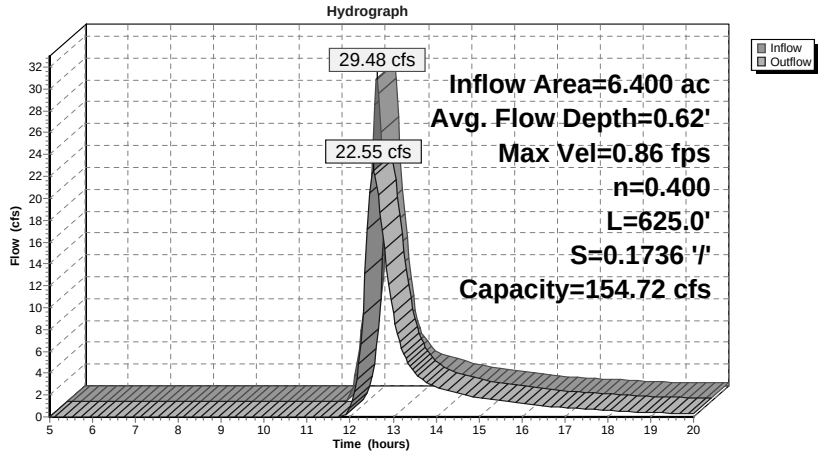
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.86 fps, Min. Travel Time= 12.2 min
Avg. Velocity = 0.38 fps, Avg. Travel Time= 27.5 min

Peak Storage= 16,488 cf @ 12.33 hrs
Average Depth at Peak Storage= 0.62'
Bank-Full Depth= 1.50' Flow Area= 100.0 sf, Capacity= 154.72 cfs

100.00' x 1.50' deep Parabolic Channel, n= 0.400
Length= 625.0' Slope= 0.1736 '/'
Inlet Invert= 138.50', Outlet Invert= 30.00'

‡

Reach R1: R1



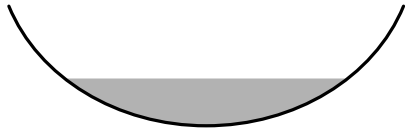
Summary for Reach R2: R2

Inflow Area = 4.154 ac, 39.48% Impervious, Inflow Depth > 2.98" for 100-Year event
Inflow = 15.59 cfs @ 12.17 hrs, Volume= 1.031 af
Outflow = 13.64 cfs @ 12.35 hrs, Volume= 1.028 af, Atten= 13%, Lag= 10.4 min

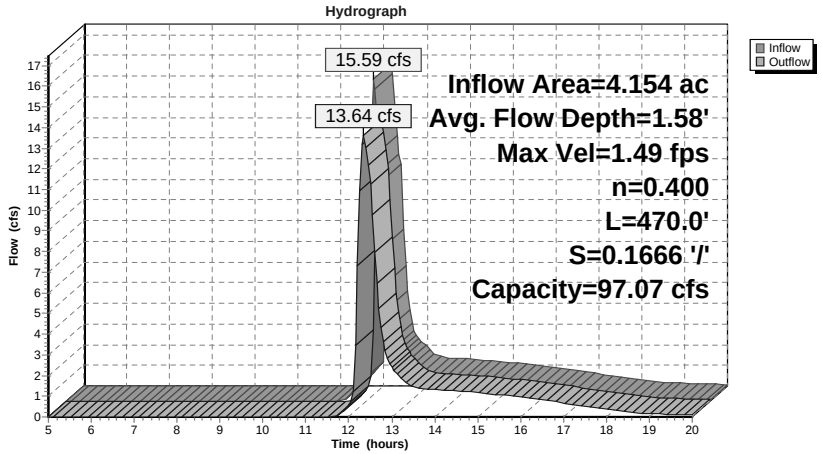
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.49 fps, Min. Travel Time= 5.3 min
Avg. Velocity = 0.64 fps, Avg. Travel Time= 12.2 min

Peak Storage= 4,345 cf @ 12.25 hrs
Average Depth at Peak Storage= 1.58'
Bank-Full Depth= 4.00' Flow Area= 37.3 sf, Capacity= 97.07 cfs

14.00' x 4.00' deep Parabolic Channel, n= 0.400
Length= 470.0' Slope= 0.1666 '/'
Inlet Invert= 114.00', Outlet Invert= 35.70'



Reach R2: R2



Summary for Pond 7P: UG A

Inflow Area = 6.400 ac, 33.67% Impervious, Inflow Depth > 4.78" for 100-Year event
Inflow = 31.10 cfs @ 12.17 hrs, Volume= 2.548 af
Outflow = 29.87 cfs @ 12.21 hrs, Volume= 2.383 af, Atten= 4%, Lag= 2.3 min
Discarded = 0.40 cfs @ 9.15 hrs, Volume= 0.381 af
Primary = 29.48 cfs @ 12.21 hrs, Volume= 2.002 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 148.82' @ 12.21 hrs Surf.Area= 3,417 sf Storage= 11,957 cf

Plug-Flow detention time= 35.4 min calculated for 2.375 af (93% of inflow)
Center-of-Mass det. time= 13.0 min (800.8 - 787.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	143.50'	4,740 cf	**44.75'W x 76.37'L x 5.75'H Field A** 19,650 cf Overall - 7,801 cf Embedded = 11,849 cf x 40.0% Voids
#2A	144.25'	7,801 cf	**Cultec R-902HD** x 120 Inside #1 Effective Size= 69.8"W x 48.0"H => 17.65 sf x 3.67'L = 64.7 cf Overall Size= 78.0"W x 48.0"H x 4.10'L with 0.44' Overlap 120 Chambers in 6 Rows Cap Storage= +2.8 cf x 2 x 6 rows = 33.1 cf
		12,541 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	146.30'	**24.0" Round Culvert X 2.00** L= 64.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 146.30' / 138.50' S= 0.1219 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Discarded	143.50'	**5.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.40 cfs @ 9.15 hrs HW=143.56' (Free Discharge)
↑**2=Exfiltration** (Exfiltration Controls 0.40 cfs)

Primary OutFlow Max=29.27 cfs @ 12.21 hrs HW=148.80' (Free Discharge)
↑**1=Culvert** (Inlet Controls 29.27 cfs @ 4.66 fps)

Pond 7P: UG A - Chamber Wizard Field A

Chamber Model = Cultec R-902HD (Cultec Recharger® 902HD)
Effective Size= 69.8"W x 48.0"H => 17.65 sf x 3.67'L = 64.7 cf
Overall Size= 78.0"W x 48.0"H x 4.10'L with 0.44' Overlap
Cap Storage= +2.8 cf x 2 x 6 rows = 33.1 cf

78.0" Wide + 9.0" Spacing = 87.0" C-C Row Spacing

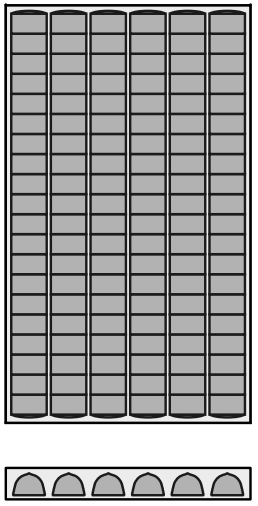
20 Chambers/Row x 3.67' Long +0.52' Cap Length x 2 = 74.37' Row Length +12.0" End Stone x 2 = 76.37' Base Length
6 Rows x 78.0" Wide + 9.0" Spacing x 5 + 12.0" Side Stone x 2 = 44.75' Base Width
9.0" Base + 48.0" Chamber Height + 12.0" Cover = 5.75' Field Height

120 Chambers x 64.7 cf + 2.8 cf Cap Volume x 2 x 6 Rows = 7,801.3 cf Chamber Storage

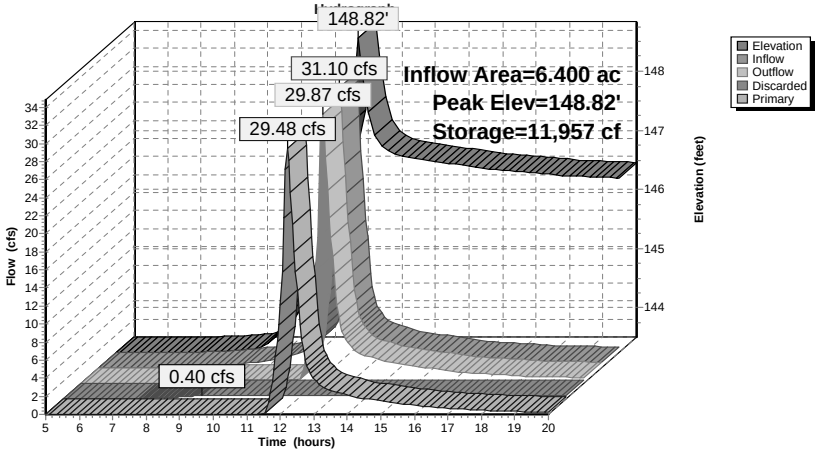
19,650.1 cf Field - 7,801.3 cf Chambers = 11,848.8 cf Stone x 40.0% Voids = 4,739.5 cf Stone Storage

Chamber Storage + Stone Storage = 12,540.8 cf = 0.288 af
Overall Storage Efficiency = 63.8%
Overall System Size = 76.37' x 44.75' x 5.75'

120 Chambers
727.8 cy Field
438.8 cy Stone



Pond 7P: UG A



Summary for Pond 13P: INFIL B

Inflow Area = 3.752 ac, 42.40% Impervious, Inflow Depth > 4.79" for 100-Year event
Inflow = 21.92 cfs @ 12.09 hrs, Volume= 1.497 af
Outflow = 16.26 cfs @ 12.17 hrs, Volume= 1.394 af, Atten= 26%, Lag= 4.8 min
Discarded = 0.66 cfs @ 12.17 hrs, Volume= 0.395 af
Primary = 15.59 cfs @ 12.17 hrs, Volume= 0.999 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 137.81' @ 12.17 hrs Surf.Area= 5,735 sf Storage= 16,519 cf

Plug-Flow detention time= 67.3 min calculated for 1.394 af (93% of inflow)
Center-of-Mass det. time= 43.2 min (826.1 - 782.9)

Volume	Invert	Avail.Storage	Storage Description
#1	133.00'	20,758 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

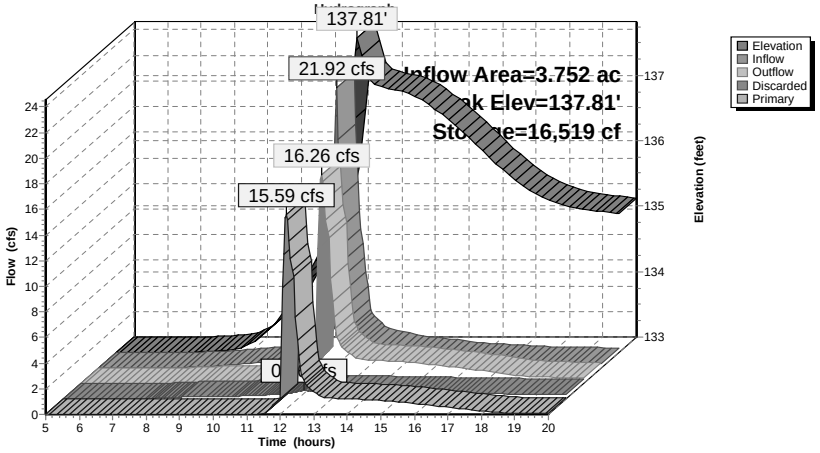
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
133.00	1,092	0	0
134.00	2,003	1,548	1,548
136.00	4,089	6,092	7,640
138.00	5,910	9,999	17,639
138.50	6,567	3,119	20,758

Device	Routing	Invert	Outlet Devices
#1	Primary	135.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 135.00' / 133.00' S= 0.0870 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Device 1	135.00'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	137.00'	**42.0" x 42.0" Horiz. Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	137.50'	**8.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64
#5	Discarded	133.00'	**5.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.66 cfs @ 12.17 hrs HW=137.79' (Free Discharge)
└**5=Exfiltration** (Exfiltration Controls 0.66 cfs)

Primary OutFlow Max=15.22 cfs @ 12.17 hrs HW=137.79' (Free Discharge)
└**1=Culvert** (Inlet Controls 12.14 cfs @ 6.87 fps)
└**2=Orifice/Grate** (Passes < 1.51 cfs potential flow)
└**3=Grate** (Passes < 31.89 cfs potential flow)
└**4=Broad-Crested Rectangular Weir** (Weir Controls 3.08 cfs @ 1.35 fps)

Pond 13P: INFIL B



Summary for Pond 15P: BIO D

Inflow Area = 0.402 ac, 12.19% Impervious, Inflow Depth > 1.82" for 100-Year event
Inflow = 0.85 cfs @ 12.09 hrs, Volume= 0.061 af
Outflow = 0.11 cfs @ 13.06 hrs, Volume= 0.032 af, Atten= 87%, Lag= 58.2 min
Primary = 0.11 cfs @ 13.06 hrs, Volume= 0.032 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 138.53' @ 13.06 hrs Surf.Area= 2,684 sf Storage= 1,311 cf

Plug-Flow detention time= 187.2 min calculated for 0.032 af (53% of inflow)
Center-of-Mass det. time= 94.0 min (924.5 - 830.5)

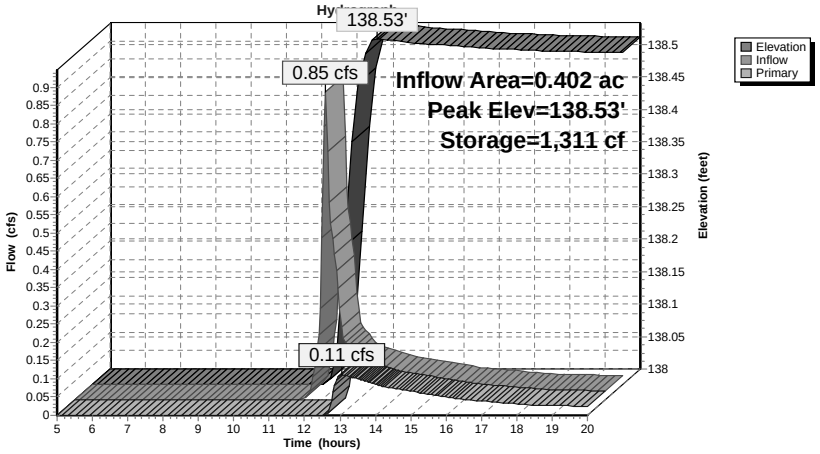
Volume	Invert	Avail.Storage	Storage Description
#1	138.00'	2,658 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
138.00	2,247	0	0
139.00	3,068	2,658	2,658

Device	Routing	Invert	Outlet Devices
#1	Primary	138.50'	**18.0" x 18.0" Horiz. Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.11 cfs @ 13.06 hrs HW=138.53' (Free Discharge)
↑**1=Grate** (Weir Controls 0.11 cfs @ 0.58 fps)

Pond 15P: BIO D



Summary for Pond 16P: BIO E

Inflow Area = 1.896 ac, 28.32% Impervious, Inflow Depth > 2.65" for 100-Year event
Inflow = 5.18 cfs @ 12.17 hrs, Volume= 0.419 af
Outflow = 5.02 cfs @ 12.20 hrs, Volume= 0.385 af, Atten= 3%, Lag= 2.1 min
Primary = 5.02 cfs @ 12.20 hrs, Volume= 0.385 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 34.73' @ 12.20 hrs Surf.Area= 3,276 sf Storage= 2,142 cf

Plug-Flow detention time= 39.3 min calculated for 0.385 af (92% of inflow)
Center-of-Mass det. time= 12.7 min (831.6 - 818.9)

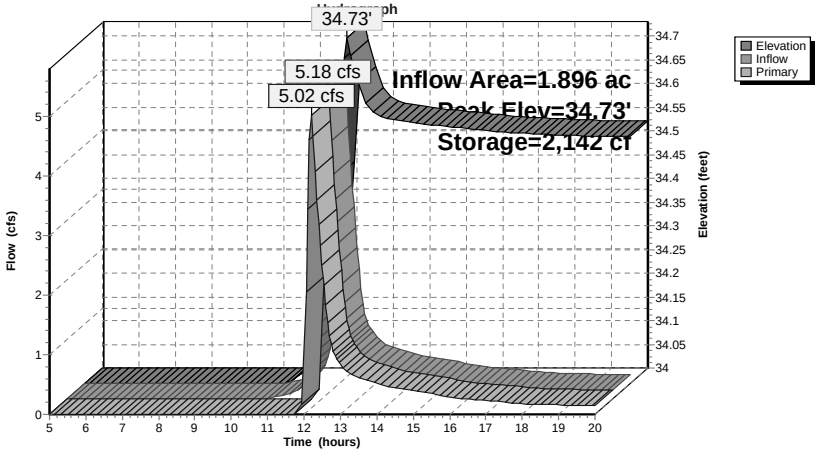
Volume	Invert	Avail.Storage	Storage Description
#1	34.00'	7,056 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
34.00	2,600	0	0
36.00	4,456	7,056	7,056

Device	Routing	Invert	Outlet Devices
#1	Primary	31.50'	**15.0" Round Culvert** L= 62.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 31.50' / 30.00' S= 0.0242 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Device 1	34.50'	**42.0" x 42.0" Horiz. Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=5.01 cfs @ 12.20 hrs HW=34.73' (Free Discharge)
1=Culvert (Passes 5.01 cfs of 9.53 cfs potential flow)
2=Grate (Weir Controls 5.01 cfs @ 1.56 fps)

Pond 16P: BIO E

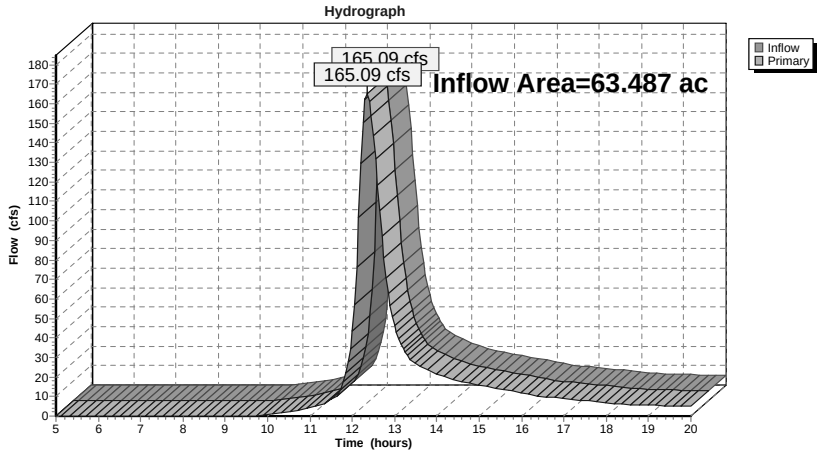


Summary for Link 1L: SDP

Inflow Area = 63.487 ac, 14.43% Impervious, Inflow Depth > 3.29" for 100-Year event
Inflow = 165.09 cfs @ 12.35 hrs, Volume= 17.396 af
Primary = 165.09 cfs @ 12.35 hrs, Volume= 17.396 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: SDP



APPENDIX F

STORMWATER MANAGEMENT PRACTICE DESIGN

Project:	Mirbeau				
Description:	Stormwater Quality Design				
By/Date:	ESR	3/26/2024	Reviewed/Date:	MAB	

Hudson Land Design, P.C.
174 Main Street
Beacon, NY 12508
845-440-6926

Underground Infiltration A

1) Determine Water Quality Volume

Water quality volume to be treated will be calculated using the 90% rule from Section 4.2 of the New York State Storm Water Design Manual (January 2015), hereinafter referred to as NYSSDM.

$WQ_V = 43{,}560 \times [P \times Rv \times A] / 12$

Where:
WQ_V = Water quality volume (cf)
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv = 0.05 + 0.009 x I , where I is % impervious area
A = Watershed (ac)

Watershed	P (in)	Impervious Area (ac)	Impervious (Coverage %)	Rv	Total Area (ac)	WQv (cf)	Pre-Treatment Practice	Treatment Practice
11	1.40	2.16	34	0.35	6.40	11,483	Hydrodynamic Device	Infiltration

2) Determine Required Pre-Treatment Volume

Determine Pre-Treatment Volume

Watershed	Required WQv (cf)	Required Pre-Treatment Volume (cf)	Pre-Treatment Practice	Provided Pre-Treatment Volume (cf)
11	11,483	11,483	Hydrodynamic Device	11,483

2) Determine Minimum Runoff Reduction Volume (RR_V)

Goal: Provide 100% RR_V by implementing Green Infrastructure techniques and Stormwater Management Practices

$RR_V = 43{,}560 \times [P \times Rv \times A] / 12$

Where:
RR_V = Runoff Reduction Volume (cf)
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv = 0.05 + 0.009 x I , where I is % impervious area — R_V: 0.35
A = Watershed (ac)

100% RR_V: 11,483 cf

* Minimum Rv of of 0.2 not applicable to RR_V calculations (use actual calculated Rv).

Project:	Mirbeau			
Description:	Stormwater Quality Design			
By/Date:	ESR	3/26/2024	Reviewed/Date:	MAB

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Underground Infiltration A

For projects that cannot meet 100% RR_V: Implement Specific Reduction Factor (S), which provides an absoulte minimum acceptable RR_V.

Drainage Area with Hydrologic Soil Group A:	0.000 acres	Corresponding S:	0.55
Drainage Area with Hydrologic Soil Group B:	6.400 acres	Corresponding S:	0.40
Drainage Area with Hydrologic Soil Group C:	0.000 acres	Corresponding S:	0.30
Drainage Area with Hydrologic Soil Group D:	0.000 acres	Corresponding S:	0.20
Total Area:	6.400 acres		
Total Area Matches		Calculated S:	0.4

Minimum RR_V (acre-feet) = [(P)(Rv*)(Ai)]/12

Calculated Ai: 0.8620
Calculated Rv*: 0.95
Calculated Minimum RR_V: 4,162 cf

Where:
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv* = 0.05 + 0.009 x I , where I is % impervious area (100%)
Ai = (S)(Aic)
Aic = Total area of new impervious cover

4) Stormwater Management Practice Design

Design Infiltration Basin

WQ_V = Remaining Water Quality Volume (cf) = 11,483 cf

- Storage volume within infiltration bed: 6,777 cf (volume below lowest outlet)

(from HydroCad Model)

- Infiltration rate for design: 5.0 inches/hour

Observed infiltration rate: 24.0 inches/hour

- Infiltration area : 3,340 sf
- Calculated exfiltration rate: 0.40 cfs (during all storms)
- Calculated time to infiltrate WQv: 7.97 hours

5) Tabulate Provided Runoff Reduction Volume (RR_V)

Infiltration Basin

Storage provided within practice: **18,260 cf** (including pretreatment)
For infiltration practices: 100% reduction (from Table 3.5 Runoff Reduction Capacity for Standard SMPs)
RR_V Reduction Factor: 100%

RR_V Provided by implementing infiltration: 18,260 cf

TOTAL RR_V PROVIDED: **11,483 cf**
Calculated 100%RR_V: 11,483 cf
Is 100% RR_V met: Yes acceptable
If 100% RR_V is not met, is Minimum RR_V met: N/A
WQ_V TREATED: **6,777 cf**

Project:	Mirbeau			
Description:	Stormwater Quality Design			
By/Date:	ESR	3/26/2024	Reviewed/Date:	MAB

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Underground Infiltration A

6) Channel Protection Volume (CPv) Design

Determine Stream Channel Protection Volume (CPv)

1-Year Storm Runoff Volume	13,068 cf	From HydroCAD Model

Compute the CPv Release Rate

The Stream Channel Protection Volume (Cpv) shall be released over 24 hours

Q(CPv)=CPv/(24 hrs X 3,600 sec/hr)	0.15	cfs

Determine Required Orifice Size To Release CPv over 24-hours

CPv orifice elevation	N/A	feet
CPv orifice diameter	N/A	inches
1-Year Storm Release Rate	0.00 cfs	From HydroCAD Model - 1 Year Storm is Infiltrated
Is CPv 100% controlled?	yes - acceptable	

7) See HydroCAD model for Overbank Flood Control (Qp) and Extreme Flood Control (Qf) computations

Project:	Mirbeau			
Description:	Stormwater Quality Design			
By/Date:	ESR	3/26/2024	Reviewed/Date:	MAB

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Infiltration Basin B

1) Determine Water Quality Volume

Water quality volume to be treated will be calculated using the 90% rule from Section 4.2 of the New York State Storm Water Design Manual (January 2015), hereinafter referred to as NYSSDM.

$WQ_V = 43{,}560 \times [P \times Rv \times A] / 12$

Where:
WQ_V = Water quality volume (cf)
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv = 0.05 + 0.009 x I , where I is % impervious area
A = Watershed (ac)

Watershed	P (in)	Impervious Area (ac)	Impervious (Coverage %)	Rv	Total Area (ac)	WQv (cf)	Pre-Treatment Practice	Treatment Practice
12	1.40	1.59	42	0.43	3.75	8,230	Forebays	Infiltration

2) Determine Required Pre-Treatment Volume

Determine Pre-Treatment Volume

Watershed	Required WQv (cf)	Required Pre-Treatment Volume (cf)	Pre-Treatment Practice
12	8,230	8,230	Forebays

Size Pre-Treatment Practice: Plunge Pools

Forebay Contour	Area (sf)	Volume (cf)	Cumulative Volume (cf)
130	98	0	0
137	3,077	11,113	11,113

11,113 cf > 8,230 cf (Remaining Required WQv Pre-Treatment Volume)
acceptable

Project:	Mirbeau			
Description:	Stormwater Quality Design			
By/Date:	ESR	3/26/2024	Reviewed/Date:	MAB

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Infiltration Basin B

3) Determine Minimum Runoff Reduction Volume (RR_V)

Goal: Provide 100% RR_V by implementing Green Infrastructure techniques and Stormwater Management Practices

$RR_V = 43{,}560 \times [P \times Rv \times A] / 12$

Where:
RR_V = Runoff Reduction Volume (cf)
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv = 0.05 + 0.009 x I , where I is % impervious area — R_V: 0.43
A = Watershed (ac)

100% RR_V: 8,230 cf

* Minimum Rv of of 0.2 not applicable to RR_V calculations (use actual calculated Rv).

For projects that cannot meet 100% RR_V: Implement Specific Reduction Factor (S), which provides an absoulte minimum acceptable RR_V.

Drainage Area with Hydrologic Soil Group A:	1.251 acres	Corresponding S: 0.55
Drainage Area with Hydrologic Soil Group B:	2.501 acres	Corresponding S: 0.40
Drainage Area with Hydrologic Soil Group C:	0.000 acres	Corresponding S: 0.30
Drainage Area with Hydrologic Soil Group D:	0.000 acres	Corresponding S: 0.20
Total Area:	3.752 acres	
	Total Area Matches	Calculated S: 0.45

Minimum RR_V (acre-feet) = [(P)(Rv*)(Ai)]/12 — Calculated Ai: 0.7160
Calculated Rv*: 0.95
Where: Calculated Minimum RR_V: 3,457 cf
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv* = 0.05 + 0.009 x I , where I is % impervious area (100%)
Ai = (S)(Aic)
Aic = Total area of new impervious cover

4) Stormwater Management Practice Design

Design Infiltration Basin

WQ_V = Remaining Water Quality Volume (cf) = 8,230 cf
- Storage volume within infiltration bed: 4,072 cf (volume below lowest outlet)

(from HydroCad Model)
- Infiltration rate for design: 5.0 inches/hour

Observed infiltration rate: 23.0 inches/hour

- Infiltration area : 5,910 sf
- Calculated exfiltration rate: 0.68 cfs infiltration area x infiltration rate
- Calculated time to infiltrate WQv: 3.34 hours WQv / calculated exfiltration rate

Project:	Mirbeau			
Description:	Stormwater Quality Design			
By/Date:	ESR	3/26/2024	Reviewed/Date:	MAB

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Infiltration Basin B

Project:	Mirbeau			
Description:	Stormwater Quality Design			
By/Date:	ESR	3/26/2024	Reviewed/Date:	MAB

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Infiltration Basin B

5) Tabulate Provided Runoff Reduction Volume (RR_V)

Infiltration Basin

Storage provided within practice:	**15,185 cf**	(including pretreatment)
For infiltration practices:	100% reduction	(from Table 3.5 Runoff Reduction Capacity for Standard SMPs)
		RR_V Reduction Factor: 100%
RR_V Provided by implementing infiltration:	15,185 cf	
TOTAL RR_V PROVIDED:	**8,230 cf**	
Calculated 100%RR_V:	8,230 cf	
Minimum RR_V:	3457 cf	
Is 100% RR_V met:	Yes	acceptable
If 100% RR_V is not met, is Minimum RR_V met:	N/A	
WQ_V TREATED:	**6,954 cf**	

6) Channel Protection Volume (CPv) Design

Determine Stream Channel Protection Volume (CPv)

1-Year Storm Runoff Volume	7,710 cf	From HydroCAD Model

Compute the CPv Release Rate

The Stream Channel Protection Volume (Cpv) shall be released over 24 hours

Q(CPv)=CPv/(24 hrs X 3,600 sec/hr)	0.09	cfs

Determine Required Orifice Size To Release CPv over 24-hours

CPv orifice elevation	N/A	feet
CPv orifice diameter	N/A	inches
1-Year Storm Release Rate	0.00 cfs	From HydroCAD Model
Is CPv 100% controlled?	yes - acceptable	

7) See HydroCAD model for Overbank Flood Control (Qp) and Extreme Flood Control (Qf) computations

Project: Mirbeau
Description: Stormwater Quality Design
By/Date: ESR 3/26/2024 Reviewed/Date: MAB

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Bioretention Area C

1) Determine Water Quality Volume

Water quality volume to be treated will be calculated using the 90% rule from Section 4.2 of the New York State Storm Water Design Manual (January 2015), hereinafter referred to as NYSSDM.

$WQ_V = 43,560 \times [P \times Rv \times A] / 12$

Where:
WQ_V = Water quality volume (cf)
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv = 0.05 + 0.009 x I , where I is % impervious area
A = Watershed (ac)

Watershed	P (in)	Impervious Area (ac)	Impervious (Coverage %)	Rv	Total Area (ac)	WQv (cf)	Pre-Treatment Practice	Treatment Practice
13	1.40	0.09	27	0.29	0.33	492	Grass Filter Strip	Bioretention

2) Determine Required Pre-Treatment Volume

Determine Pre-Treatment Volume

Watershed	Required WQv (cf)	Required Pre-Treatment Volume (cf)	Pre-Treatment Practice
13	492	492	Grass Filter Strip

486 cf > 492 cf (Remaining Required WQv Pre-Treatment Volume)
insufficient

2) Determine Minimum Runoff Reduction Volume (RR_V)

Goal: Provide 100% RR_V by implementing Green Infrastructure techniques and Stormwater Management Practices

$RR_V = 43,560 \times [P \times Rv \times A] / 12$

Where:
RR_V = Runoff Reduction Volume (cf)
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv = 0.05 + 0.009 x I , where I is % impervious area — R_V: 0.29
A = Watershed (ac)
100% RR_V: 0,492 cf

* Minimum Rv of of 0.2 not applicable to RR_V calculations (use actual calculated Rv).

For projects that cannot meet 100% RR_V: Implement Specific Reduction Factor (S), which provides an absoulte minimum acceptable RR_V.

Drainage Area with Hydrologic Soil Group A:	0.000 acres	Corresponding S: 0.55
Drainage Area with Hydrologic Soil Group B:	0.334 acres	Corresponding S: 0.40
Drainage Area with Hydrologic Soil Group C:	0.000 acres	Corresponding S: 0.30
Drainage Area with Hydrologic Soil Group D:	0.000 acres	Corresponding S: 0.20
Total Area:	0.334 acres	
Total Area Matches		Calculated S: 0.4

Minimum RR_V (acre-feet) = [(P)(Rv*)(Ai)]/12 — Calculated Ai: 0.0356
Calculated Rv*: 0.95
Where: Calculated Minimum RR_V: 0,172 cf
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv* = 0.05 + 0.009 x I , where I is % impervious area (100%)
Ai = (S)(Aic)
Aic = Total area of new impervious cover

Project: Mirbeau
Description: Stormwater Quality Design
By/Date: ESR 3/26/2024 Reviewed/Date: MAB

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Bioretention Area C

4) Stormwater Management Practice Design

Design Bioretention Area Filter Bed

$A_{FR} = WQ_V \times D_F / [K \times (H_F + D_F) \times (T_F)]$

Where:

WQ_V = Remaining Water Quality Volume (cf) = 0,369 cf (equals 75% WQ_V, which only accounts for the min. WQ_V required in the plunge pool and does not take into account the other pre-treatment)
D_F = Filter Bed Depth (ft) = 2.5 ft
K = Coefficient Permeability (0.5 ft/day per § 6.4.4 of NYSSDM) = 0.5 ft/day
H_F = Average Height Water Above Filter Bed (ft) = 0.25 ft (maximum ponding depth of 6")
T_F = Filter Bed Drain Time (2 days per § 6.4.4 of NYSSDM) = 2 days
A_{FR} = Required Surface Area of Filter Bed (sf) = 335 sf
A_F = Surface Area of Filter Bed Provided (sf) = 530 sf acceptable

Confirm Storage Capability of Practice

- Confirm system can hold 75% of water quality volume

75% Water Quality Volume (cf) = 369 cf (excludes pre-treatment volume)

- Volume Within Filter Bed:

$V_F = A_F \times D_F \times N$
N = Porosity (0.20 per Table 10.5.5 of the NYSSDM)= 0.2

V_F = Storage volume within filter bed (cf) = 265 cf

- Volume Above Filter Bed:

$V_{F\text{-}TEMP} = 2 \times A_F \times H_F$

$V_{F\text{-}TEMP}$ = Storage volume above filter bed (cf) = 265 cf

- Volume Within Drainage Layer:

$V_{DL} = A_{DL} \times D_{DL} \times N$
N = Porosity (0.40 standard porosity for stone reservoirs, see also NYSSDM § 6.3.4)= 0.4
A_{DL} = Underdrain Length * Underdain Stone Jacket Width Underdrain Stone Jacket Width: 3 ft Underdrain Length: (see Required Underdrain Length section)
D_{DL} = Drainage Layer Depth (stone jacket depth): 10 inches

V_{DL} = Storage volume within drainage layer (cf) = 0 cf

- Total storage within practice only, not including pre-treatment (cf) = 530 cf > 369 cf (75% WQv Storage Volume) acceptable

- Total storage within practice and pre-treatment (cf) = 1,016 cf > 492 cf (100% WQv Storage Volume) acceptable

Required Underdrain Length

- Length of underdrain should be based on 10% of the provided filter bed area per § 8.5 of NYSSDM.

Length of underdrain required = 18 lf
Length of underdrain provided = 0 lf (No underdrains provided in HSG B soils)

Verify Ponding Depth Over Filter Bed

- No more than 6" of ponding is required per section 6.4.4 of NYSSDM.

Top of filter bed elevation = 140 ft
Outlet control structure lowest elevation = 140.5 ft
Ponding depth.= 6 in acceptable

Project:	Mirbeau			
Description:	Stormwater Quality Design			
By/Date:	ESR	3/26/2024	Reviewed/Date:	MAB

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845-440-6926

Bioretention Area C

5) Tabulate Provided Runoff Reduction Volume (RR_V)

Bioretention Area

Storage provided within practice:	**1,502 cf**	(includes pre-treatment)
For Bioretention in Hydrologic Soil Group A & B:	100% reduction	(without underdrains, although underdrains with closed valve may be provided for future maintenance purposes)
For Bioretention in Hydrologic Soil Group C & D:	40% reduction	(with underdrains)
HSG at the Bioretention Area:	B	RR_V Reduction Factor: 100%
RR_V Provided by implementing bioretention:	1,502 cf	

WQ_V REDUCED (RRV):	**0,492 cf**	
Calculated 100% RR_V:	0,492 cf	
Minimum RR_V:	172 cf	
Is 100% RR_V met:	Yes	acceptable
If 100% RR_V is not met, is Minimum RR_V met:	N/A	
WQ_V TREATED:	**1010 cf**	

6) Channel Protection Volume (CPv) Design

Determine Stream Channel Protection Volume (CPv)

1-Year Storm Runoff Volume	0,610 cf	From HydroCAD Model

Compute the CPv Release Rate

The Stream Channel Protection Volume (Cpv) shall be released over 24 hours

Q(CPv)=CPv/(24 hrs X 3,600 sec/hr)	0.01	cfs

Determine Required Orifice Size To Release CPv over 24-hours

CPv orifice elevation	140.5	feet
CPv orifice diameter	-	inches
1-Year Storm Release Rate	0.00 cfs	From HydroCAD Model - Entire 1-Year Storm is Infiltrated
Is CPv 100% controlled?	yes - acceptable	

7) See HydroCAD model for Overbank Flood Control (Q_p) and Extreme Flood Control (Q_f) computations

Project:	Mirbeau			
Description:	Stormwater Quality Design			
By/Date:	ESR	3/26/2024	Reviewed/Date:	MAB

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Bioretention Area D

1) Determine Water Quality Volume

Water quality volume to be treated will be calculated using the 90% rule from Section 4.2 of the New York State Storm Water Design Manual (January 2015), hereinafter referred to as NYSSDM.

$WQ_V = 43{,}560 \times [P \times Rv \times A] / 12$

Where:
WQ_V = Water quality volume (cf)
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv = 0.05 + 0.009 x I , where I is % impervious area
A = Watershed (ac)

Watershed	P (in)	Impervious Area (ac)	Impervious (Coverage %)	Rv	Total Area (ac)	WQv (cf)	Pre-Treatment Practice	Treatment Practice
14	1.40	0.05	12	0.16	0.40	326	Grass Filter Strip	Bioretention

2) Determine Required Pre-Treatment Volume

Determine Pre-Treatment Volume

Watershed	Required WQv (cf)	Provided Pre-Treatment Volume (cf)	Pre-Treatment Practice
14	326	327	Grass Filter Strip

327 cf > 326 cf (Remaining Required WQv Pre-Treatment Volume)
acceptable

2) Determine Minimum Runoff Reduction Volume (RR_V)

Goal: Provide 100% RR_V by implementing Green Infrastructure techniques and Stormwater Management Practices

$RR_V = 43{,}560 \times [P \times Rv \times A] / 12$

Where:
RR_V = Runoff Reduction Volume (cf)
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv = 0.05 + 0.009 x I , where I is % impervious area
A = Watershed (ac)

R_V: 0.16

100% RR_V: 0,326 cf

* Minimum Rv of of 0.2 not applicable to RR_V calculations (use actual calculated Rv).

Project:	Mirbeau			
Description:	Stormwater Quality Design			
By/Date:	ESR	3/26/2024	Reviewed/Date:	MAB

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845-440-6926

Bioretention Area D

For projects that cannot meet 100% RR_V: Implement Specific Reduction Factor (S), which provides an absoulte minimum acceptable RR_V.

Drainage Area with Hydrologic Soil Group A:	0.402 acres	Corresponding S:	0.55
Drainage Area with Hydrologic Soil Group B:	0.000 acres	Corresponding S:	0.40
Drainage Area with Hydrologic Soil Group C:	0.000 acres	Corresponding S:	0.30
Drainage Area with Hydrologic Soil Group D:	0.000 acres	Corresponding S:	0.20
Total Area:	0.402 acres		
Total Area Matches		Calculated S:	0.55

Minimum RR_V (acre-feet) = [(P)(Rv*)(Ai)]/12

Calculated Ai: 0.0270
Calculated Rv*: 0.95
Calculated Minimum RR_V: 0,130 cf

Where:
P = 90 % Rainfall Event Number (in), per Figure 4.1
Rv* = 0.05 + 0.009 x I , where I is % impervious area (100%)
Ai = (S)(Aic)
Aic = Total area of new impervious cover

4) Stormwater Management Practice Design

Design Bioretention Area Filter Bed

$A_{FR} = WQ_V \times D_F / [K \times (H_F + D_F) \times (T_F)]$

Where:

WQ_V = Remaining Water Quality Volume (cf) =	0,245 cf	(equals 75% WQ_V, which only accounts for the min. WQ_V required in the plunge pool and does not take into account the other pre-treatment)	
D_F = Filter Bed Depth (ft) =	2.5	ft	
K = Coefficient Permeability (0.5 ft/day per § 6.4.4 of NYSSDM) =	0.5	ft/day	
H_F = Average Height Water Above Filter Bed (ft) =	0.25	ft (maximum ponding depth of 6")	
T_F = Filter Bed Drain Time (2 days per § 6.4.4 of NYSSDM) =	2	days	
A_{FR} = Required Surface Area of Filter Bed (sf) =	222	sf	
A_F = Surface Area of Filter Bed Provided (sf) =	1,562	sf	acceptable

Project: Mirbeau
Description: Stormwater Quality Design
By/Date: ESR 3/26/2024 Reviewed/Date: MAB

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Bioretention Area D

Confirm Storage Capability of Practice

- Confirm system can hold 75% of water quality volume

75% Water Quality Volume (cf) = 245 cf (excludes pre-treatment volume)

- Volume Within Filter Bed:

$V_F = A_F \times D_F \times N$

N = Porosity (0.20 per Table 10.5.5 of the NYSSDM)= 0.2

V_F = Storage volume within filter bed (cf) = 781 cf

- Volume Above Filter Bed:

$V_{F\text{-}TEMP} = 2 \times A_F \times H_F$

$V_{F\text{-}TEMP}$ = Storage volume above filter bed (cf) = 781 cf

- Volume Within Drainage Layer:

$V_{DL} = A_{DL} \times D_{DL} \times N$

N = Porosity (0.40 standard porosity for stone reservoirs, see also NYSSDM § 6.3.4)= 0.4

A_{DL} = Underdrain Length * Underdain Stone Jacket Width Underdrain Stone Jacket Width: 3 ft Underdrain Length: (see Required Underdrain Length section)

D_{DL} = Drainage Layer Depth (stone jacket depth): 10 inches

V_{DL} = Storage volume within drainage layer (cf) = 0 cf

- Total storage within practice only, not including pre-treatment (cf) = 1,562 cf > 245 cf (75% WQv Storage Volume)
  acceptable

- Total storage within practice and pre-treatment (cf) = 1,889 cf > 326 cf (100% WQv Storage Volume)
  acceptable

Required Underdrain Length

- Length of underdrain should be based on 10% of the provided filter bed area per § 8.5 of NYSSDM.

Length of underdrain required = 52 lf
Length of underdrain provided = 0 lf (No underdrains provided in HSG B soils)

Verify Ponding Depth Over Filter Bed

- No more than 6" of ponding is required per section 6.4.4 of NYSSDM.

Top of filter bed elevation = 138 ft
Outlet control structure lowest elevation = 138.5 ft
Ponding depth.= 6 in acceptable

Project:	Mirbeau			
Description:	Stormwater Quality Design			
By/Date:	ESR	3/26/2024	Reviewed/Date:	MAB

Hudson Land Design, P.C.
174 Main Street
Beacon, NY 12508
845-440-6926

Bioretention Area D

5) Tabulate Provided Runoff Reduction Volume (RR_V)

Bioretention Area

Storage provided within practice:	**2,216 cf**	(includes pre-treatment)
For Bioretention in Hydrologic Soil Group A & B:	100% reduction	(without underdrains, although underdrains with closed valve may be provided for future maintenance purposes)
For Bioretention in Hydrologic Soil Group C & D:	40% reduction	(with underdrains)
HSG at the Bioretention Area:	A	RR_V Reduction Factor: 100%
RR_V Provided by implementing bioretention:	2,216 cf	
WQ_V REDUCED (RRV):	**0,326 cf**	
Calculated 100% RR_V:	0,326 cf	
Minimum RR_V:	130 cf	
Is 100% RR_V met:	Yes	acceptable
If 100% RR_V is not met, is Minimum RR_V met:	N/A	
WQ_V TREATED:	**1890 cf**	

6) Channel Protection Volume (CPv) Design

Determine Stream Channel Protection Volume (CPv)

1-Year Storm Runoff Volume	0,000 cf	From HydroCAD Model

Compute the CPv Release Rate

The Stream Channel Protection Volume (Cpv) shall be released over 24 hours

Q(CPv)=CPv/(24 hrs X 3,600 sec/hr)	0.00	cfs

Determine Required Orifice Size To Release CPv over 24-hours

CPv orifice elevation	140.5	feet
CPv orifice diameter	-	inches
1-Year Storm Release Rate	0.00 cfs	From HydroCAD Model - Entire 1-Year Storm is Infiltrated
Is CPv 100% controlled?	yes - acceptable	

7) See HydroCAD model for Overbank Flood Control (Qp) and Extreme Flood Control (Qf) computations

Hydro International

First Defense®

Advanced Hydrodynamic Separator

Product Summary

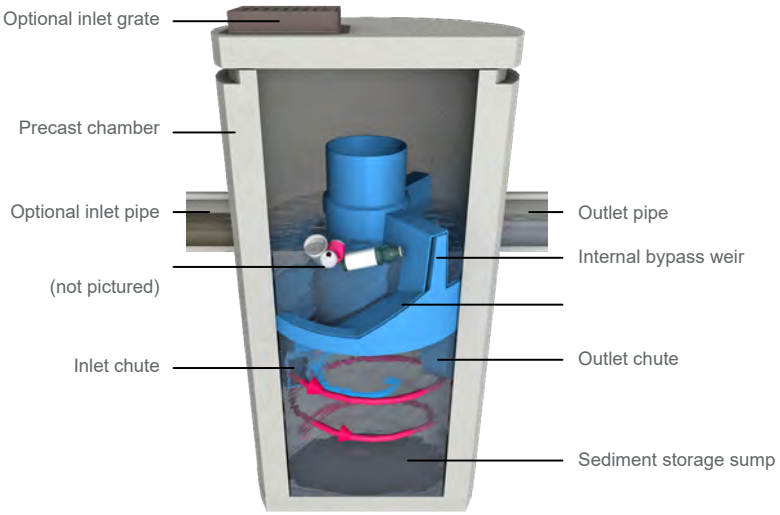
A Simple Solution for the Trickiest Sites

First Defense is a versatile stormwater separator with some of the highest

site space and reduce project costs by using the smallest possible footprint. It works with single or multiple inlet pipes and inlet grates. An internal bypass

pollutants and preventing washouts.

Features



Contaminated stormwater runoff enters the inlet chute from a surface grate and/or inlet pipe. The inlet chute introduces flow into the chamber tangentially to create a low energy vortex flow regime (magenta arrow) that directs sediment into the sump while oils, floating trash and debris rise to the surface.

Treated stormwater exits through a submerged outlet chute located opposite to the direction of the rotating flow (blue arrow). Enhanced vortex separation is provided by forcing the rotating flow within the vessel to follow the longest path possible rather than directly from inlet to outlet.

Higher flows bypass the treatment chamber to prevent turbulence and washout of captured pollutants. An internal bypass conveys infrequent peak flows directly to the outlet eliminating the need for, and expense of, external bypass control structures. A floatables draw off slot functions to convey floatables into the treatment chamber prior to bypass.

Applications

- Areas requiring a minimum of 50% TSS removal
- Stormwater treatment at the point of entry into the drainage line
- slope and depth of cover
- Highways, parking lots, industrial areas and urban developments
- Pre-treatment to ponds, storage systems, green infrastructure

Benefits

Highest Flow Through the Smallest Footprint

- **Smaller Footprint, Lower Costs**
  First Defense provides space-saving, easy-to-install surface water treatment in standard size chambers/manholes.
- **Adapt to Site Limitations**
  V
  slip First Defense into a tight spot. It also works well with large pipes, multiple inlet pipes and inlet grates.
- **Reduce Installation Time & Costs**
  Every First Defense unit is delivered to site pre-assembled and ready for install.
- **Online System Configuration**
  First Defense eliminates the need for separate structures with its integrated internal bypass.
- **Designed with Maintenance in Mind**
  Easy vactor hose access through the center shaft of the system makes for quick sump cleanout, saving time and reducing long-term operational cost.

Sizing & Specifications

First Defense units are available in **six diameters** sizes. The dimensions below are common across all model numbers.

Diameter	Peak Online Flow Rate	Maximum Pipe Diameter[1]	Typical Sediment Storage Capacity[2]	Minimum Distance from Outlet Invert to Top of Rim[3]	Standard Distance from Outlet Invert to Sump Floor
(ft / m)	(cfs / L/s)	(in / mm)	(yd^3 / m^3)	(ft / m)	(ft / m)
3 / 0.9	15 / 424	18 / 450	0.4 / 0.3	2.0 - 2.5 / 0.61 - 0.76	3.71 / 1.13
4 / 1.2	18 / 510	24 / 600	0.7 / 0.5	2.0 - 3.0 / 0.61 - 0.91	4.97 / 1.5
5 / 1.5	20 / 566	24 / 600	1.1 / .84	2.0 - 3.7 / 0.61 - 1.13	5.83 / 1.5
6 / 1.8	32 / 906	30 / 750	1.6 / 1.2	2.0 - 4.1 / 0.61 - 1.25	5.97 / 1.8
8 / 2.4	50 / 1415	48 / 1200	2.8 / 2.1	2.4 - 5.4 / 0.73 -1.65	7.40 / 2.2
10 / 3.0	50 / 1415	48 / 1200	4.4 / 3.3	2.4 - 6.8 / 0.73 - 2.07	10.25 / 3.12

two versions that conform to the water quality regulations.[4]

First Defense High Capacity Model Number	Typical TSS Treatment Flow Rates	
	NJDEP [4]	110µm
	(cfs / L/s)	(cfs / L/s)
FDHC-3	0.84 / 23.7	1.06 / 30.0
FDHC-4	1.50 / 42.4	1.88 / 53.2
FDHC-5	2.35 / 66.2	2.94 / 83.2
FDHC-6	3.38 / 95.7	4.23 / 119.8
FDHC-8	6.00 / 169.9	7.52 / 212.9
FDHC-10	9.38 / 265.6	11.75 / 332.7

First Defense Optimum Model Number	NJDEP Treatment Flow Rates[4]
	(cfs / L/s)
FDO-3	1.02 / 28.9
FDO-4	1.81 / 51.3
FDO-5	2.83 / 80.0
FDO-6	4.07 / 115.2
FDO-8	7.23 / 204.7
FDO-10	11.33 / 320.6

[1]Contact Hydro International when larger pipe sizes are required.
[2]Contact Hydro International when custom sediment storage capacity is required.
[3]These are guidlines only contact Hydro for detailed design.
[4]NJDEP NJCAT V, based on one inlet pipe and no inlet grate.

Also available in a screened configuration for Full Trash Capture!

Free Online Design Tool

This free online sizing tool will recommend the best separator, model entered by the user.

Upon completion, users have the option to submit the design to Hydro International for a free review by our engineering team.

Go to hydro-int.com/sizing to access the tool.

Hydro International

Hydro International, 94 Hutchins Drive, Portland, ME 04102
Tel: (207) 756-6200
Email: stormwaterinquiry@hydro-int.com
Web: www

FD_SS_B_2203

Download Drawings:
→ hydro-int.com/fddrawings

Operation & Maintenance Manual:
→ hydro-int.com/fd-om

CULTEC RECHARGER® 902HD STORMWATER CHAMBER

The Recharger® 902HD is a 48" (1219 mm) tall, high capacity chamber. Typically when using this model, fewer chambers are required resulting in less labor and a smaller installation area. The Recharger® 902HD has the side portal internal manifold feature. HVLV® FC-48 Feed Connectors are inserted into the side portals to create the internal manifold.

Recharger 902HD Chamber

Recharger 902HD End Cap

Recharger 902HD Chamber	
Size (L x W x H)	4.25' x 78" x 48"
	1.30 m x 1981 mm x 1219 mm
Installed Length	3.67'
	1.12 m
Length Adjustment per Row - with two end caps installed	1.03'
	0.31 m
Length Adjustment per Row - when not using end caps	0.58'
	0.18 m
Chamber Storage	17.31 ft^3/ft
	1.61 m^3/m
	63.47 ft^3/unit
	1.80 m^3/unit
Min. Installed Storage	27.06 ft^3/ft
	2.53 m^3/m
	99.28 ft^3/unit
	2.81 m^3/unit
Min. Area Required	26.58 ft^2
	2.47 m^2
Chamber Weight	83.0 lbs
	37.65 kg
Shipping	15 chambers/skid
	1,370 lbs/skid
	14 skids/48' flatbed
Min. Center-to-Center Spacing	7.25'
	2.21 m
Max. Allowable Cover	8.3'
	2.53 m
Max. Allowable O.D. in Side Portal	10" HDPE, 12" PVC
	250 mm HDPE, 300 mm PVC
Compatible Feed Connector	HVLV FC-48 Feed Connector

Calculations are based on installed chamber length.
All above values are nominal.
Includes 12" (305 mm) stone above crown of chamber and typical stone surround at 7.25' (2.21 m) center-to-center spacing and stone foundation depth as listed in table.
Stone void calculated at 40%.

	Stone Foundation Depth		
	9"	12"	18"
	229 mm	305 mm	457 mm
Chamber and Stone Storage Per Chamber	99.28 ft^3	101.94 ft^3	107.26 ft^3
	2.81 m^3	2.89 m^3	3.04 m^3
Min. Effective Depth	5.75'	6.00'	6.5'
	1.75 m	1.83 m	1.98 m
Stone Required Per Chamber	3.32 yd^3	3.56 yd^3	4.05 yd^3
	2.54 m^3	2.72 m^3	3.06 m^3

Recharger 902HD End Cap	
Size (L x W x H)	9.7" x 78" x 48.5"
	246 mm x 1982 mm x 1231 mm
Installed Length	6.2"
	157 mm
End Cap Storage	5.34 ft^3/ft
	0.50 m^3/m
	2.76 ft^3/unit
	0.08 m^3/unit
Min. Installed Storage	19.88 ft^3/ft
	1.85 m^3/m
	10.28 ft^3/unit
	0.29 m^3/unit
End Cap Weight	52.0 lbs
	23.59 kg
Shipping	7 end caps/skid
	638 lbs/skid
	14 skids/48' flatbed
Max. Inlet Opening in End Cap	30" HDPE, 36" PVC
	750 mm HDPE, 900 mm PVC

Calculations are based on installed chamber length.
All above values are nominal.
Min. installed storage includes 9" (229 mm) stone base, 12" (305 mm) stone above crown of chamber and typical stone surround at 7.25' (2.21 m) center-to-center spacing.

For more information, contact CULTEC at (203) 775-4416 or visit www.cultec.com.

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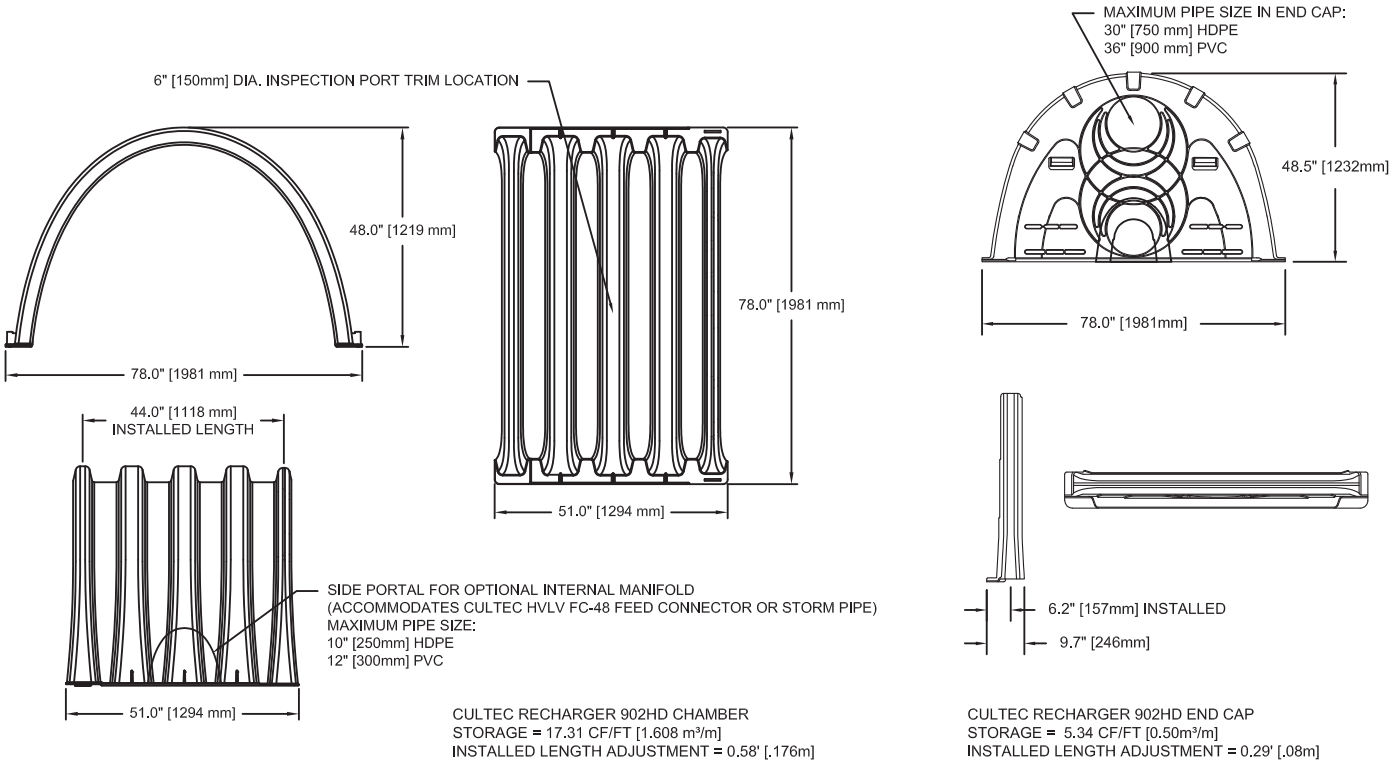
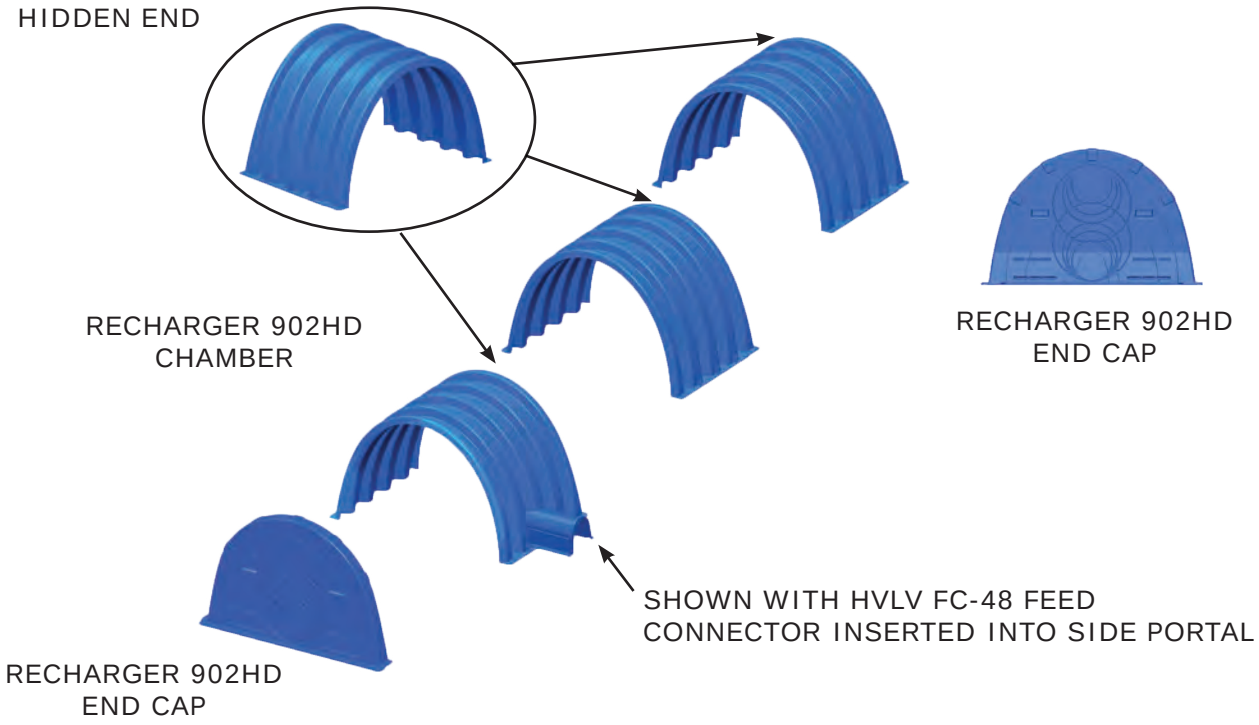
Three View Drawing



CULTEC RECHARGER 902HD CHAMBER
STORAGE = 17.31 CF/FT [1.608 m³/m]
INSTALLED LENGTH ADJUSTMENT = 0.58' [.176m]

CULTEC RECHARGER 902HD END CAP
STORAGE = 5.34 CF/FT [0.50m³/m]
INSTALLED LENGTH ADJUSTMENT = 0.29' [.08m]

Typical Interlock Installation



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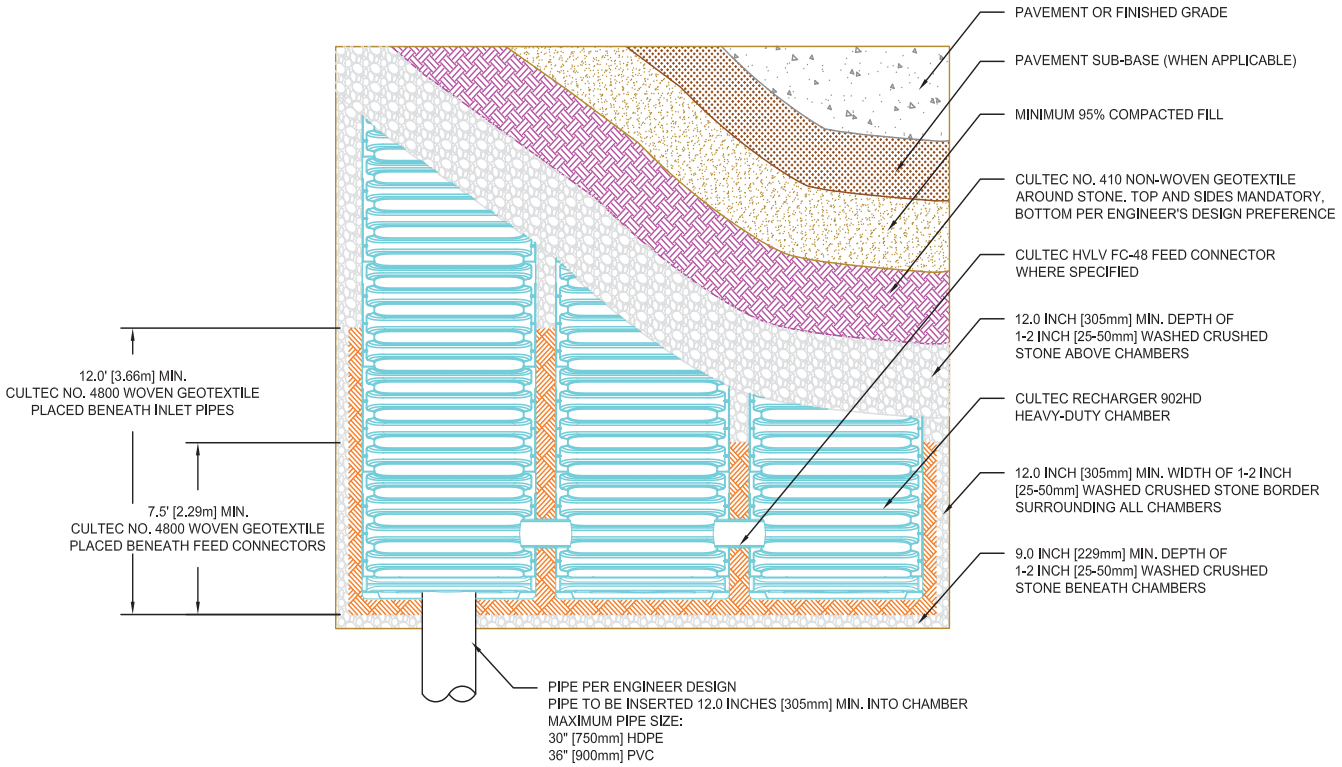
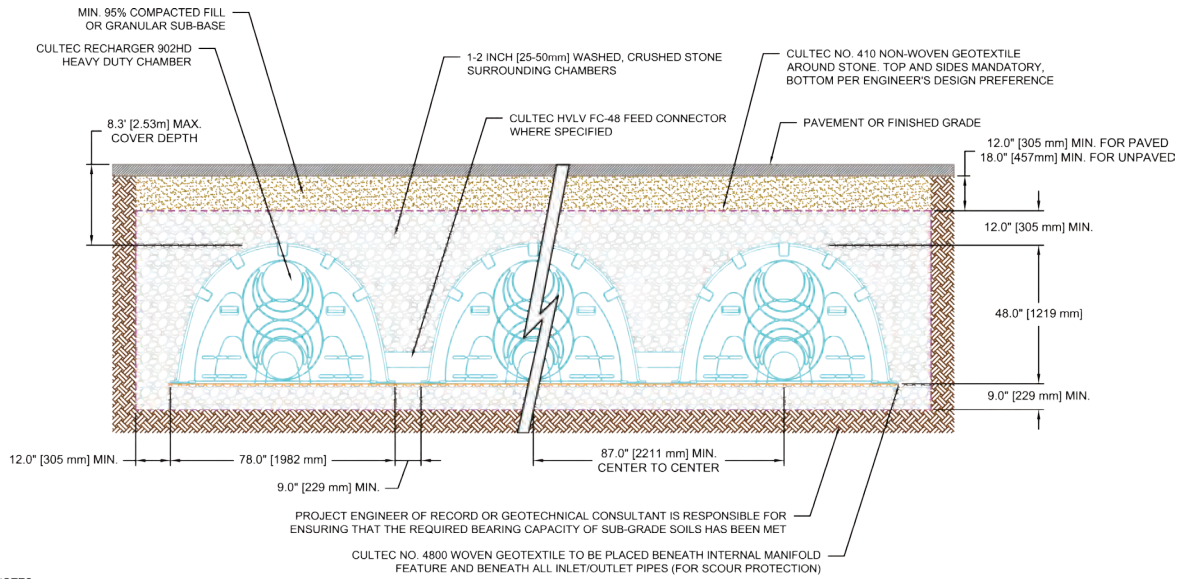
Plan View Drawing



Typical Cross Section for Traffic Application



NOTES:

1. THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS." THE LOAD CONFIGURATION SHALL INCLUDE:
   - 1.a. INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER
   - 1.b. MAXIMUM PERMANENT (50-YEAR) COVER LOAD
   - 1.c. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD
2. THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F3430-20 "STANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS"
3. THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
   - 3.a. THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F3430
   - 3.b. THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75
   - 3.c. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95

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Recharger® 902HD Bare Chamber Storage Volumes

Elevation		Incremental Storage Volume				Cumulative Storage	
in.	mm	ft³/ft	m³/m	ft³	m³	ft³	m³
48	1219	0.020	0.002	0.073	0.002	63.470	1.797
47	1194	0.050	0.005	0.183	0.005	63.397	1.795
46	1168	0.070	0.007	0.257	0.007	63.213	1.790
45	1143	0.120	0.011	0.440	0.012	62.957	1.783
44	1118	0.160	0.015	0.587	0.017	62.517	1.770
43	1092	0.200	0.019	0.733	0.021	61.930	1.754
42	1067	0.220	0.020	0.807	0.023	61.197	1.733
41	1041	0.240	0.022	0.880	0.025	60.390	1.710
40	1016	0.270	0.025	0.990	0.028	59.510	1.685
39	991	0.270	0.025	0.990	0.028	58.520	1.657
38	965	0.290	0.027	1.063	0.030	57.530	1.629
37	940	0.300	0.028	1.100	0.031	56.467	1.599
36	914	0.310	0.029	1.137	0.032	55.367	1.568
35	889	0.330	0.031	1.210	0.034	54.230	1.536
34	864	0.340	0.032	1.247	0.035	53.020	1.502
33	838	0.350	0.033	1.283	0.036	51.773	1.466
32	813	0.350	0.033	1.283	0.036	50.490	1.430
31	787	0.360	0.033	1.320	0.037	49.207	1.394
30	762	0.370	0.034	1.357	0.038	47.887	1.356
29	737	0.380	0.035	1.393	0.039	46.530	1.318
28	711	0.390	0.036	1.430	0.040	45.137	1.278
27	686	0.390	0.036	1.430	0.040	43.707	1.238
26	660	0.400	0.037	1.467	0.042	42.277	1.197
25	635	0.400	0.037	1.467	0.042	40.810	1.156
24	610	0.410	0.038	1.503	0.043	39.343	1.114
23	584	0.410	0.038	1.503	0.043	37.840	1.072
22	559	0.410	0.038	1.503	0.043	36.337	1.029
21	533	0.420	0.039	1.540	0.044	34.833	0.986
20	508	0.420	0.039	1.540	0.044	33.293	0.943
19	483	0.420	0.039	1.540	0.044	31.753	0.899
18	457	0.430	0.040	1.577	0.045	30.213	0.856
17	432	0.430	0.040	1.577	0.045	28.637	0.811
16	406	0.440	0.041	1.613	0.046	27.060	0.766
15	381	0.440	0.041	1.613	0.046	25.447	0.721
14	356	0.450	0.042	1.650	0.047	23.833	0.675
13	330	0.450	0.042	1.650	0.047	22.183	0.628
12	305	0.450	0.042	1.650	0.047	20.533	0.582
11	279	0.450	0.042	1.650	0.047	18.883	0.535
10	254	0.460	0.043	1.687	0.048	17.233	0.488
9	229	0.460	0.043	1.687	0.048	15.547	0.440
8	203	0.460	0.043	1.687	0.048	13.860	0.393
7	178	0.460	0.043	1.687	0.048	12.173	0.345
6	152	0.470	0.044	1.723	0.049	10.487	0.297
5	127	0.470	0.044	1.723	0.049	8.763	0.248
4	102	0.480	0.045	1.760	0.050	7.040	0.199
3	76	0.480	0.045	1.760	0.050	5.280	0.150
2	51	0.480	0.045	1.760	0.050	3.520	0.100
1	25	0.480	0.045	1.760	0.050	1.760	0.050
Total		17.310	1.608	63.470	1.797	63.470	1.797

Calculations are based on installed chamber length of 3.67' (1.12 m).

Recharger® 902HD Bare End Cap Storage Volumes

Elevation		Incremental Storage Volume				Cumulative Storage	
in.	mm	ft³/ft	m³/m	ft³	m³	ft³	m³
48	1219	0.039	0.004	0.020	0.0006	2.758	0.0781
47	1194	0.058	0.005	0.030	0.0008	2.738	0.0775
46	1168	0.058	0.005	0.030	0.0008	2.780	0.0767
45	1143	0.077	0.007	0.040	0.0011	2.678	0.0758
44	1118	0.097	0.009	0.050	0.0014	2.638	0.0747
43	1092	0.077	0.007	0.040	0.0011	2.588	0.0733
42	1067	0.097	0.009	0.050	0.0014	2.548	0.0722
41	1041	0.097	0.009	0.050	0.0014	2.498	0.0707
40	1016	0.097	0.009	0.050	0.0014	2.448	0.0693
39	991	0.097	0.009	0.050	0.0014	2.398	0.0679
38	965	0.097	0.009	0.050	0.0014	2.348	0.0665
37	940	0.116	0.011	0.060	0.0017	2.299	0.0651
36	914	0.097	0.009	0.050	0.0014	2.239	0.0634
35	889	0.097	0.009	0.050	0.0014	2.189	0.0620
34	864	0.116	0.011	0.060	0.0017	2.139	0.0606
33	838	0.097	0.009	0.050	0.0014	2.079	0.0589
32	813	0.097	0.009	0.050	0.0014	2.029	0.0574
31	787	0.116	0.011	0.060	0.0017	1.979	0.0560
30	762	0.097	0.009	0.050	0.0014	1.919	0.0543
29	737	0.135	0.013	0.070	0.0020	1.869	0.0529
28	711	0.097	0.009	0.050	0.0014	1.799	0.0509
27	686	0.116	0.011	0.060	0.0017	1.749	0.0495
26	660	0.116	0.011	0.060	0.0017	1.689	0.0478
25	635	0.097	0.009	0.050	0.0014	1.629	0.0461
24	609	0.116	0.011	0.060	0.0017	1.579	0.0447
23	584	0.116	0.011	0.060	0.0017	1.519	0.0430
22	559	0.135	0.013	0.070	0.0020	1.459	0.0413
21	533	0.116	0.011	0.060	0.0017	1.389	0.0393
20	508	0.116	0.011	0.060	0.0017	1.329	0.0376
19	483	0.116	0.011	0.060	0.0017	1.269	0.0359
18	457	0.116	0.011	0.060	0.0017	1.209	0.0342
17	432	0.116	0.011	0.060	0.0017	1.149	0.0325
16	406	0.135	0.013	0.070	0.0020	1.089	0.0308
15	381	0.116	0.011	0.060	0.0017	1.019	0.0289
14	356	0.116	0.011	0.060	0.0017	0.959	0.0272
13	330	0.116	0.011	0.060	0.0017	0.899	0.0255
12	305	0.135	0.013	0.070	0.0020	0.839	0.0238
11	279	0.116	0.011	0.060	0.0017	0.770	0.0218
10	254	0.135	0.013	0.070	0.0020	0.710	0.0201
9	229	0.135	0.013	0.070	0.0020	0.640	0.0181
8	203	0.135	0.013	0.070	0.0020	0.570	0.0161
7	178	0.135	0.013	0.070	0.0020	0.500	0.0141
6	152	0.116	0.011	0.060	0.0017	0.430	0.0122
5	127	0.135	0.013	0.070	0.0020	0.370	0.0105
4	102	0.135	0.013	0.070	0.0020	0.300	0.0085
3	76	0.155	0.014	0.080	0.0023	0.230	0.0065
2	51	0.135	0.013	0.070	0.0020	0.150	0.0042
1	25	0.155	0.014	0.080	0.0023	0.080	0.0023
Total		5.338	0.496	2.758	0.0781	2.758	0.0781

Calculations are based on installed chamber length of 6.2" (157 mm).

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CULTEC Recharger® 902HD Specifications

GENERAL

CULTEC Recharger® 902HD chambers are designed for underground stormwater management. The chambers may be used for retention, recharging, detention or controlling the flow of on-site stormwater runoff.

CHAMBER PARAMETERS

1. The chambers shall be manufactured in the U.S.A. or Canada by CULTEC, Inc. of Brookfield, CT (cultec.com, 203-775-4416).
2. The chambers shall be designed and tested in accordance with ASTM F2787 "Standard Practice for Structural Design of Thermoplastic Corrugated Wall Stormwater Collection Chambers". The load configuration shall include:
    a. Instantaneous AASHTO Design Truck live load at minimum cover
    b. Maximum permanent (50-year) cover load
    c. 1-week parked AASHTO design truck load
3. The chambers shall meet the requirements of ASTM F3430-20 "Standard Specification for Cellular Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers".
4. The installed chamber system shall provide resistance to the loads and load factors as defined in the AASHTO LRFD Bridge Design Specifications Section 12.12, when installed according to CULTEC's recommended installation instructions. The structural design of the chambers shall include the following:
    a. The Creep Modulus shall be 50-year as specified in ASTM F3430
    b. The minimum safety factor for live loads shall be 1.75
    c. The minimum safety factor for dead loads shall be 1.95
5. The chamber shall be structural foam injection molded of blue virgin high molecular weight impact-modified polypropylene.
6. The chamber shall be arched in shape.
7. The chamber shall be open-bottomed.
8. The chamber shall be joined using an interlocking overlapping rib method. Connections must be fully shouldered overlapping ribs, having no separate couplings.
9. The nominal chamber dimensions of the CULTEC Recharger® 902HD shall be 48 inches (1219 mm) tall, 78 inches (1981 mm) wide and 4.25 feet (1.30 m) long. The installed length of a joined Recharger 902HD shall be 3.67 feet (1.12 m).
10. Multiple chambers may be connected to form different length rows. Each row shall begin and end with a separately formed CULTEC Recharger® 902HD End Cap. Maximum inlet opening on the end cap is 30 inches (750 mm) HDPE or 36 inches (900 mm) PVC.
11. The chamber shall have two side portals to accept CULTEC HVLV™ FC-48 Feed Connectors to create an internal manifold. Maximum allowable pipe size in the side portal is 10 inches (250 mm) HDPE and 12 inches (300 mm) PVC.
12. The nominal chamber dimensions of the CULTEC HVLV™ FC-48 Feed Connector shall be 12 inches (305 mm) tall, 16 inches (406 mm) wide and 49 inches (1245 mm) long.
13. The nominal storage volume of the Recharger 902HD chamber shall be 17.31 ft^3 / ft (1.61 m^3 / m) - without stone. The nominal storage volume of a joined Recharger 902HD shall be 63.47 ft^3 / unit (1.80 m^3 / unit) - without stone.
14. The nominal storage volume of the HVLV™ FC-48 Feed Connector shall be 0.913 ft^3 / ft (0.085 m^3 / m) - without stone.
15. The Recharger 902HD chamber shall have 5 corrugations.
16. The chamber shall be capable of accepting a 6 inch (150 mm) inspection port opening at the top center of each chamber, centered on the corrugation crest.
17. The units may be trimmed to custom lengths by cutting back to any corrugation.
18. The chamber shall be manufactured in a facility employing CULTEC's Quality Control and Assurance Procedures.
19. Maximum allowable cover over the top of the chamber shall be 8.3 feet (2.53 m).

END CAP PARAMETERS

1. The CULTEC Recharger® 902HD End Cap (referred to as 'end cap') shall be manufactured in the U.S.A. by CULTEC, Inc. of Brookfield, CT (cultec.com, 203-775-4416).
2. The end cap shall be twin-sheet thermoformed of virgin high molecular weight polyethylene.
3. The end cap shall be joined at the beginning and end of each row of chambers using an interlocking overlapping rib method. Connections must be fully shouldered overlapping ribs, having no separate couplings.
4. The nominal dimensions of the end cap shall be 48.5 inches (1231 mm) tall, 78 inches (1982 mm) wide and 9.7 inches (246 mm) long. When joined with a Recharger 902HD Chamber, the installed length of the end cap shall be 6.2 inches (157 mm).
5. The nominal storage volume of the end cap shall be 5.34 ft^3 / ft (0.50 m^3 / m) - without stone. The nominal storage volume of an interlocked end cap shall be 2.76 ft^3 / unit (0.08 m^3 / unit) - without stone.
6. Maximum inlet opening on the end cap is 30 inches (750 mm) HDPE or 36 inches (900 mm) PVC.
7. The end cap shall provide resistance to the loads and load factors as defined in the AASHTO LRFD Bridge Design Specifications Section 12.12.

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APPENDIX G

PRE-CONSTRUCTION SITE ASSESSMENT CHECKLIST

I. **PRE-CONSTRUCTION MEETING DOCUMENTS**

Project Name _____

Permit No. _____ **Date of Authorization** _____

Name of Operator _____

Prime Contractor _____

a. **Preamble to Site Assessment and Inspections**

The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified inspector[1] conduct an assessment of the site prior to the commencement of construction[2] and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements. A preconstruction meeting should be held to review all of the SWPPP requirements with construction personnel.

When construction starts, site inspections shall be conducted by the qualified inspector at least every 7 calendar days. The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified inspector perform a final site inspection. The qualified inspector shall certify that the site has undergone final stabilization[3] using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 Refer to "Qualified Inspector" inspection requirements in the current SPDES General Permit for Stormwater Discharges from Construction Activity for complete list of inspection requirements.
2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.
3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

b. Pre-construction Site Assessment Checklist
(NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

Yes No NA

[ ] [ ] [ ] Has a Notice of Intent been filed with the NYS Department of Conservation?
[ ] [ ] [ ] Is the SWPPP on-site? Where?_____
[ ] [ ] [ ] Is the Plan current? What is the latest revision date?_____
[ ] [ ] [ ] Is a copy of the NOI (with brief description) onsite? Where?_____
[ ] [ ] [ ] Have all contractors involved with stormwater related activities signed a contractor's certification?

2. Resource Protection

Yes No NA

[ ] [ ] [ ] Are construction limits clearly flagged or fenced?
[ ] [ ] [ ] Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.
[ ] [ ] [ ] Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

Yes No NA

[ ] [ ] [ ] Clean stormwater runoff has been diverted from areas to be disturbed.
[ ] [ ] [ ] Bodies of water located either on site or in the vicinity of the site have been identified and protected.
[ ] [ ] [ ] Appropriate practices to protect on-site or downstream surface water are installed.
[ ] [ ] [ ] Are clearing and grading operations divided into areas <5 acres?

4. Stabilized Construction Access

Yes No NA

[ ] [ ] [ ] A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
[ ] [ ] [ ] Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
[ ] [ ] [ ] Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Sediment Controls

Yes No NA

[ ] [ ] [ ] Silt fence material and installation comply with the standard drawing and specifications.
[ ] [ ] [ ] Silt fences are installed at appropriate spacing intervals
[ ] [ ] [ ] Sediment/detention basin was installed as first land disturbing activity.
[ ] [ ] [ ] Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA

[ ] [ ] [ ] The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
[ ] [ ] [ ] The plan is contained in the SWPPP on page _____
[ ] [ ] [ ] Appropriate materials to control spills are onsite. Where? _____

APPENDIX H

STORMWATER CONSTRUCTION INSPECTION CHECKLISTS

Bioretention Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

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

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

Comments:

Actions to be Taken:

Open Channel System Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Pre-construction meeting		
Runoff diverted		
Facility location staked out		
2. Excavation		
Size and location		
Side slope stable		
Soil permeability		
Groundwater / bedrock		
Lateral slopes completely level		
Longitudinal slopes within design range		
Excavation does not compact subsoils		
3. Check dams		
Dimensions		
Spacing		
Materials		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
4. Structural Components		
Underdrain installed correctly		
Inflow installed correctly		
Pretreatment devices installed		
5. Vegetation		
Complies with planting specifications		
Topsoil adequate in composition and placement		
Adequate erosion control measures in place		
6. Final inspection		
Dimensions		
Check dams		
Proper outlet		
Effective stand of vegetation and stabilization		
Contributing watershed stabilized before flow is routed to the factility		

Comments:

Actions to be Taken:

Infiltration Basin Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Runoff diverted		
Soil permeability tested		
Groundwater / bedrock depth		
2. Excavation		
Size and location		
Side slopes stable		
Excavation does not compact subsoils		
3. Embankment		
Barrel		
Anti-seep collar or Filter diaphragm		
Fill material		

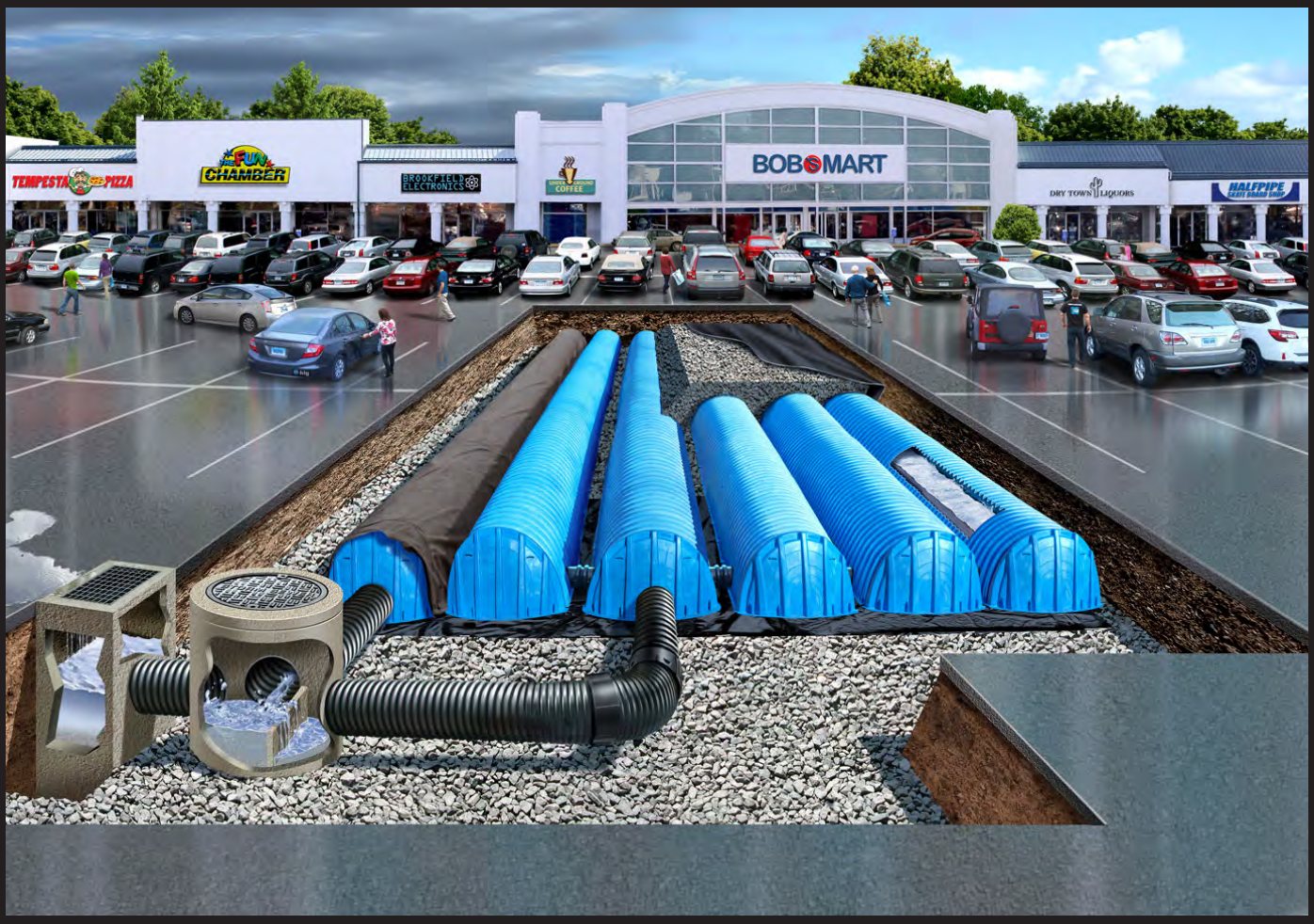
CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
4. Final Excavation		
Drainage area stabilized		
Sediment removed from facility		
Basin floor tilled		
Facility stabilized		
5. Final Inspection		
Pretreatment facility in place		
Inlets / outlets		
Contributing watershed stabilized before flow is routed to the factility		

Comments:

Actions to be Taken:

CULTEC SEPARATOR™ ROW

WATER QUALITY SYSTEM



OPERATION & MAINTENANCE GUIDE

FOR CULTEC STORMWATER MANAGEMENT SYSTEMS

GLOBE VERIFIED VÉRIFIÉ

STORMWATER MANAGEMENT SOLUTIONS

CULTEC®

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For technical support, please call (203)775-4416 ext. 203 or e-mail tech@cultec.com.

Visit www.cultec.com/downloads.html for Product Downloads and CAD details.

Doc ID: CLT043 02-22
Feb 2022

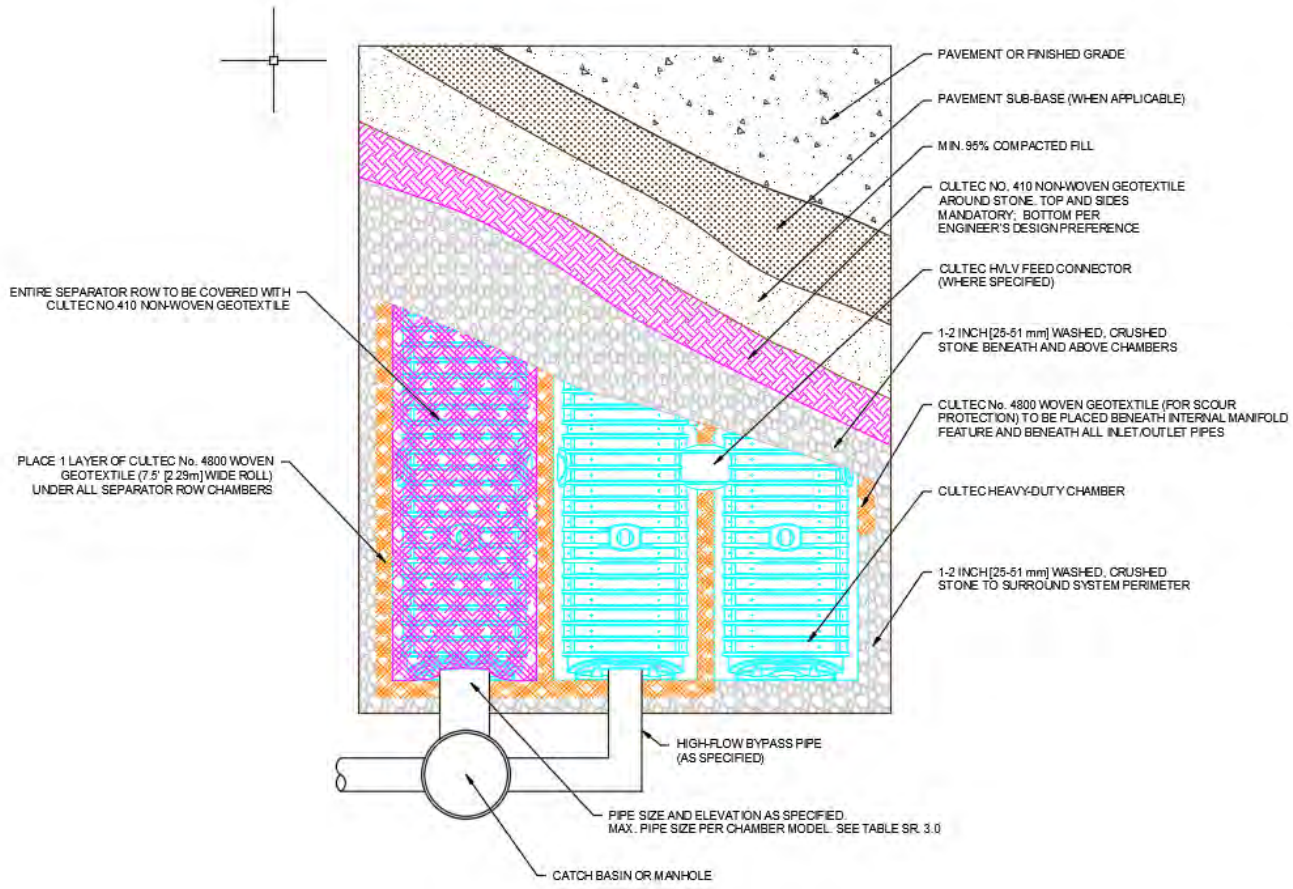
Introduction

CULTEC's Separator™ Row is an inexpensive means of removing Total Suspended Solids from the CULTEC chamber system, as well as providing easier access for inspection and maintenance. The Separator Row is designed to capture the First Flush of a rain event and is typically included as part of the "Treatment Train" for water quality.

The CULTEC Separator Row is a row of CULTEC Contactor or Recharger Chambers that are surrounded on all sides by filter fabric. One layer of CULTEC No. 4800™ Woven Geotextile are placed between the clean foundation stone and the chamber feet. The chambers are then completely wrapped with CULTEC No. 410™ non-woven geotextile. This configuration is designed to trap any sediment and/or debris that may pass through the upstream water-quality structures and into the chamber system.

A manhole is typically located adjacent to the separator row for ease of inspection and maintenance. This manhole is placed upstream of the system and can include a high-flow bypass pipe to pass peak-flows onto adjacent rows of chambers. The upstream manhole is designed with a sump to trap heavier sediment and allow for proper cleaning of the Separator Row. A JetVac process with a high pressure water nozzle is introduced down the Separator Row via the access manhole to clean all sediment and debris from the Separator Row. Captured pollutants are flushed into the sumped access manhole for vacuuming, and the process is repeated until the Separator Row is completely free of sediment and debris.

The Separator Row performance has been tested and verified to the protocols and procedures as defined by Environmental Technology Verification (ETV) Canada to achieve 80% TSS removal.



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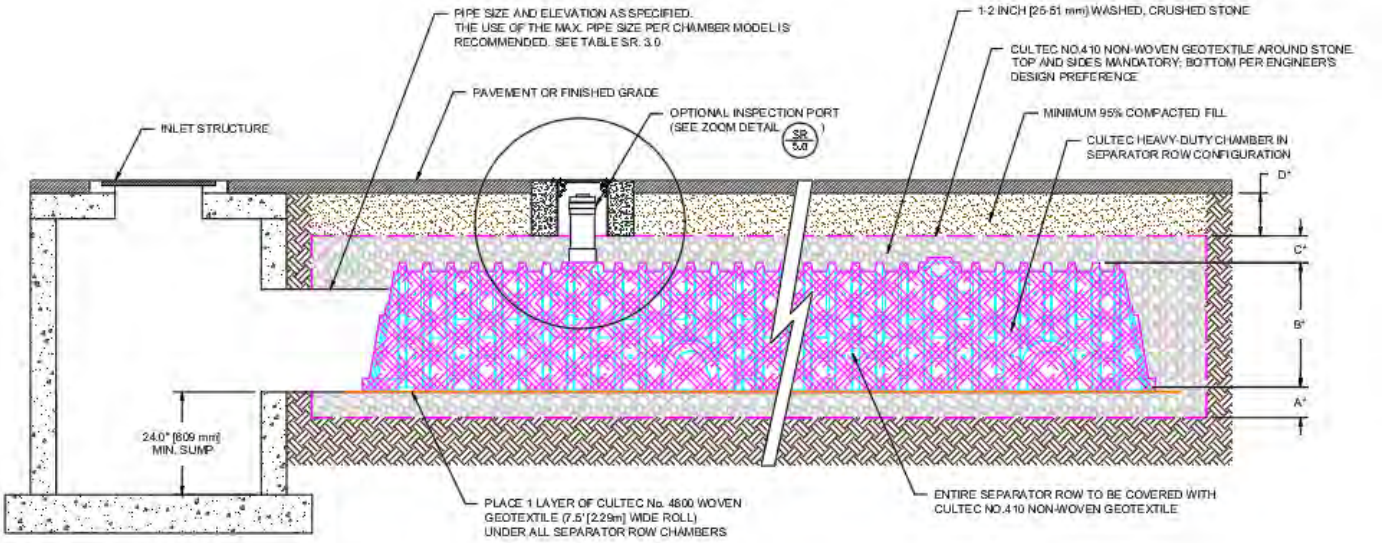
Design

There is no single design to achieve a high level of water quality. The CULTEC Separator Row should be designed as part of an overall best management practices water quality system. Pre-treatment devices such as sump catch basins, inlet baffles and proprietary oil-grit separators and filter systems can all be incorporated upstream of the CULTEC Separator Row. Sumped access/diversion manholes should be installed directly upstream of the Separator Row.

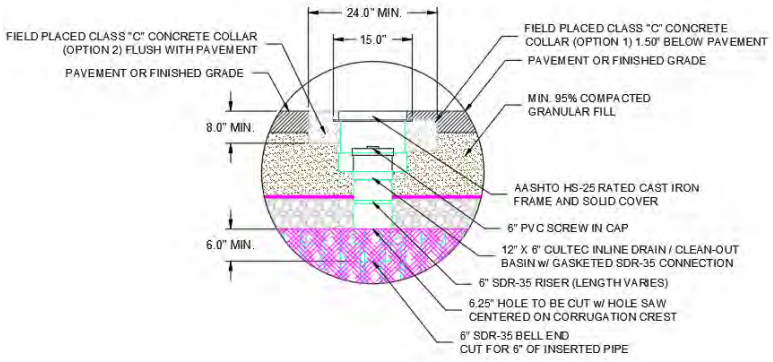
The following is a list of recommended design practices to ensure proper maintenance for the life of the system:

- Install sumped access/diversion manholes, including a minimum 24" (600 mm) sump, directly upstream of the Separator Row.
- Include a high-flow bypass pipe to divert peak flows that exceed the capacity of the Separator Row to adjacent rows.
- Connect the access manhole to the Separator Row with the largest diameter pipe allowable based on the CULTEC chamber model used.
- Maintain a minimum distance between the access manhole and the Separator Row to promote efficient maintenance.
- Include at least one inspection port per Separator Row for periodic inspection.

Note: Typical JetVac maintenance reels have a maximum of 400 feet (121.9 m) of available hose. Consider this when designing the length of the CULTEC Separator Rows.



*SEE SR 3.0 - CROSS SECTION TABLE REFERENCE



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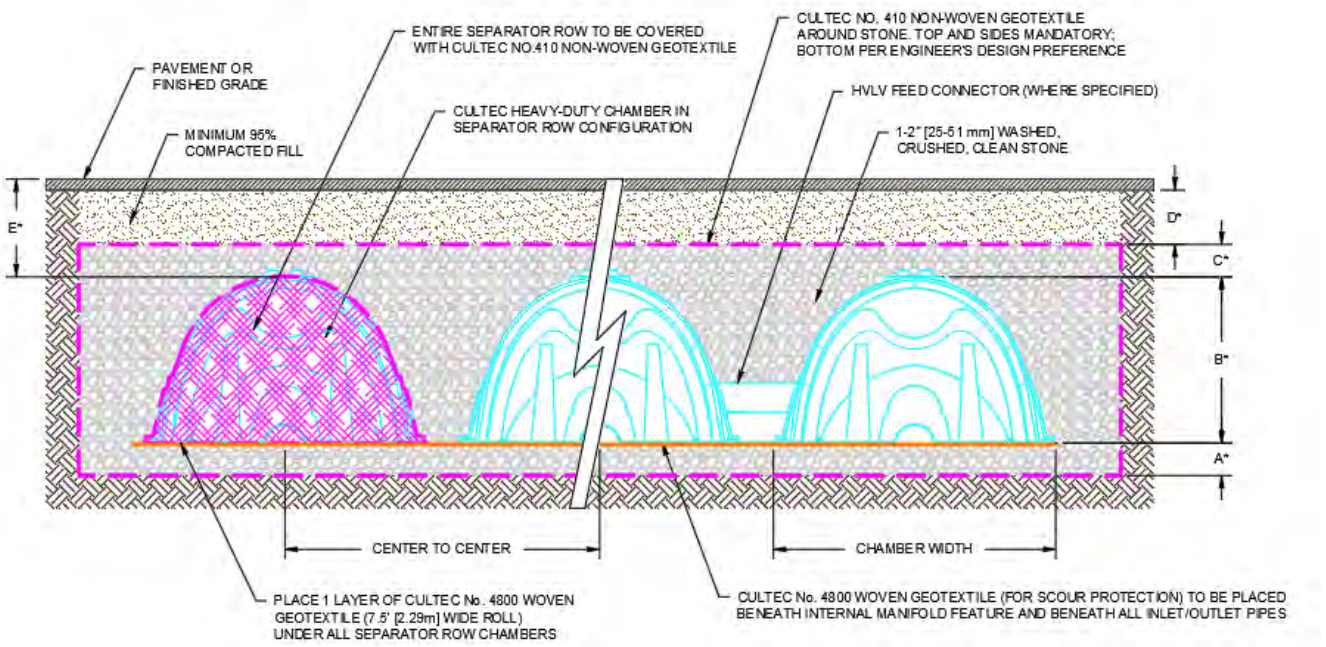

*SEE SR 3.0 - CROSS SECTION TABLE REFERENCE

Table SR 3.0

	Description	Contactor 100HD	Recharger 150XLHD	Recharger 280HD	Recharger 330XLHD	Recharger 360HD	Recharger 902HD
A	Min. depth of stone base	6″ 152 mm	6″ 152 mm	6″ 152 mm	6″ 152 mm	6″ 152 mm	9″ 229 m
B	Chamber height	12.5″ 318 mm	18.5″ 470 mm	26.5″ 673 mm	30.5″ 775 mm	36″ 914 mm	48″ 1219 mm
C	Min. depth of stone required above units for traffic applications	6″ 152 mm	6″ 152 mm	6″ 152 mm	6″ 152 mm	6″ 152 mm	12″ 305 mm
D	Min. depth required of 95% compacted fill for paved traffic application	8″ 203 mm	8″ 203 mm	8″ 203 mm	10″ 254 mm	12″ 305 mm	12″ 305 mm
E	Max. depth of cover allowed above crown of chamber	12′ 3.65 m	12′ 3.65 m	12′ 3.65 m	12′ 3.65 m	12′ 3.65 m	8.5′ 2.59 m
	Max. allowable pipe size into chamber end wall/end cap	10″ 250 mm	12″ 300 mm	18″ 450 mm	24″ 600 mm	24″ 600 mm	24″ 600 mm

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Inspection and Maintenance

CULTEC recommends inspection of the Separator Row to be performed every six months for the first year of service. Future inspection frequency can be adjusted based upon previous inspection observations. However annual inspections are recommended. Inspection of the Separator Row can be achieved via an inspection port riser installed during construction. This inspection port riser will connect the top of the Separator Row chambers to finished grade with a removable lid. Alternatively the Separator Row may be inspected via the manhole(s) located at the end(s) of the Separator Row. However this method of inspection requires confined space entry. If entry into the manhole is required, all local and OSHA rules for confined space entries must be strictly followed.

To inspect:

- Remove the inspection port lid from the floor box frame.
- Remove the riser pipe cap.
- With a flashlight and stadia rod, measure the depth of sediment.
- Record results in a maintenance log.
- When depth of sediment exceeds 3” (76 mm), use the JetVac procedure described below.

The JetVac process utilizes a high pressure water nozzle controlled from the surface. The high pressure nozzle is introduced down the Separator Row via the access manhole(s). The high pressure water cleans all sediment and debris from the Separator Row as the nozzle is retrieved. Captured pollutants are flushed into the sumped access manhole for vacuuming. This process is repeated until the Separator Row is completely free of sediment and debris. A small diameter culvert cleaning nozzle is recommended for this procedure.

High pressure water nozzle

Cleaning Separator Row and pipes with high pressure water nozzle

SEPARATOR ROW: Separator Row prior to cleaning

ADJACENT ROW: When the Separator Row is working properly, the adjacent rows will not show signs of sediment.

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Inspection and Maintenance Record

Date	Mode of Access	Frequency	Depth of Sediment	Actions	Expenses	Inspector	Notes
Ex.	Inspection Port	Semi-annually	2″	Measure sediment depth with stadia rod. Visually inspect	$100	DPG	Depth of Sediment was measured via Northeast Inspection Port Adjacent to MH-1. Sediment depth was found to be 2″. No further action required at this time.
Ex.	Access Manhole	Annually					

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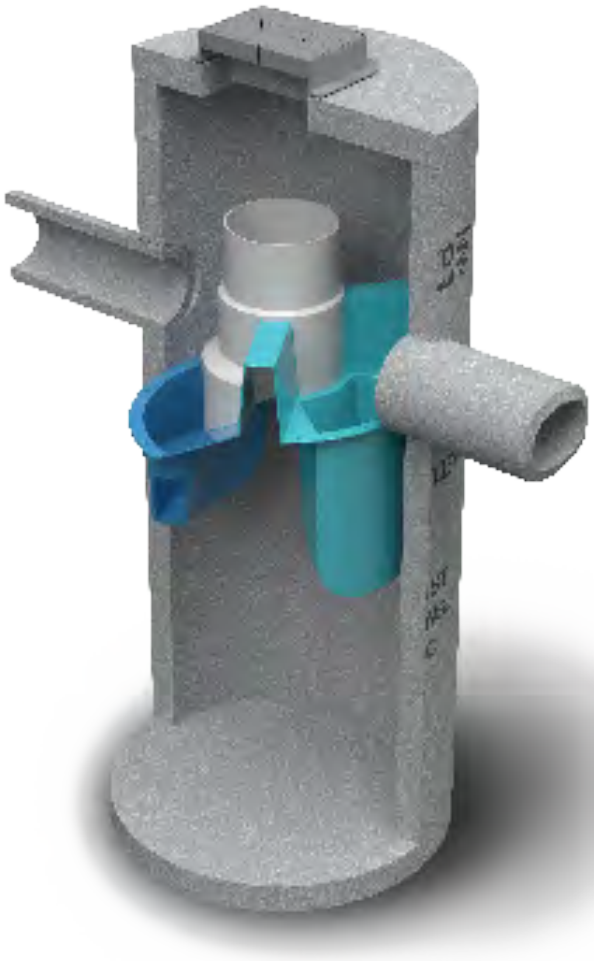

Operation and Maintenance Manual

First Defense® High Capacity and First Defense®Optimum

Vortex Separator for Stormwater Treatment

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- Inspection
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8 First Defense® Installation Log

9 First Defense® Inspection and Maintenance Log

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Tel: (207) 756-6200 Fax: (207) 756-6212 Web: www.hydro-int.com

I. First Defense® by Hydro International

Introduction

The First Defense® is an enhanced vortex separator that combines an and economical stormwater treatment chamber with an integral peak bypass. It removes total suspended solids (TSS), trash and hydrocarbons from stormwater without washing out previously captured pollutants. The First Defense® is available in several model to accommodate a wide range of pipe sizes,

The two product models described in this guide are the First Defense® High Capacity and the First Defense® Optimum; they are inspected and maintained identically.

Operation

The First Defense® operates on simple hydraulics. It is self-activating, has no moving parts, no external power requirement and is fabricated with durable non-corrosive components. No manual procedures are required to operate the unit and maintenance is limited to monitoring accumulations of stored pollutants and periodic clean-outs. The First Defense® has been designed to allow for easy and safe access for inspection, monitoring and clean-out procedures. Neither entry into the unit nor removal of the internal components is necessary for maintenance, thus safety concerns related to entry are avoided.

Pollutant Capture and Retention

The internal components of the First Defense® have been designed to optimize pollutant capture. Sediment is captured and retained in the base of the unit, while oil and are stored on the water surface in the inner volume (Fig.1).

The pollutant storage volumes are isolated from the built-in bypass chamber to prevent washout during storm events. The sump of the First Defense® retains a standing water level between storm events. This ensures a quiescent regime at the onset of a storm, preventing resuspension and washout of pollutants captured during previous events.

Accessories such as oil absorbent pads are available for enhanced oil removal and storage. Due to the separation of the oil and storage volume from the outlet, the potential for washout of stored pollutants between clean-outs is minimized.

Applications

- Stormwater treatment at the point of entry into the drainage line
- with limited slope and depth of cover
- tied into an existing storm drain line
-

Advantages

- Inlet options include surface grate or multiple inlet pipes
- manholes
- time within the treatment chamber, enhancing pollutant settling
- Delivered to site pre-assembled and ready for installation

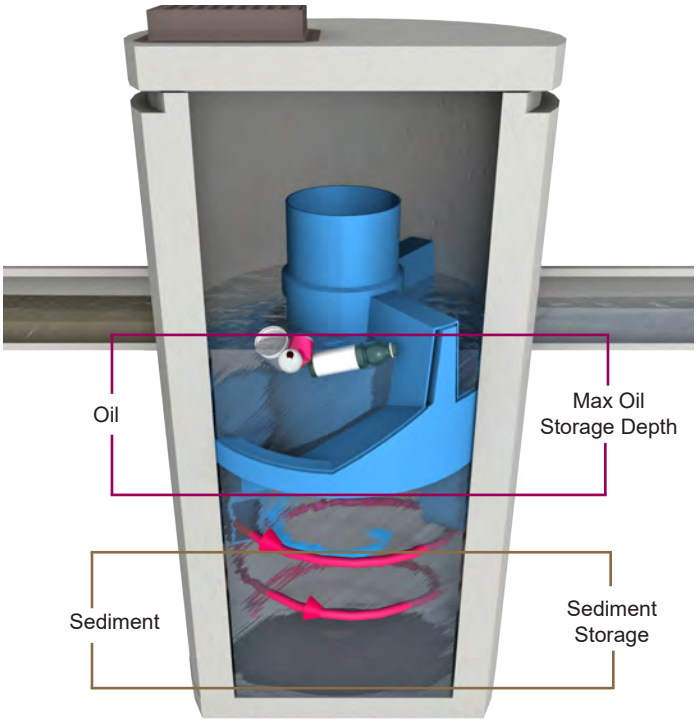


Fig.1 Pollutant storage volumes in the First Defense®.

The First Defense® inlet and internal bypass arrangements are available in several model sizes and The components

All First Defense® models include the internal components that are designed to remove and retain total suspended solids (TSS), ® model sizes (diameter) are shown in Table 1.

III. Maintenance

First Defense® Components

1. **Built-In Bypass**
2. **Inlet Pipe**
3. **Inlet Chute**
4. **Floatables Draw-off Port**
5. **Outlet Pipe**
6. **Floatables Storage**
7. **Sediment Storage**
8. **Inlet Grate or Cover**

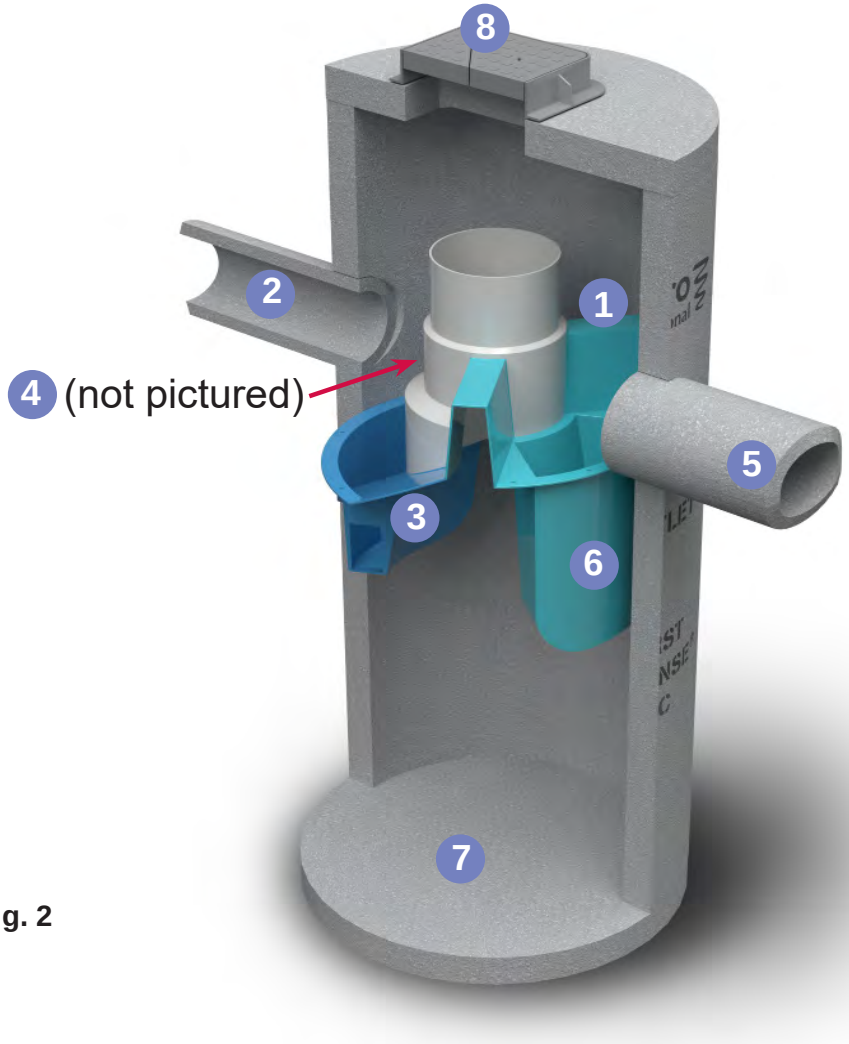


Fig. 2

Table 1

First Defense® Model Sizes
(ft / m) diameter
3 / 0.9
4 / 1.2
5 / 1.5
6 / 1.8
7 / 2.1
8 / 2.4
10 / 3.0

Overview

The First Defense® protects the environment by removing a wide range of pollutants from stormwater Periodic removal of these captured pollutants is essential to the continuous, long-term functioning of the First Defense®. The First Defense® will capture and retain sediment and oil until the sediment and oil storage volumes are full to capacity. When sediment and oil storage capacities are reached, the First Defense® will no longer be able to store removed sediment and oil.

The First Defense® allows for easy and safe inspection, monitoring and clean-out procedures. A commercially or municipally owned Access ports are located in the top of the manhole.

Maintenance events may include Inspection, Oil & Floatables Removal, and Sediment Removal. Maintenance events do not require entry into the First Defense®, nor do they require the internal components of the First Defense® to be removed. In the case of inspection and removal, a vactor truck is not required. However, a vactor truck is required if the maintenance event is to include oil removal and/or sediment removal.

Maintenance Equipment Considerations

The internal components of the First Defense® have a centrally located circular shaft through which the sediment storage sump can be accessed with a sump vac hose. The open diameter of this access shaft is 15 inches in diameter (Fig.3). Therefore, the nozzle .

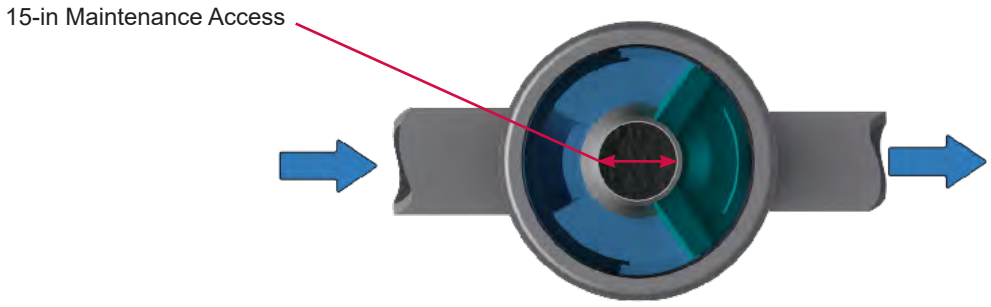


Fig.3 The central opening to the sump of the First Defense®is 15 inches in diameter.

Determining Your Maintenance Schedule

The frequency of clean out is determined in the after installation. During the year of operation, the unit should be inspected every six months to determine the rate of sediment and s accumulation. A simple probe such as a Sludge-Judge® can be used to determine the level of accumulated solids stored in the sump. This information can be recorded in the maintenance log (see page 9) to establish a routine maintenance schedule.

The vactor procedure, including both sediment and oil / removal, for First Defense® typically takes less than 30 minutes and removes a combined water/oil volume of about 765 gallons.

Inspection Procedures

1. Set up any necessary safety equipment around the access port or grate of the First Defense® as stipulated by local ordinances. Safety equipment should notify passing

2. Remove the grate or lid to the manhole.

3. Without entering the vessel, look down into the chamber to inspect the inside. Make note of any irregularities. Fig.4 shows the standing water level that should be observed.

4. Without entering the vessel, use the pole with the skimmer net

   and water surface.

5. Using a sediment probe such as a Sludge Judge®, measure the depth of sediment that has collected in the sump of the vessel.

6. On the Maintenance Log (see page 9), record the date, unit

   removed, and the depth of sediment measured. Also note any apparent irregularities such as damaged components or blockages.

7. Securely replace the grate or lid.

8. Take down safety equipment.

9. Notify Hydro International of any irregularities noted during inspection.

Floatables and Sediment Clean Out

Floatables clean out is typically done in conjunction with sediment removal. A commercially or municipally owned sump-

Floatables and loose debris can also be netted with a skimmer and pole. The access port located at the top of the manhole provides unobstructed access for a vactor hose to be lowered to the base of the sump.

Scheduling

- Floatables and sump clean out are typically conducted once a year during any season.

- Floatables and sump clean out should occur as soon as possible following a spill in the contributing drainage area.

Fig.4 Floatables are removed with a vactor hose

Recommended Equipment

-

- Crow bar or other tool to remove grate or lid

-

- Sediment probe (such as a Sludge Judge®)

- V

- First Defense® Maintenance Log

Floatables and Sediment Clean Out Procedures

1. Set up any necessary safety equipment around the access port or grate of the First Defense® as stipulated by local ordinances. Safety equipment should notify passing
2. Remove the grate or lid to the manhole.
3. Without entering the vessel, look down into the chamber to inspect the inside. Make note of any irregularities.
4. with the vactor hose or with the skimmer or net
5. Using a sediment probe such as a Sludge Judge®, measure the depth of sediment that has collected in the sump of the vessel and record it in the Maintenance Log (page 9).
6. to the base of the sump. Vactor out the sediment and gross
7. Retract the vactor hose from the vessel.
8. On the Maintenance Log provided by Hydro International,

   and gross debris removed, and the depth of sediment measured. Also note any apparent irregularities such as damaged components, blockages, or irregularly high or low water levels.
9. Securely replace the grate or lid.

Maintenance at a Glance

Inspection	
Oil and Floatables Removal	- Once per year, with sediment removal - Following a spill in the drainage area
Sediment Removal	- Once per year or as needed - Following a spill in the drainage area
NOTE: For most clean outs the entire volume of liquid does not need to be removed from the manhole. Only remove the	

First Defense® Installation Log

HYDRO INTERNATIONAL REFERENCE NUMBER:	
SITE NAME:	
SITE LOCATION:	
OWNER:	CONTRACTOR:
CONTACT NAME:	CONTACT NAME:
COMPANY NAME:	COMPANY NAME:
ADDRESS:	ADDRESS:
TELEPHONE:	TELEPHONE:
FAX:	FAX:

INSTALLATION DATE: / /

MODEL SIZE (CIRCLE ONE): [3-FT] [4-FT] [5-FT] [6-FT] [7-FT] [8-FT] [10-FT]

INLET (CIRCLE ALL THAT APPLY): GRATED INLET (CATCH BASIN) INLET PIPE (FLOW THROUGH)

Hydro International (Stormwater), 94 Hutchins Drive, Portland ME 04102
Tel: (207) 756-6200 Fax: (207) 756-6212 Web: www.hydro-int.com

First Defense® Inspection and Maintenance Log

Date	Initials	Depth of Floatables and Oils	Sediment Depth Measured	Volume of Sediment Removed	Site Activity and Comments

Hydro International (Stormwater), 94 Hutchins Drive, Portland ME 04102
Tel: (207) 756-6200 Fax: (207) 756-6212 Web: www.hydro-int.com

APPENDIX I

CONTRACTOR AND SUBCONTRACTOR CERTIFICATIONS

CERTIFICATION STATEMENT

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Contractor:

Name:_____

Signature:_____

Title:_____

Company Name:_____

Company Address:_____

_____

_____

_____

Company Phone Number:_____

Site Address:_____

_____

_____

_____

Specific SWPPP Responsibilities:

_____

_____

_____

_____

_____

Date of Certification: _____

Name and Title of Trained Contractor for SWPPP Implementation:_____

_____

CERTIFICATION STATEMENT

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Sub-Contractor:

Name:_____

Signature:_____

Title:_____

Company Name:_____

Company Address:_____

_____

_____

_____

Company Phone Number:_____

Site Address:_____

_____

_____

_____

Specific SWPPP Responsibilities:

_____

_____

_____

_____

_____

Date of Certification: _____

Name and Title of Trained Contractor for SWPPP Implementation:_____

_____

APPENDIX J

QUALIFIED PROFESSIONAL'S CERTIFICATION

QUALIFIED PROFESSIONAL'S CERTIFICATION

"I hereby certify that I meet the criteria set forth in the General Permit to conduct site inspections for this project and that the appropriate erosion and sediment controls described in the SWPPP and as described in the Pre-Construction Site Assessment Checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction."

Name (Print):_____

Title:_____

Date:_____

Company Name:_____

Company Address:_____

_____

_____

_____

Company Phone Number:_____

Company Email:_____

Signature:_____

APPENDIX K

OWNER/OPERATOR CERTIFICATION

CERTIFICATION STATEMENT

"I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I also certify under penalty of law that that this document and the corresponding documents were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, I am acknowledging that this SWPPP has been developed and will be implemented as the first element of construction and agree to comply with all the terms and conditions of the general permit for which the NOI is being submitted."

Name (Print):_____

Title:_____

Date:_____

Company Name:_____

Company Address:_____

_____

_____

_____

Company Phone Number:_____

Company Email:_____

Signature:_____

APPENDIX L

POST-DEVELOPMENT MAINTENANCE AND INSPECTION CHECKLIST

Bioretention Operation, Maintenance and Management Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

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

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

Comments:

Actions to be Taken:

Open Channel Operation, Maintenance, and Management Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

MAINTENANCE ITEM	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Debris Cleanout (Monthly)		
Contributing areas clean of debris		
2. Check Dams or Energy Dissipators (Annual, After Major Storms)		
No evidence of flow going around structures		
No evidence of erosion at downstream toe		
Soil permeability		
Groundwater / bedrock		
3. Vegetation (Monthly)		
Mowing done when needed		
Minimum mowing depth not exceeded		
No evidence of erosion		
Fertilized per specification		
4. Dewatering (Monthly)		
Dewaters between storms		

MAINTENANCE ITEM	SATISFACTORY/ UNSATISFACTORY	COMMENTS
5. Sediment deposition (Annual)		
Clean of sediment		
6. Outlet/Overflow Spillway (Annual)		
Good condition, no need for repairs		
No evidence of erosion		

Comments:

Actions to be Taken:

Infiltration Trench Operation, Maintenance, and Management Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

MAINTENANCE ITEM	SATISFACTORY / UNSATISFACTORY	COMMENTS
1. Debris Cleanout (Monthly)		
Trench surface clear of debris		
Inflow pipes clear of debris		
Overflow spillway clear of debris		
Inlet area clear of debris		
2. Sediment Traps or Forebays (Annual)		
Obviously trapping sediment		
Greater than 50% of storage volume remaining		
3. Dewatering (Monthly)		
Trench dewaters between storms		
4. Sediment Cleanout of Trench (Annual)		
No evidence of sedimentation in trench		
Sediment accumulation doesn't yet require cleanout		
5. Inlets (Annual)		

MAINTENANCE ITEM	SATISFACTORY / UNSATISFACTORY	COMMENTS
Good condition		
No evidence of erosion		
6. Outlet/Overflow Spillway (Annual)		
Good condition, no need for repair		
No evidence of erosion		
7. Aggregate Repairs (Annual)		
Surface of aggregate clean		
Top layer of stone does not need replacement		
Trench does not need rehabilitation		

Comments:

Actions to be Taken:

APPENDIX M

CONSTRUCTION INSPECTION REPORT

II. **CONSTRUCTION DURATION INSPECTIONS**

a. **Directions:**

Inspection Forms will be filled out during the entire construction phase of the project.

Required Elements:

1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;

2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;

3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;

4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);

5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and

6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

SITE PLAN/SKETCH

Inspector (print name)	**Date of Inspection**
Qualified Inspector (print name)	**Qualified Inspector Signature**

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

Maintaining Water Quality

Yes No NA

[ ] [ ] [ ] Is there an increase in turbidity causing a substantial visible contrast to natural conditions at the outfalls?
[ ] [ ] [ ] Is there residue from oil and floating substances, visible oil film, or globules or grease at the outfalls?
[ ] [ ] [ ] All disturbance is within the limits of the approved plans.
[ ] [ ] [ ] Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

Housekeeping

1. General Site Conditions

Yes No NA

[ ] [ ] [ ] Is construction site litter, debris and spoils appropriately managed?
[ ] [ ] [ ] Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
[ ] [ ] [ ] Is construction impacting the adjacent property?
[ ] [ ] [ ] Is dust adequately controlled?

2. Temporary Stream Crossing

Yes No NA

[ ] [ ] [ ] Maximum diameter pipes necessary to span creek without dredging are installed.
[ ] [ ] [ ] Installed non-woven geotextile fabric beneath approaches.
[ ] [ ] [ ] Is fill composed of aggregate (no earth or soil)?
[ ] [ ] [ ] Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

3. Stabilized Construction Access

Yes No NA

[ ] [ ] [ ] Stone is clean enough to effectively remove mud from vehicles.
[ ] [ ] [ ] Installed per standards and specifications?
[ ] [ ] [ ] Does all traffic use the stabilized entrance to enter and leave site?
[ ] [ ] [ ] Is adequate drainage provided to prevent ponding at entrance?

Runoff Control Practices

1. Excavation Dewatering

Yes No NA

[ ] [ ] [ ] Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
[ ] [ ] [ ] Clean water from upstream pool is being pumped to the downstream pool.
[ ] [ ] [ ] Sediment laden water from work area is being discharged to a silt-trapping device.
[ ] [ ] [ ] Constructed upstream berm with one-foot minimum freeboard.

Runoff Control Practices (continued)

2. Flow Spreader

Yes No NA

[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
[ ] [ ] [ ] Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales

Yes No NA

[ ] [ ] [ ] Installed per plan with minimum side slopes 2H:1V or flatter.
[ ] [ ] [ ] Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
[ ] [ ] [ ] Sediment-laden runoff directed to sediment trapping structure

4. Stone Check Dam

Yes No NA

[ ] [ ] [ ] Is channel stable? (flow is not eroding soil underneath or around the structure).
[ ] [ ] [ ] Check is in good condition (rocks in place and no permanent pools behind the structure).
[ ] [ ] [ ] Has accumulated sediment been removed?.

5. Rock Outlet Protection

Yes No NA

[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Installed concurrently with pipe installation.

Soil Stabilization

1. Topsoil and Spoil Stockpiles

Yes No NA

[ ] [ ] [ ] Stockpiles are stabilized with vegetation and/or mulch.
[ ] [ ] [ ] Sediment control is installed at the toe of the slope.

2. Revegetation

Yes No NA

[ ] [ ] [ ] Temporary seedings and mulch have been applied to idle areas.
[ ] [ ] [ ] 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control Practices

1. Silt Fence and Linear Barriers

Yes No NA

[ ] [ ] [ ] Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
[ ] [ ] [ ] Joints constructed by wrapping the two ends together for continuous support.
[ ] [ ] [ ] Fabric buried 6 inches minimum.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.
Sediment accumulation is ___% of design capacity.

Sediment Control Practices (continued)

2. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated; Filter Sock or Manufactured practices)

Yes No NA

[ ] [ ] [ ] Installed concrete blocks lengthwise so open ends face outward, not upward.
[ ] [ ] [ ] Placed wire screen between No. 3 crushed stone and concrete blocks.
[ ] [ ] [ ] Drainage area is 1acre or less.
[ ] [ ] [ ] Excavated area is 900 cubic feet.
[ ] [ ] [ ] Excavated side slopes should be 2:1.
[ ] [ ] [ ] 2" x 4" frame is constructed and structurally sound.
[ ] [ ] [ ] Posts 3-foot maximum spacing between posts.
[ ] [ ] [ ] Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.
[ ] [ ] [ ] Manufactured insert fabric is free of tears and punctures.
[ ] [ ] [ ] Filter Sock is not torn or flattened and fill material is contained within the mesh sock.

Sediment accumulation ___% of design capacity.

3. Temporary Sediment Trap

Yes No NA

[ ] [ ] [ ] Outlet structure is constructed per the approved plan or drawing.
[ ] [ ] [ ] Geotextile fabric has been placed beneath rock fill.
[ ] [ ] [ ] Sediment trap slopes and disturbed areas are stabilized.

Sediment accumulation is ___% of design capacity.

4. Temporary Sediment Basin

Yes No NA

[ ] [ ] [ ] Basin and outlet structure constructed per the approved plan.
[ ] [ ] [ ] Basin side slopes are stabilized with seed/mulch.
[ ] [ ] [ ] Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
[ ] [ ] [ ] Sediment basin dewatering pool is dewatering at appropriate rate.

Sediment accumulation is ___% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design. All practices shall be maintained in accordance with their respective standards.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

CONSTRUCTION DURATION INSPECTIONS

b. Modifications to the SWPPP (To be completed as described below)

The Operator shall amend the SWPPP whenever:

1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
2. The SWPPP proves to be ineffective in:
   a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
   b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and
3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.

Modification & Reason:

APPENDIX N

NOTICE OF TERMINATION

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505
(NOTE: Submit completed form to address above)

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity

Please indicate your permit identification number: NYR ___ ___ ___ ___ ___ ___

I. Owner or Operator Information

1. Owner/Operator Name: The Mirbeau Companies, LLC.

2. Street Address:

3. City/State/Zip:

4. Contact Person:	4a.Telephone:

4b. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name: Mirbeau Inn & Spa at Beacon

6. Street Address: 7 Craig House Lane

7. City/Zip:

8. County:

III. Reason for Termination

9a. □ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. ***Date final stabilization completed** (month/year): _____

9b. □ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ___ ___ ___ ___ ___ ___
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. □ Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? □ yes □ no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? □ yes □ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

_____

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? □ yes □ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

□ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

□ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

□ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

□ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? □ yes □ no

(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:

(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:	
Title/Position:	
Signature:	Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

IX. Owner or Operator Certification

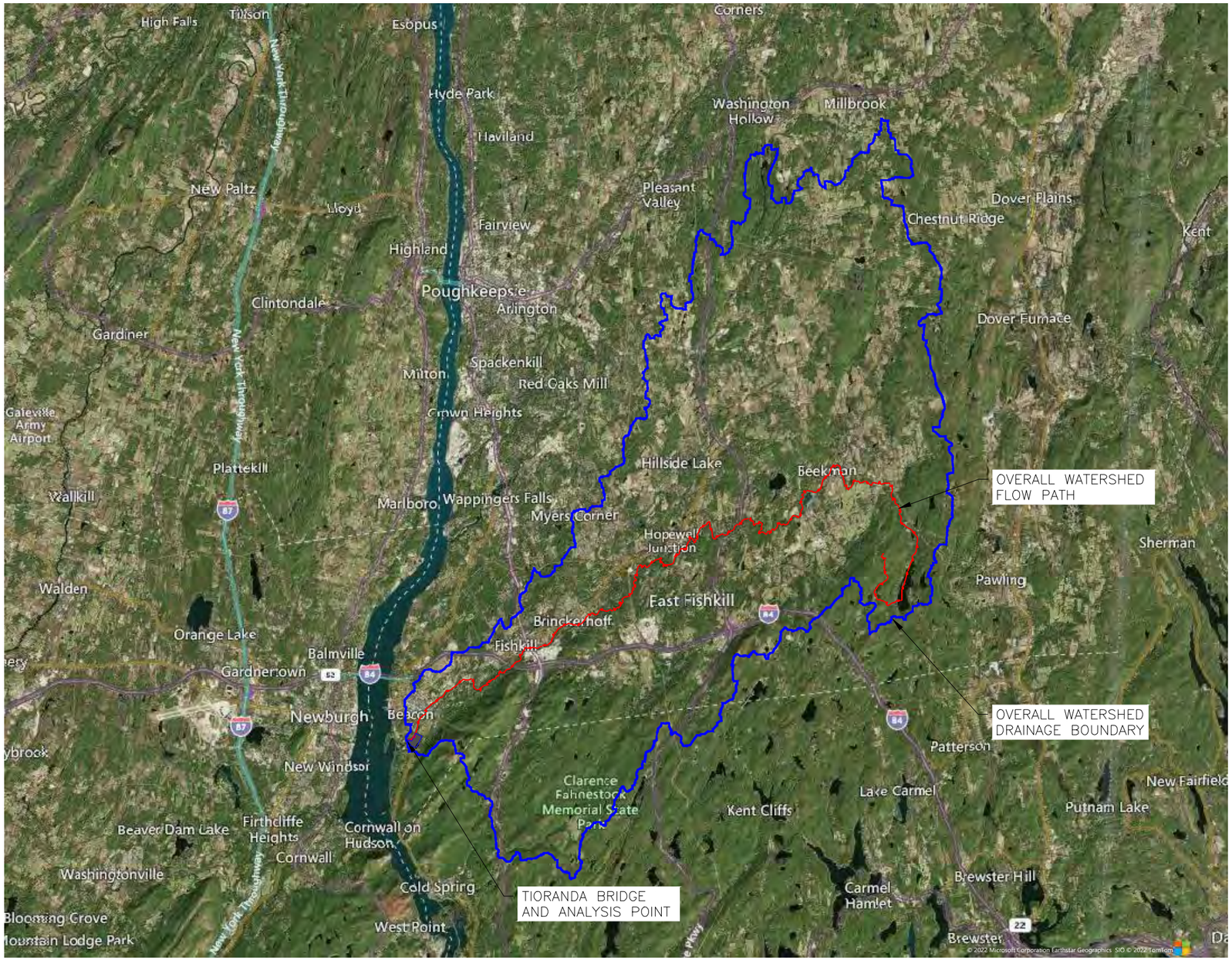
I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

(NYS DEC Notice of Termination - January 2015)

APPENDIX O

DRAINAGE MAPS & SOIL TEST MAPS



DRAWN BY: ESR	CHECKED BY: MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY
1	5/25/22	PER PLANNING BOARD COMMENTS	ESR

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

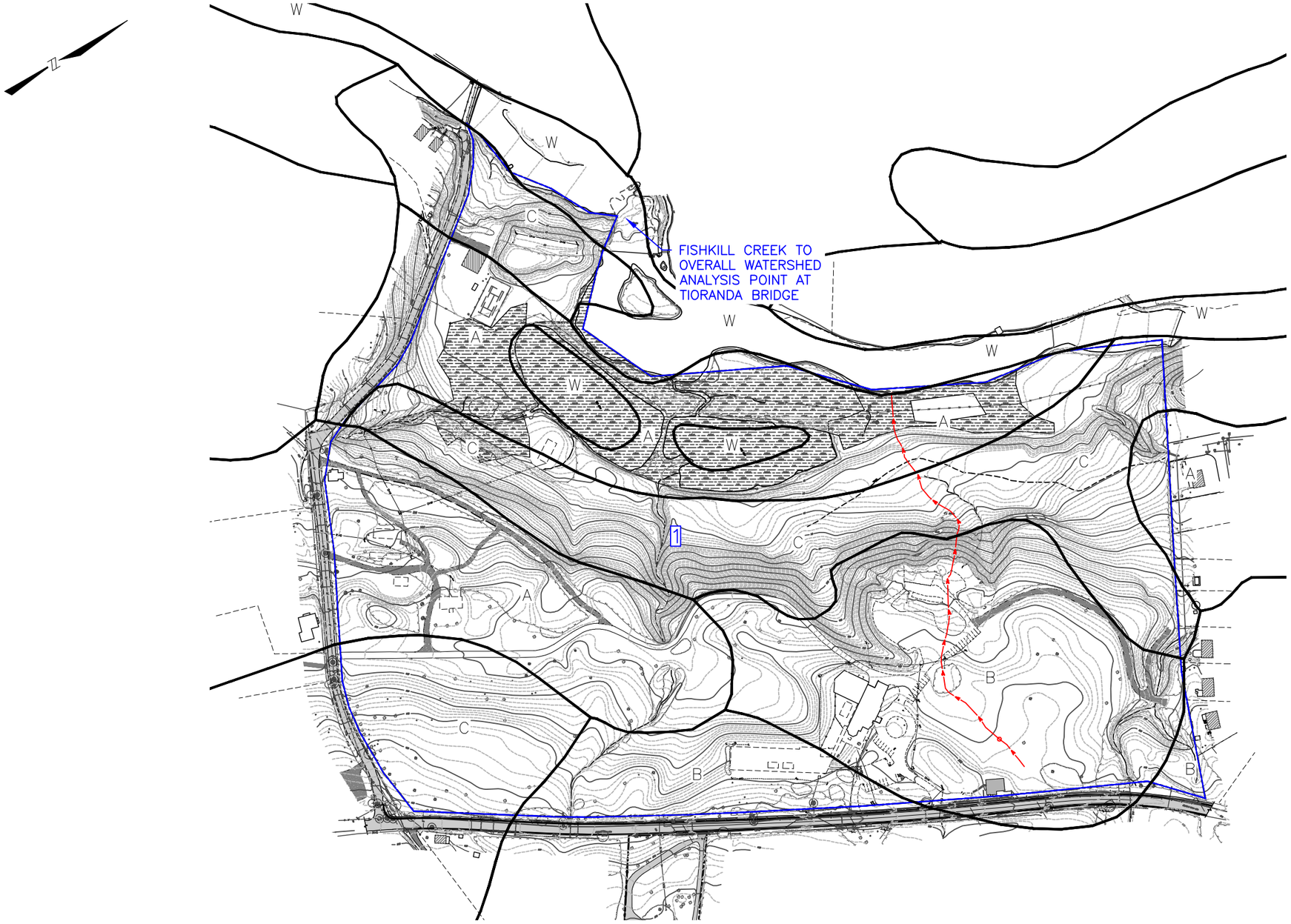
OVERALL WATERSHED MAP

MIRBEAU INN & SPA BEACON

7 CRAIG HOUSE LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 20,000'
TITLE:	DR-1
SHEET:	1 OF 3

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



DRAWN BY: ESR		CHECKED BY: MAB	
REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	5/25/22	PER PLANNING BOARD COMMENTS	ESR
2	7/26/22	PER PLANNING BOARD COMMENTS	ESR
3	9/27/22	PER PLANNING BOARD COMMENTS	MAB
4	2/27/24	PER AMENDED SITE PLAN	MAB
5	3/26/24	ADD PRE-DEV CONDITIONS	ESR

SEAL

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

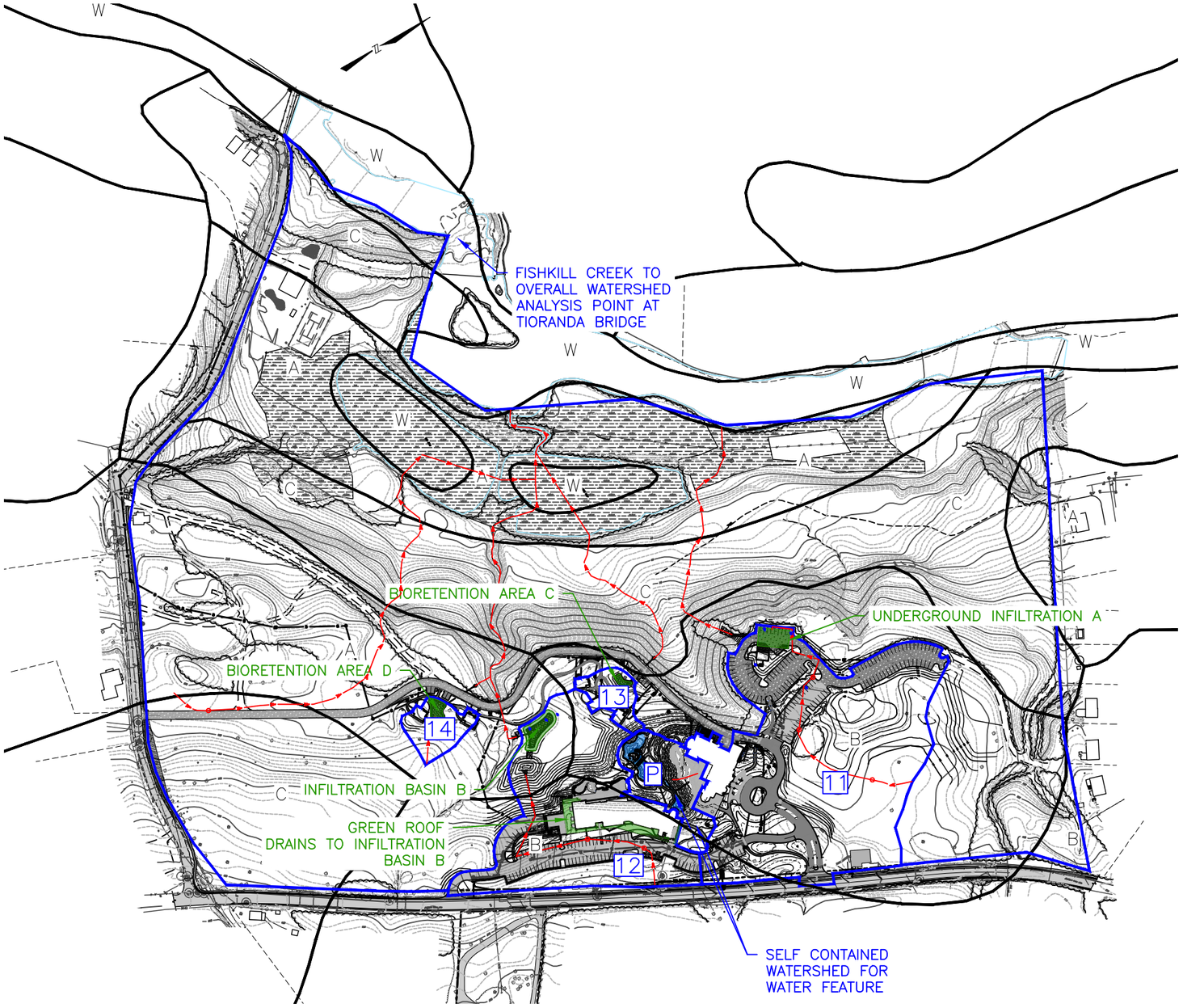
PRE-DEVELOPMENT CONDITIONS MAP

MIRBEAU BEACON INN & SPA

7 CRAIG HOUSE LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #: 2021:051
DATE: 3/29/2022
SCALE: 1" = 300'
TITLE: DR-2
SHEET: 2 OF 3

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



DRAWN BY: ESR	CHECKED BY: MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY
1	5/25/22	PER PLANNING BOARD COMMENTS	ESR
2	7/26/22	PER PLANNING BOARD COMMENTS	ESR
3	9/27/22	PER PLANNING BOARD COMMENTS	MAB
4	2/27/24	PER AMENDED SITE PLAN	MAB
5	3/26/24	ADD PRE-DEV CONDITIONS	ESR

SEAL

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

POST-DEVELOPMENT CONDITIONS MAP

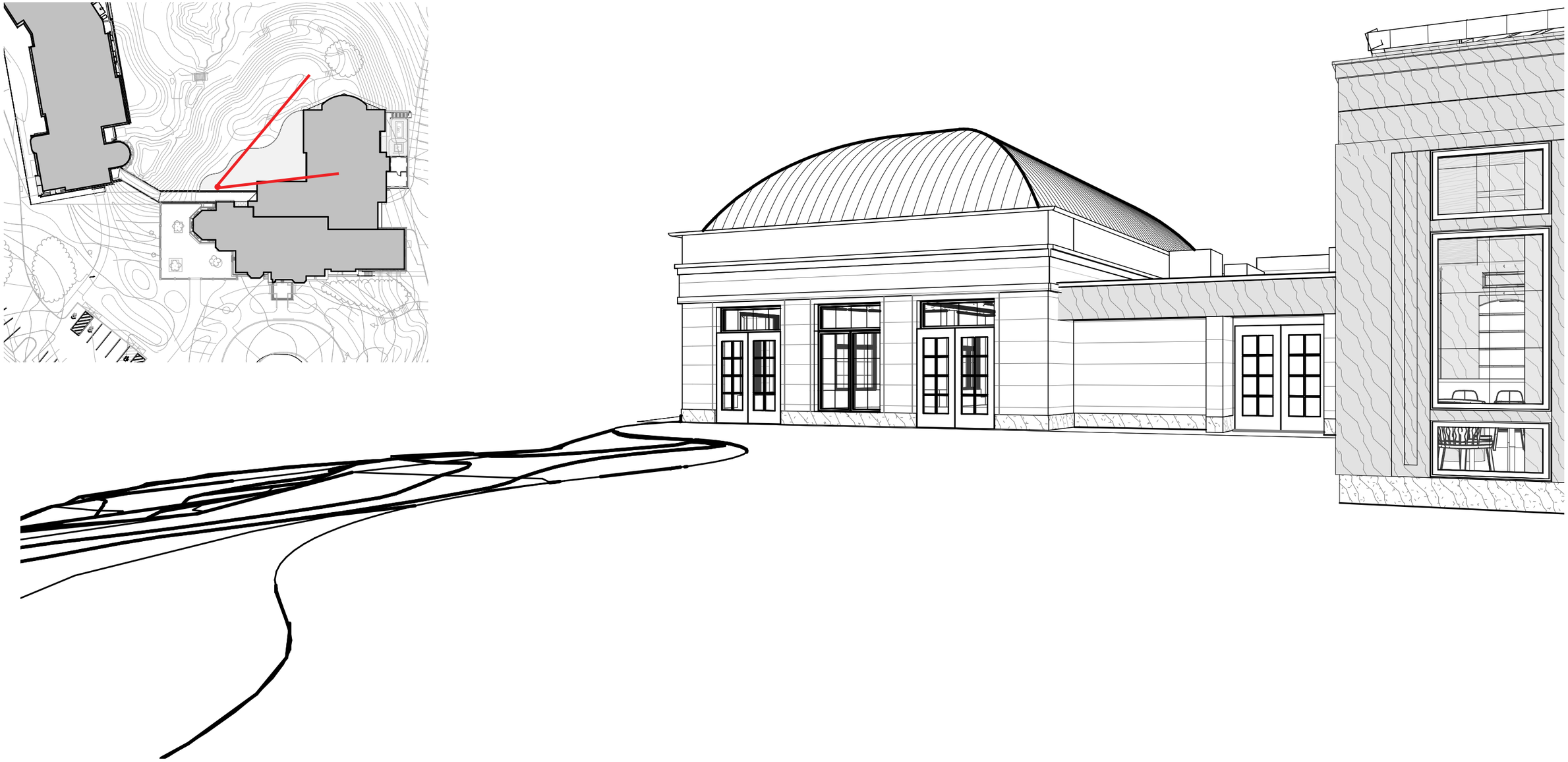
MIRBEAU BEACON INN & SPA

7 CRAIG HOUSE LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

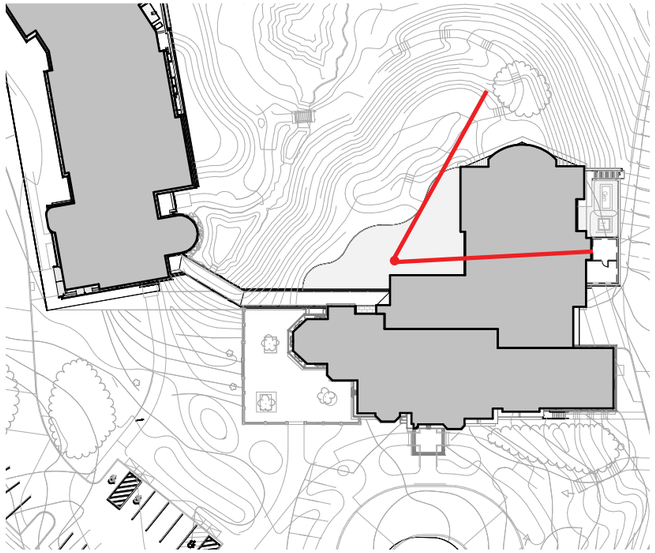
JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 300'
TITLE:	DR-3
SHEET:	3 OF 3

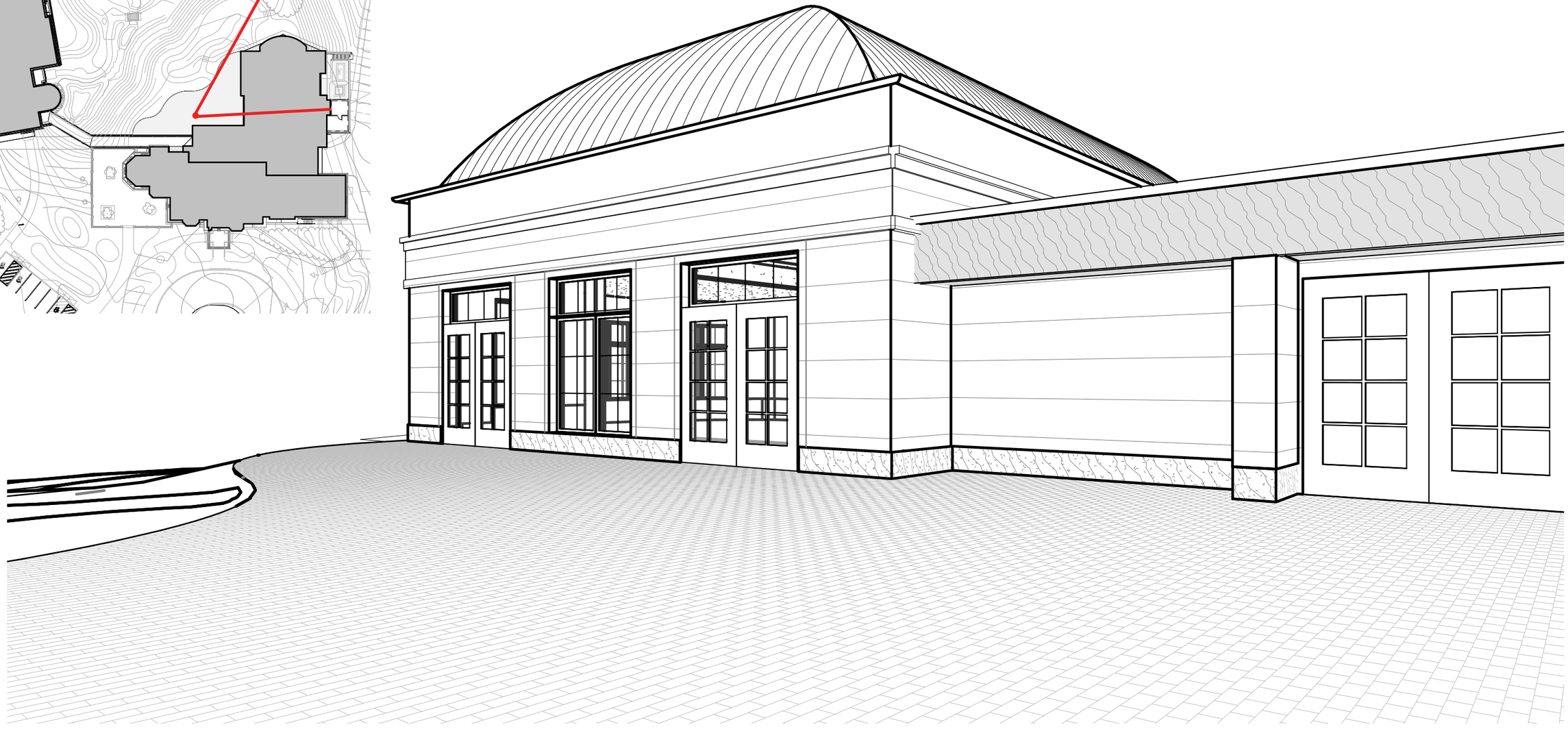
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION L

VIEWSHED DIAGRAM
EDGE OF PATIO



VIEWSHED DIAGRAM
OUTSIDE OF BISTRO





APPLICATION FOR AMENDED SITE PLAN

MIRBEAU INN & SPA BEACON

DUTCHESS COUNTY DEPARTMENT OF BEHAVIORAL & COMMUNITY HEALTH

STANDARD NOTES FOR PROJECTS W/CENTRAL WATER & SEWER

THE DESIGN, CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH INCLUDE:

"NEW YORK STATE DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS"; NYSDEC

"RECOMMENDED STANDARDS FOR SEWAGE TREATMENT WORKS, (TEN STATES)."

"RECOMMENDED STANDARDS FOR WATER WORKS, (TEN STATES)."

"NEW YORK STATE DEPARTMENT OF HEALTH AND DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION POLICIES, PROCEDURES AND STANDARDS."

"DUTCHESS COUNTY AND NEW YORK STATE SANITARY CODES."

"DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION CERTIFICATE OF APPROVAL LETTER."

THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR ARRANGEMENT OF SEWAGE DISPOSAL AND WATER SUPPLY FACILITIES.

UPON COMPLETION OF THE FACILITIES, THE FINISHED WORKS SHALL BE INSPECTED, TESTED, AND CERTIFIED COMPLETE TO THE DC EHSD BY THE NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SUPERVISING CONSTRUCTION. NO PART OF THE FACILITIES SHALL BE PLACED INTO SERVICE UNTIL ACCEPTED BY THE DC EHSD.

APPROVAL OF ANY PLAN(S) OR AMENDMENT THERETO SHALL BE VALID FOR A PERIOD OF FIVE (5) YEARS FROM THE DATE OF APPROVAL. FOLLOWING THE EXPIRATION OF SAID APPROVAL, THE PLAN(S) SHALL BE RE-SUBMITTED TO THE COMMISSIONER OF HEALTH FOR CONSIDERATION FOR RE-APPROVAL. RE-SUBMISSION OR REVISED SUBMISSION OF PLANS AND/OR ASSOCIATED DOCUMENTS SHALL BE SUBJECT TO COMPLIANCE WITH THE TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES IN EFFECT AT THE TIME OF THE RE-SUBMISSION.

NO CELLAR, FOOTING, FLOOR, GARAGE, COOLER OR ROOF DRAINS SHALL BE DISCHARGED INTO THE SEWAGE COLLECTION SYSTEM.

ALL BUILDINGS SHALL BE CONSTRUCTED AT AN ELEVATION HIGH ENOUGH TO ENSURE GRAVITY FLOW TO THE SEWAGE COLLECTION SYSTEM.

ALL REQUIRED EROSION & SEDIMENT CONTROL AND STORMWATER POLLUTION PREVENTION WATER QUALITY & QUANTITY CONTROL STRUCTURES, PERMANENT AND TEMPORARY, ARE SHOWN ON THE PLANS.

THE DC EHSD SHALL BE NOTIFIED SIXTY DAYS PRIOR TO ANY CHANGE IN USE; USE CHANGES MAY REQUIRE RE-APPROVAL BY THE DC EHSD.

NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WATER SYSTEM SHALL NOT BE PLACED INTO SERVICE, UNTIL A "COMPLETED WORKS APPROVAL" IS ISSUED UNDER SECTION 5-1.22(D) OF PART 5 OF THE NEW YORK STATE SANITARY CODE (10NYCRR5).

NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WASTEWATER COLLECTION SYSTEM SHALL NOT BE PLACED INTO SERVICE UNTIL, A "CERTIFICATE OF CONSTRUCTION COMPLIANCE" IS ISSUED UNDER SECTION 19.7 OF ARTICLE 19 OF THE DUTCHESS COUNTY SANITARY CODE.

ALL SERVICE LINES ARE THE RESPONSIBILITY OF THE OWNER UP TO THE PROPERTY LINE. THE WATER AND SEWER COMPANIES SHALL BE RESPONSIBLE FOR ALL VALVES AND PIPES WHICH ARE NOT ON THE OWNER'S PROPERTY.

THE UNDERSIGNED OWNERS OF THE PROPERTY HEREON STATE THAT THEY ARE FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

ADDITIONAL NOTES FOR RETAINING WALLS AND/OR SLOPE STABILIZATION

THE RETAINING WALL/SLOPE STABILIZATION DETAILS SHOWN ON THESE PLANS ARE NOT CERTIFIED FOR STRUCTURAL INTEGRITY BY THE DC EHSD.

BACK FLOW PREVENTION WITHIN BUILDINGS NOTES

INDIVIDUAL REDUCED PRESSURE ZONE (RPZ) BACK FLOW PREVENTION DEVICES SHALL BE PROVIDED ON THE SERVICE LINES WITHIN THE BUILDINGS.

11 MIRBEAU LANE
CITY OF BEACON, DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258
LOT AREA: ±64.35
R1-80 ZONING DISTRICT

OWNER & APPLICANT:
MIRBEAU BEACON, LLC;
433 BROADWAY STE 203,
SARATOGA SPRINGS, NY 12866

AREA MAP SCALE: 1" = 500'

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

PROJECT ARCHITECT:
ARROWSTREET
10 POST OFFICE SQUARE
SUITE 700N
BOSTON, MA 02109
PH: 617-623-5555

PROJECT LANDSCAPE ARCHITECT:
THE LRC GROUP
85 CIVIC CENTER PLAZA
SUITE 204
POUGHKEEPSIE, NY 12601
PH: 845-243-2880

AMENDED SITE PLAN NOTES:

1. SEE SHEET 3 "OVERALL AMENDED MASTER PLAN" FOR A LIST OF SITE PLAN CHANGES. LABELS HAVE BEEN ADDED TO THE OVERALL MASTER PLAN THAT CORRESPOND TO EACH CHANGE.

DCDBCH APPROVAL BLOCK

DUTCHESS COUNTY DEPARTMENT OF
BEHAVIORAL AND COMMUNITY HEALTH
POUGHKEEPSIE, NEW YORK

RECOMMENDED FOR APPROVAL BY:

_____

DATE: _____

PROJECT: _____

_____

_____

_____
SUPERVISING PUBLIC HEALTH ENGINEER

THE DUTCHESS COUNTY DEPARTMENT OF HEALTH ONLY REVIEWED SHEETS 1 THROUGH 19 OF THE SITE PLAN SET. THIS APPROVAL IS FOR SITE WATER AND SEWER INFRASTRUCTURE ONLY.

SITE PLAN DRAWING INDEX:

SHEET 1: COVER SHEET: CV-1
SHEET 2: EXISTING CONDITIONS AND REMOVALS PLAN: XC-1
SHEET 3: OVERALL AMENDED MASTER PLAN: SP-1
SHEET 4: AMENDED SITE PLAN - NORTH: SP-2
SHEET 5: AMENDED SITE PLAN - SOUTH: SP-3
SHEET 6: AMENDED SITE PLAN - SOUTHWEST: SP-4
SHEET 7: GRADING & UTILITY PLAN - NORTH: GU-1
SHEET 8: GRADING & UTILITY PLAN - SOUTH: GU-2
SHEET 9: GRADING & UTILITY PLAN - SOUTHWEST GU-3
SHEET 10: EROSION & SEDIMENT CONTROL PLAN - NORTH: ESC-1
SHEET 11: EROSION & SEDIMENT CONTROL PLAN - SOUTH: ESC-2
SHEET 12: PROFILES: PR-1
SHEET 13: PROFILES: PR-2
SHEET 14: PROFILES: PR-3
SHEET 15: PROFILES: PR-4
SHEET 16: DETAILS: CD-1
SHEET 17: DETAILS: CD-2
SHEET 18: DETAILS: CD-3
SHEET 19: DETAILS: CD-4
SHEET 20: TREE REMOVAL & PROTECTION PLAN - NORTH: TP-1
SHEET 21: TREE REMOVAL & PROTECTION PLAN - SOUTH: TP-2
SHEET 22: PRELIMINARY PLANTING PLAN - NORTH: LL-2
SHEET 23: PRELIMINARY PLANTING PLAN - SOUTH: LL-3
SHEET 24: PRELIMINARY PLANTING PLAN - HOTEL/SPA AREA: LL-4
SHEET 25: PRELIMINARY PLANTING PLAN - PARKING: LL-5
SHEET 26: PRELIMINARY PLANTING PLAN - SOUTH/COTTAGES: LL-6
SHEET 27: SITE LIGHTING PLAN - NORTH: LP-2
SHEET 28: SITE LIGHTING PLAN - SOUTH: LP-3
SHEET 29: OVERALL MASTER PLAN WITH FUTURE PHASE CONCEPTUAL IMPROVEMENTS

REFERENCE DRAWING SET INDEX:

SHEET 1 OF 1: "SUBDIVISION PLAT PREPARED FOR MIRBEAU BEACON, LLC" BY BADEY & WATSON SURVEYING & ENGINEERING, D.P.C.
SHEETS 1 - 12: "HIGHWAY IMPROVEMENT PLANS FOR MIRBEAU BEACON" BY COLLIERS ENGINEERING & DESIGN
ARCHITECTURAL ELEVATION PLAN SET BY ARROWSTREET ARCHITECTURE & DESIGN
SHEET A3.00A: OVERALL ELEVATIONS
SHEET A3.00B: OVERALL ELEVATIONS
SHEET A3.00C: COTTAGE ELEVATIONS

PROJECT WETLAND & WIDLIFE BIOLOGIST:
ECOLOGICAL SOLUTIONS, LLC
121 LEON STOCKER DRIVE
STRATTON, VT 05360
(203) 910-4716

PROJECT SURVEYOR:
BADEY & WATSON
SURVEYING & ENGINEERING D.P.C.
3063 U.S. 9
COLD SPRING, NY 10516
PH: 845-265-9217

PROJECT TRAFFIC CONSULTANT:
COLLIERS ENGINEERING & DESIGN P.C.
400 COLUMBUS AVENUE,
SUITE 108E
VALHALLA, NY 10595
PH: 914-347-7500

PROJECT ATTORNEY:
BERLANDI NUSSBAUM & REITZAS LLP.
527 ROUTE 22, SUITE #2
PAWLING, NY 12564
PH: 212-804-6329

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.

_____ _____
MIRBEAU BEACON, LLC 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.

Dig Safely. New York Call 811 before you dig

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB				
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB				
14	3/29/24	PER DCDBCH COMMENTS	CMB				
15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB				

ARROWSTREET
ARCHITECTURE & DESIGN
10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
arrowstreet.com

Mirbeau INN & SPA

LANDSCAPE ARCHITECTS:
LRC GROUP
85 Civic Center Plaza, Suite 204
Poughkeepsie NY 12601
Tel: 845.243.2880
160 West Street, Suite E
Cromwell, CT 06416
Tel: 860.635.2877
www.lrcconsult.com
LRC Engineering & Surveying, DPC
LRC Engineering & Surveying, LLC
LRC Environmental Services, Inc.
LRC Proj. No. 21-2809
● Landscape Architecture
● Civil Engineering
● Environmental Services
● Land Surveying
● Land Planning

HUDSON LAND DESIGN

STATE OF NEW YORK MICHAEL A. BERGSON 084485 LICENSED PROFESSIONAL ENGINEER
SEAL

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

COVER SHEET

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	AS SHOWN
TITLE:	CV-1
SHEET:	1 OF 29

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

PROJECT INFORMATION:	
PARCEL OWNER:	THE MIRBEAU COMPANIES, LLC., 433 BROADWAY STE 203, SARATOGA SPRINGS NY 12866
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	7 CRAIG HOUSE LANE, BEACON NY 12508
TAX PARCEL ID:	6054-13-001258 (±64.39 ACRES) & 6054-17-047180 (±2.24 ACRES)
PARCEL AREA:	±66.63-ACRES TOTAL
WATER SUPPLY:	CITY OF BEACON MUNICIPAL WATER
SEWAGE DISPOSAL:	CITY OF BEACON MUNICIPAL SEWER

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100 YEAR FLOODPLAIN LINE
- 250 EXISTING MAJOR CONTOUR
- 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
- GO EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- CB 50 EXISTING CATCH BASIN

MAP REFERENCES:

1. "TOPOGRAPHIC MAP PREPARED FOR MIRBEAU INN & SPA RHINEBECK" DATED OCTOBER 21, 2003 AS PREPARED BY BADEY & WATSON SURVEYING & ENGINEERING D.P.C., N.Y.S. LICENSE NO. 48167 AND REVISED ON MARCH 17, 2022.

SURVEY NOTES:

1. COPYRIGHT "2003 & 2022" BY BADEY & WATSON, SURVEYING & ENGINEERING, D.P.C. ALL RIGHTS RESERVED. UNAUTHORIZED DUPLICATION IS A VIOLATION OF APPLICABLE LAWS.
2. UNAUTHORIZED ALTERATION OR ADDITION TO A DOCUMENT PREPARED BY A LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 , SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.
3. THE TOPOGRAPHIC DATA HEREON WAS COMPILED PHOTOGRAMMETRICALLY FROM AERIAL PHOTOGRAPHS DATED APRIL 14, 2003. THE PHOTO SCALE WAS 1 INCH TO 500 FEET. THE COMPILATION SCALE WAS 1 INCH TO 40 FEET.
4. THE MERIDIAN AND COORDINATE VALUES HEREON REFER TO THE NEW YORK STATE COORDINATE SYSTEM, EAST ZONE (NAVD-1983).
5. THE VERTICAL DATUM HEREON IS THE NORTH AMERICAN VERTICAL DATUM OF 1988.
6. PROPERTY LINE UPDATED BY BADEY & WATSON SURVEYING & ENGINEERING, P.C. IN JANUARY 2023.
7. REVISED ON MARCH 17, 2022 AS FOLLOWS
   - A. UPDATED LOGO,
   - B. ADDED GRAPHIC SCALE,
   - C. REMOVED 2003 WETLANDS BOUNDARY FLAGGING.
   - C. ADDED WETLAND FLAGGING BY MICHAEL NOWICKI AND RELATED DATA.
   - D. VERIFIED MH273 LOCATION AND INVERTS, AND SEWER LINE NORTH ALONG SOUTH AVENUE, AND RELATED DATA.
8. WETLANDS FLAGS A29, B13 AND H11 WERE NOT FOUND IN FIELD. APPROXIMATE LOCATION BASED ON SKETCH BY MICHAEL NOWICKI.

Now or formerly Anthony J DiBrita, Jr. Tax ID 5954-20-828209

Now or formerly Emil D. Alzamora Tax ID 5954-20-840230

Now or formerly Jennifer McCue Tax ID 5954-20-

Now or formerly Rocco M. Bianchi Tax ID 5954-20-866178

Now or formerly Kenneth R. Straub Tax ID 5954-20-881147

Now or formerly John McNiff Tax ID 5954-20-910139

Now or formerly Tonyes Tax ID 5954-20-926118

Now or formerly Harold V. Owens, Jr. Tax ID 5954-20-939212

Now or formerly Scenic Hudson Land Trust, Inc. Liber 1991 of Deeds Page 1 Tax ID 5954-16-938070

Formerly Central Hudson Gas & Electric Company Now or formerly Sisters Properties, LLC. Dec. 02-2007-30958 Tax ID 5954-16-894286

Now or formerly Scenic Hudson Land Trust, Inc. Tax ID 5954-16-910293

Now or formerly Sisters Properties, LLC. Tax ID 5954-16-951357

Now or formerly Amanda Robinson Tax ID 5954-16-940215

Now or formerly Robert Rodriguez, Jr. Tax ID 6054-13-013367

Now or formerly Robert F. Elmwood, Jr. Tax ID 6054-13-022364

Now or formerly Kiah Miller Tax ID 6054-13-030361

Now or formerly Mathew George Tax ID 6054-13-037356

Now or formerly Hubert Jordan Tax ID 6054-13-045352

Now or formerly Andrew Sparling Tax ID 6054-13-055348

Now or formerly Roberta MacLean Tax ID 6054-13-063342

Now or formerly Donald J Van Buren, Jr. Tax ID 6054-13-072338

Now or formerly Patrick D. Barry, Trustee Tax ID 6054-13-084335

Now or formerly Judy Galarza-Rodriguez Tax ID 6054-13-092338

Formerly Beacon School District See "Subdivision Plat Section II Eastlyne Estates..." Filed in the Dutchess County Clerk's office on May 25, 1956 as Map No. 7259

Now or formerly Toronda Company Formerly Scenic Hudson Land Trust, Inc. Now or formerly New York State of Formerly State of New York Document No. 02-2002-10958 Tax ID 6054-13-059135

Now or formerly Fleming & Landstreet Tax ID 6054-13-025161

Formerly University Settlement Society of New York Now or formerly State of New York Document No. 02-2008-109 Tax ID 6054-13-126252

FUTURE PHASE ON-SITE UTILITY POLES AND OVERHEAD WIRES TO BE REMOVED (TYP)

EXISTING EASEMENT TO BE EXTINGUISHED

EXISTING SANITARY SERVICE LATERAL SHALL BE CUT JUST OUTSIDE THE MANHOLE AND PLUGGED

EXISTING SUMP PUMP WITHIN MANSION SHALL BE DISCONNECTED FROM THE INTERIOR SANITARY SEWER PLUMBING AND RE-DIRECTED TO THE ONSITE DRAINAGE SYSTEM

EXISTING 1970'S ERA CAFETERIA WING FOOTPRINT TO REMAIN.

EXISTING HOSPITAL WING TO BE DEMOLISHED

EXISTING UNDERGROUND UTILITIES TO BE REMOVED (TYP)

EXISTING PAVED AREA TO BE REMOVED AND RECYCLED TO BE RE-USED ON SITE (TYP)

ALL EXISTING ON-SITE UTILITY POLES AND OVERHEAD WIRES TO BE REMOVED (TYP)

TREE TO BE REMOVED (TYP)

LOT 1 57.307 AC.

LOT 2 7.031 AC.

Concrete Wall with Metal Post and Stockade Fence (Remains)

Multi-Story Frame Building

Wood Post

SLOCUM ROAD

SOUTH AVENUE

NEW YORK STATE ROUTE 9D

A.K.A. "HOWLAND AVENUE"

FISHKILL CREEK

POND

EXISTING CONDITIONS AND REMOVALS PLAN

SCALE: 1" = 100'

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

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.

Dig Safely. New York Call 811 before you dig

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB				
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB				
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617.623.5555
arrowstreet.com

Mirbeau INN & SPA

LANDSCAPE ARCHITECTS:
LRC GROUP
85 Civic Center Plaza, Suite 204, Poughkeepsie NY 12601, Tel: 845.243.2880
160 West Street, Suite E, Cromwell, CT 06416, Tel: 860.635.2877
www.lrcconsult.com
LRC Engineering & Surveying, DPC
LRC Engineering & Surveying, LLC
LRC Environmental Services, Inc.
LRC Proj. No. 21-2809
- Landscape Architecture
- Civil Engineering
- Environmental Services
- Land Surveying
- Land Planning

HUDSON LAND DESIGN

STATE OF NEW YORK — MICHAEL A. BADEY — 048459 — 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

EXISTING CONDITIONS & REMOVALS PLAN

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 100'
TITLE:	XC-1
SHEET:	2 OF 29

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

SCHEDULE OF REGULATIONS (R1–80 ZONING DISTRICT & HDLO ZONE) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT (SEE NOTE)	EXISTING LOT	EX. MANSION	EX. S GATE HOUSE	EX. TIORANDA SCH.	EX. BENNET HSE	PROP. HOTEL	PROP. MAINT. BLG.
LOT AREA:	80,000 SQFT MIN./UNIT	±2,804,828 SQFT						
LOT WIDTH:	150 FEET MINIMUM	±1,103.91 FEET						
LOT DEPTH:	200 FEET MINIMUM	±2,084.45 FEET						
YARD SETBACKS:								
FRONT YARD:	50 FEET		±1,169.8 FEET	±5.9 FEET*	±50.1 FEET	±1,531.6 FEET	±825.1 FEET	±1,498.6 FEET
SIDE YARD:	30 FEET		±190.8 FEET	±918 FEET	±228.4 FEET	±4.9 FEET*	±92.4 FEET	±558.1 FEET
REAR YARD:	50 FEET MINIMUM		±784.3 FEET	±2,202.9 FEET	±294.5 FEET	±518.9 FEET	±960.4 FEET	±706.6 FEET
MAX. BUILDING HEIGHT:	35 FT, 2.5 STORIES		±38 FEET*	EXISTING	EXISTING	EXISTING	±35 FEET	±25 FEET
MAX. BUILDING COVERAGE:	10% MAX.	±1.3%						

*EXISTING NON–CONFORMING

NOTES:
1. THE HISTORIC DISTRICT AND LANDMARK OVERLAY (HDLO) ZONE OVERLAYS THE UNDERLYING R1–80 ZONE APPLICABLE TO SINGLE–FAMILY RESIDENTIAL DEVELOPMENT. THE PLANNING BOARD HAS THE AUTHORITY TO APPROVE BUILDING SIZE AND BUILDING CONFIGURATION FOR A PROJECT WITHIN THE HDLO AS PART OF IT'S SPECIAL PERMIT REVIEW.

PARKING CONFORMANCE TABLE:

LAND USE	CODE REQUIREMENT	REQUIRED
HOTEL (75 ROOMS)	1 SPACE/ROOM	75 SPACES
COTTAGES (5)	2 SPACES/COTTAGE	10 SPACES
RESTAURANT (110 SEATS/2,364 SQFT)	1 SPACE/3 PERSONS	37 SPACES
	OR	OR
	1 SPACE/150 SQFT GROSS	16 SPACES
	FLR. AREA EXCL. UTILITY AREAS	
SPA (21 ROOMS/6,125 SQFT)	1 SPACE/200 SQFT OF GROSS	31 SPACES
	FLR. AREA EXCL. UTILITY AREAS	
EMPLOYEES (80 AT ANY ONE TIME)	1 SPACE/EMPLOYEE	80 SPACES

TOTAL REQUIRED: 233 SPACES
TOTAL PROVIDED: 245 SPACES

PARKING NOTES:
1. PARKING FOR THE COTTAGES IS PROPOSED TO BE PROVIDED AT A RATE OF 2 SPACES PER COTTAGE.
2. DUE TO SHIFT OVERLAP, THERE COULD BE UP TO 80 EMPLOYEES ONSITE AT ANY ONE TIME TO SERVICE THE HOTEL, RESTAURANT AND SPA AS WELL AS OTHER PORTIONS OF THE PROJECT.
3. SPA SQUARE FOOTAGE INCLUDES ALL PUBLICLY AVAILABLE SPA SPACE. BACK–OF–HOUSE OR SUPPORT SPACE HAS BEEN EXCLUDED FROM THIS CALCULATION.
4. THE FUTURE TIORANDA RECREATION AREA PROVIDES AN ADDITIONAL 38 PARKING SPACES.
5. 7 ADA PARKING SPACES ARE PROVIDED.

PHASE 1 ARCHAEOLOGICAL STUDY NOTES:

1. A PHASE IA LITERATURE REVIEW ARCHAEOLOGICAL SENSITIVITY ASSESSMENT AND A PHASE IB ARCHAEOLOGICAL FIELD INVESTIGATION STUDY WAS COMPLETED BY HARTGEN ARCHEOLOGICAL ASSOCIATES, INC IN JULY OF 2006. THE STUDY IDENTIFIED SEVERAL PRE–CONTACT AND HISTORICAL SENSITIVE AREAS.
2. FOUR (4) PRE–CONTACT ZONES WERE DISCOVERED DURING THE STUDY IDENTIFIED AS SITES #1, #3, #4 AND #5 ON THE PLAN.
3. THREE (3) HISTORIC ZONES WERE DISCOVERED DURING THE STUDY IDENTIFIED AS SITE #2, #6 AND #7 ON THE PLAN.
4. THE NEW YORK STATE HISTORICAL PRESERVATION OFFICE HAS DETERMINED THAT THE SENSITIVE ZONES AND ASSOCIATED 50' BUFFERS WITHIN THESE AREAS SHOULD BE AVOIDED TO THE GREATEST EXTENT POSSIBLE. NO EXCAVATION SHALL TAKE PLACE WITHIN THE SENSITIVE ZONES, AND LIMITED WORK CAN BE PROPOSED WITHIN THE 50' BUFFERS.
5. FILLING ONLY WITHIN THE 50' BUFFERS WILL NOT REQUIRE A PHASE II STUDY TO BE PREPARED. ALL EXCAVATION WORK WITHIN THE SENSITIVE AREA OR BUFFER WILL REQUIRE A PHASE II STUDY TO BE PREPARED WITHIN THOSE AREAS.
6. A SMALL PORTION OF FILLING WILL TAKE PLACE WITHIN THE WESTERN 50' BUFFER WITHIN SITE #1 WHICH IS PERMITTED. THE TENT VENUE AREA IS PARTIALLY WITHIN THE SOUTHEASTERLY 50' BUFFER OF SITE #1. NO GRADING OR EXCAVATION IS PROPOSED WITHIN THIS AREA.
7. THERE IS A SMALL AMOUNT OF AT–GRADE ROAD WIDENING WITHIN THE 50' BUFFER ASSOCIATED WITH SITE #5. THE SHPO OFFICE RECOMMENDS THE USE OF GEOTEXTILE SEPARATION REINFORCEMENT OVER TOPSOIL FOR PLACEMENT OF PAVEMENT WITHIN A BUFFER AREA. NO TOPSOIL IS TO BE REMOVED.
8. SEE GRADING PLANS FOR PROPOSED WORK WITHIN THESE AREAS.

UNITED STATES ARMY CORPS OF ENGINEERS NOTES:

1. A USACE PERMIT WILL BE REQUIRED FOR FUTURE WALKING TRAILS THROUGH WETLAND MEADOWS.
2. A USACE PERMIT HAS BEEN GRANTED FOR WETLAND BUFFER DISTURBANCE. A SNAKE BARRIER SHALL BE ERECTED FOR ALL CONSTRUCTION WORK BEING CONDUCTED DURING THE TIMBER RATTLESNAKE ACTIVE PERIOD.

GENERAL NOTES:

1. THE DR. BENNET COTTAGE, SOUTH GATE HOUSE AND TIORANDA SCHOOL SHALL HAVE THEIR EXTERIORS SECURED AND STABILIZED TO PROTECT THEM FOR FUTURE USES IN SUBSEQUENT PHASES.

AMENDED SITE PLAN NOTES:

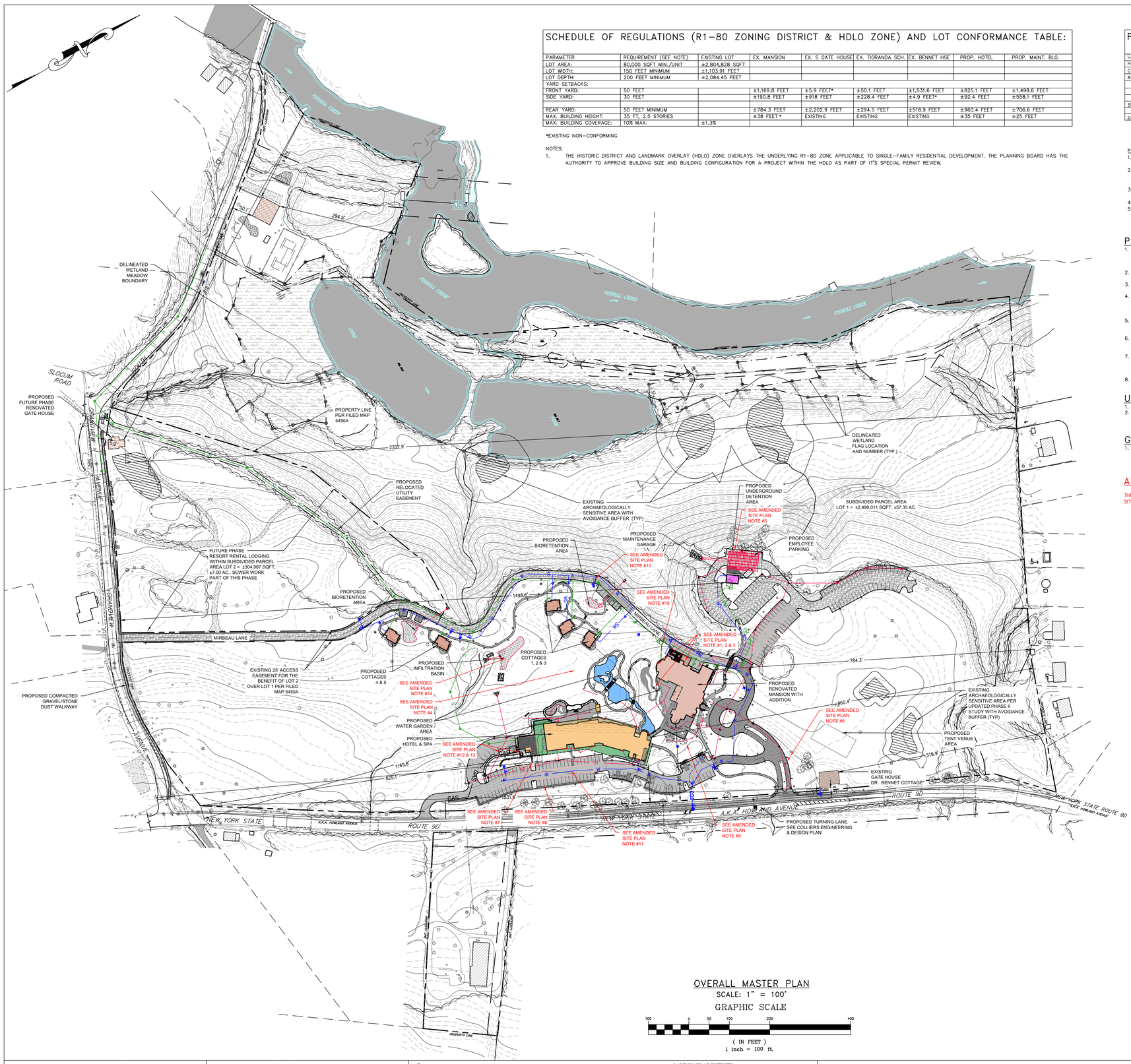
THE AMENDED SITE PLANS AND ELEVATIONS IDENTIFY THE FOLLOWING CHANGES TO THE APPROVED SITE PLANS.

1. RETAIN THE DINING WING STRUCTURE WITHIN THE MANSION.
2. ELIMINATE THE 7 GROTTO ROOMS WITHIN THE MANSION.
3. ADD AN ELEVATOR AND EXTERIOR WALK IN COOLER & FREEZER ADJACENT TO THE WEST SIDE OF THE MANSION ALONG MIRBEAU LANE.
4. ELIMINATE 2 OF THE 4 MONET GARDEN PONDS.
5. DEFER THE WESTERN EMPLOYEE LOTS PAVING AND PROVIDE GRAVEL LOTS.
6. REPLACE THE PAVEMENT WITH CHIP SEAL SURFACE ON THE MAIN ENTRANCE DRIVE.
7. REPLACE VARIOUS REDI–ROCK WALLS WITH LARGE DIAMETER LANDSCAPE BOULDERS.
8. ELIMINATE THE CURB ADJACENT TO THE REDI–ROCK WALLS ALONG THE EASTERN EDGE OF THE CHATEAU EASTERN LOT AND INSTALL CONCRETE CURB STOPS AT EACH SPACE.
9. ELIMINATE THE WALKING PATH FROM THE FRONT CIRCULAR DRIVE OVER TO THE SPA ENTRANCE.
10. DEFER THE PAVEMENT ON MIRBEAU LANE FROM COTTAGE 3 TO GRANDVIEW UNTIL THE FUTURE DEVELOPMENT OF THE COTTAGES IN THE TRIANGULAR PARCEL.
11. ELIMINATE WATER SERVICE LINE TO CHATEAU HOTEL FROM CONNECTION WITH 8" SERVICE MAIN ADJACENT TO COTTAGE #4, AND PROVIDE A 6" SERVICE LINE TO THE CHATEAU HOTEL FROM THE 8" MAIN THAT CONNECTS TO THE EXISTING WATER MAIN IN HOWLAND AVENUE. THE RELOCATED 6" SERVICE LINE IS ALSO CONNECTED TO THE PREVIOUSLY APPROVED HYDRANT ON THE SOUTH END OF THE HOTEL WING.
12. INSTALLING A SECOND PRIMARY TRANSFORMER ADJACENT TO THE LAUNDRY ROOM WITHIN THE CHATEAU HOTEL.
13. INSTALLING A SECOND DUMPSTER ENCLOSURE AT THE BOTTOM OF THE DRIVE LEADING TO THE LAUNDRY ROOM WITHIN THE CHATEAU HOTEL.
14. CHANGED BIORETENTION AREA B TO AN INFILTRATION BASIN.
15. MOVED GREASE TRAP LOCATION TO THE SOUTH SIDE OF THE MANSION DINING WING.
16. MOVED ONSITE SEWER MAIN TO GATEHOUSE LANE.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100 YEAR FLOODPLAIN LINE
- 250 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- WS EXISTING WATER LINE
- EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- CB 50 EXISTING CATCH BASIN

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- 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
- PROPOSED WATER LINE
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE



OVERALL MASTER PLAN

SCALE: 1" = 100'

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

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

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

SIGNED THIS _____ DAY OF _____, 20_____ BY

_____ CHAIRMAN

_____ SECRETARY

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

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DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB				
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB				
14	3/29/24	PER DCDBCH COMMENTS	CMB				
15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB				

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13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845–440–6926
F: 845–440–6637

OVERALL AMENDED MASTER PLAN
MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054–13–001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 100'
TITLE:	SP–1
SHEET:	3 OF 29

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

LEGEND:

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- 100 YEAR FLOODPLAIN LINE
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- EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- EXISTING SEWER SERVICE LINE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- EXISTING WATER LINE
- EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- EXISTING CATCH BASIN

- PROPOSED PROPERTY LINE
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- PROPOSED SDS LATERAL
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- PROPOSED WATER LINE
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- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

SIGHT DISTANCE NOTES:

1. THE AVAILABLE SIGHT DISTANCE ON MIRBEAU LANE AT THE PROPOSED PARKING SPACES FOR COTTAGE #1, #2 AND #3 MEETS OR EXCEEDS 130 FEET AT EACH PARKING SPACE. THE PROPOSED SPEED LIMIT FOR MIRBEAU LANE IS 15 MPH WHICH REQUIRES A STOPPING SIGHT DISTANCE OF 80 FEET. THE AVAILABLE STOPPING SIGHT DISTANCE OF A MINIMUM OF 130 FEET SATISFIES SPEED LIMITS GREATER THAN 20 MPH. THEREFORE THE SIGHT DISTANCE IS ADEQUATE.

SIGN A | SIGN B | SIGN C

DIRECTIONAL SIGNAGE DETAILS
NOT TO SCALE

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16. MOVED ONSITE SEWER MAIN TO GATEHOUSE LANE.

SITE PLAN – NORTH
SCALE: 1" = 40'

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

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

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_____ SECRETARY

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REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB				
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15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB				

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13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
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F: 845-440-6637

AMENDED SITE PLAN – NORTH
MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 40'
TITLE:	SP-2
SHEET:	4 OF 29

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

LEGEND:

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- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100 YEAR FLOODPLAIN LINE
- 250 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW — EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS — SS — EXISTING SEWER SERVICE LINE
- S — EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W — EXISTING WATER LINE
- WS — WS — EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- CB 50 — EXISTING CATCH BASIN

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 — PROPOSED MAJOR CONTOUR
- 252 — PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S — PROPOSED SEWER LINE
- SS — SS — PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST — PROPOSED STORM WATER LINE
- RL — PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W — PROPOSED WATER LINE
- WS — WS — PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

SIGHT DISTANCE NOTES:

1. THE AVAILABLE SIGHT DISTANCE ON MIRBEAU LANE AT THE PROPOSED PARKING SPACES FOR COTTAGE #4 AND #5 MEETS OR EXCEEDS 130 FEET AT EACH PARKING SPACE. THE PROPOSED SPEED LIMIT FOR MIRBEAU LANE IS 15 MPH WHICH REQUIRES A STOPPING SIGHT DISTANCE OF 80 FEET. THE AVAILABLE STOPPING SIGHT DISTANCE OF A MINIMUM OF 130 FEET SATISFIES SPEED LIMITS GREATER THAN 20 MPH. THEREFORE THE SIGHT DISTANCE IS ADEQUATE.
2. CLEARING WILL BE REQUIRED TO ACHIEVE SIGHT DISTANCE AT THE EXISTING MIRBEAU LANE ENTRANCE AT GRANDVIEW AVENUE. THE CLEARING AREA IS SHOWN ON THIS PLAN.

AMENDED SITE PLAN NOTES:

THE AMENDED SITE PLANS AND ELEVATIONS IDENTIFY THE FOLLOWING CHANGES TO THE APPROVED SITE PLANS.

1. RETAIN THE DINING WING STRUCTURE WITHIN THE MANSION.
2. ELIMINATE THE 7 GROTTO ROOMS WITHIN THE MANSION.
3. ADD AN ELEVATOR AND EXTERIOR WALK IN COOLER & FREEZER ADJACENT TO THE WEST SIDE OF THE MANSION ALONG MIRBEAU LANE.
4. ELIMINATE 2 OF THE 4 MONET GARDEN PONDS.
5. DEFER THE WESTERN EMPLOYEE LOTS PAVING AND PROVIDE GRAVEL LOTS.
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14. CHANGED BIORETENTION AREA B TO AN INFILTRATION BASIN.
15. MOVED GREASE TRAP LOCATION TO THE SOUTH SIDE OF THE MANSION DINING WING.
16. MOVED ONSITE SEWER MAIN TO GATEHOUSE LANE.

SITE PLAN – SOUTH

SCALE: 1" = 40'

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
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AMENDED SITE PLAN – SOUTH

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 40'
TITLE:	SP-3
SHEET:	5 OF 29

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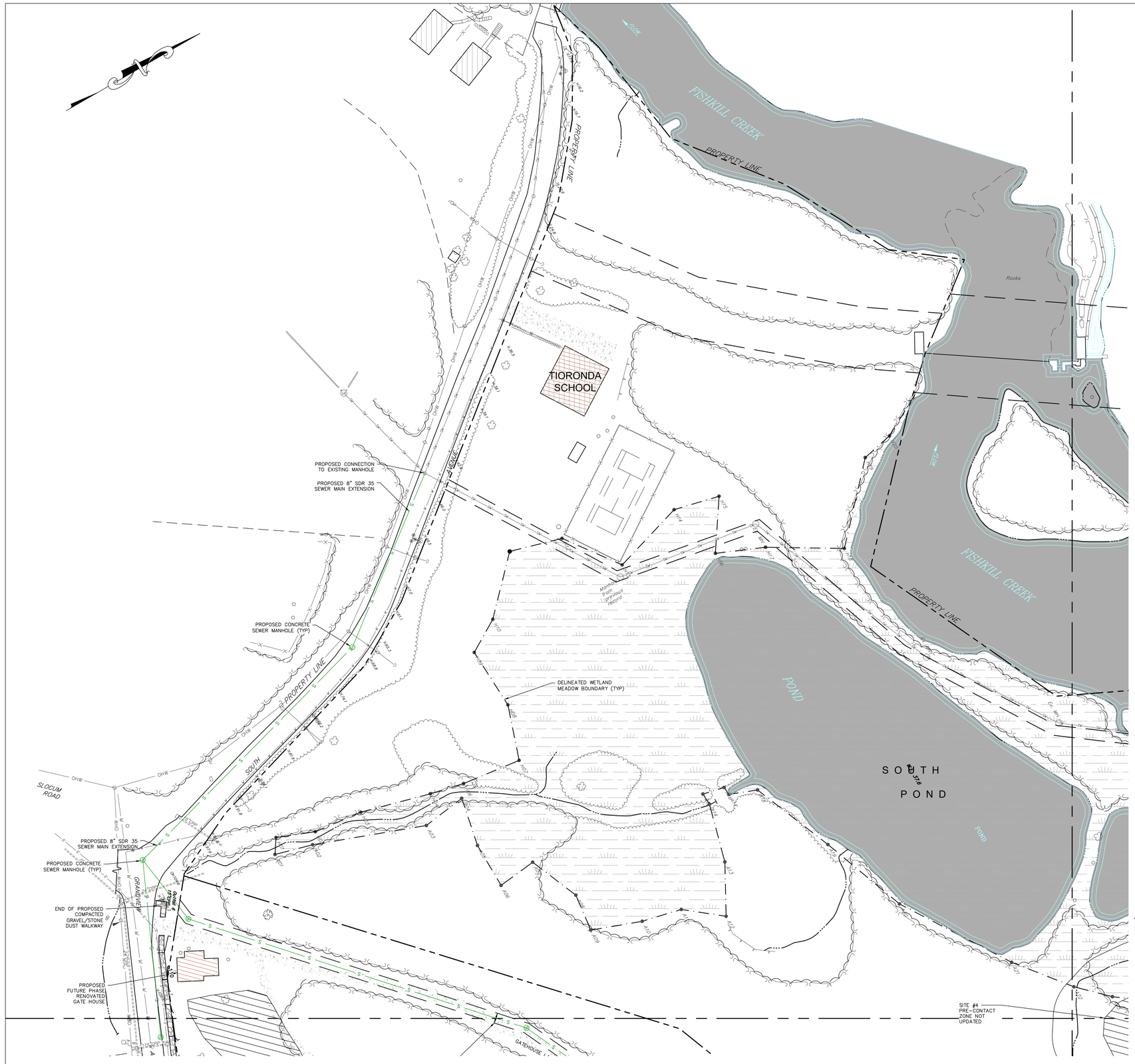

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100 YEAR FLOODPLAIN LINE
- 250 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW — EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS — SS — EXISTING SEWER SERVICE LINE
- S — EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W — EXISTING WATER LINE
- WS — WS — EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- CB 50 — EXISTING CATCH BASIN

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 — PROPOSED MAJOR CONTOUR
- 252 — PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S — PROPOSED SEWER LINE
- SS — SS — PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST — PROPOSED STORM WATER LINE
- RL — PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W — PROPOSED WATER LINE
- WS — WS — PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

AMENDED SITE PLAN NOTES:

THE AMENDED SITE PLANS AND ELEVATIONS IDENTIFY THE FOLLOWING CHANGES TO THE APPROVED SITE PLANS.

1. RETAIN THE DINING WING STRUCTURE WITHIN THE MANSION.
2. ELIMINATE THE 7 GROTTO ROOMS WITHIN THE MANSION.
3. ADD AN ELEVATOR AND EXTERIOR WALK IN COOLER & FREEZER ADJACENT TO THE WEST SIDE OF THE MANSION ALONG MIRBEAU LANE.
4. ELIMINATE 2 OF THE 4 MONET GARDEN PONDS.
5. DEFER THE WESTERN EMPLOYEE LOTS PAVING AND PROVIDE GRAVEL LOTS.
6. REPLACE THE PAVEMENT WITH CHIP SEAL SURFACE ON THE MAIN ENTRANCE DRIVE.
7. REPLACE VARIOUS REDI-ROCK WALLS WITH LARGE DIAMETER LANDSCAPE BOULDERS.
8. ELIMINATE THE CURB ADJACENT TO THE REDI-ROCK WALLS ALONG THE EASTERN EDGE OF THE CHATEAU EASTERN LOT AND INSTALL CONCRETE CURB STOPS AT EACH SPACE.
9. ELIMINATE THE WALKING PATH FROM THE FRONT CIRCULAR DRIVE OVER TO THE SPA ENTRANCE.
10. DEFER THE PAVEMENT ON MIRBEAU LANE FROM COTTAGE 3 TO GRANDVIEW UNTIL THE FUTURE DEVELOPMENT OF THE COTTAGES IN THE TRIANGULAR PARCEL.
11. ELIMINATE WATER SERVICE LINE TO CHATEAU HOTEL FROM CONNECTION WITH 8" SERVICE MAIN ADJACENT TO COTTAGE #4, AND PROVIDE A 6" SERVICE LINE TO THE CHATEAU HOTEL FROM THE 8" MAIN THAT CONNECTS TO THE EXISTING WATER MAIN IN HOWLAND AVENUE. THE RELOCATED 6" SERVICE LINE IS ALSO CONNECTED TO THE PREVIOUSLY APPROVED HYDRANT ON THE SOUTH END OF THE HOTEL WING.
12. INSTALLING A SECOND PRIMARY TRANSFORMER ADJACENT TO THE LAUNDRY ROOM WITHIN THE CHATEAU HOTEL.
13. INSTALLING A SECOND DUMPSTER ENCLOSURE AT THE BOTTOM OF THE DRIVE LEADING TO THE LAUNDRY ROOM WITHIN THE CHATEAU HOTEL.
14. CHANGED BIORETENTION AREA B TO AN INFILTRATION BASIN.
15. MOVED GREASE TRAP LOCATION TO THE SOUTH SIDE OF THE MANSION DINING WING.
16. MOVED ONSITE SEWER MAIN TO GATEHOUSE LANE.

SITE PLAN – SOUTH WEST
SCALE: 1" = 40'

GRAPHIC SCALE

40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

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.

Dig Safely. New York Call 811 before you dig

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB				
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB				
14	3/29/24	PER DCDBCH COMMENTS	CMB				
15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB				

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AMENDED SITE PLAN – SOUTHWEST

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 40'
TITLE:	SP-4
SHEET:	6 OF 29

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STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
CB 1B	RIM = 157.50 SUMP = 153.40 CB1B–CB1A INV OUT = 154.40
CB1A	RIM = 154.86 SUMP = 150.70 CB1B–CB1A INV IN = 151.80 CB1A–DET INV OUT = 151.70
CB2	RIM = 150.91 SUMP = 144.04 CB2A–CB2 INV IN = 145.14 CB2–WQI1 INV OUT = 145.04
CB2A	RIM = 155.09 SUMP = 144.58 CB3–CB2A INV IN = 145.68 CB2A–CB2 INV OUT = 145.58
CB3	RIM = 157.26 SUMP = 145.34 CB7–CB3 INV IN = 153.50 CB4–CB3 INV IN = 146.34 CB3–CB2A INV OUT = 146.34
CB4	RIM = 155.25 SUMP = 146.30 CB5–CB4 INV IN = 147.40 CB4–CB3 INV OUT = 147.30
CB5	RIM = 153.75 SUMP = 146.96 CB6–CB5 INV IN = 148.06 CB5–CB4 INV OUT = 147.96

STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
CB6	RIM = 151.50 SUMP = 147.48 CB6–CB5 INV OUT = 148.48
CB7	RIM = 160.65 SUMP = 154.58 CB8–CB7 INV IN = 156.75 CB7–CB3 INV OUT = 155.58
CB8	RIM = 164.64 SUMP = 159.65 CB9–CB8 INV IN = 160.75 CB8–CB7 INV OUT = 160.65
CB9	RIM = 169.65 SUMP = 162.08 CB10–CB9 INV IN = 165.60 CB9A TO CB9 INV IN = 163.33 CB9–CB8 INV OUT = 163.08
CB9A	RIM = 167.33 SUMP = 163.50 CB9A TO CB9 INV OUT = 164.50
CB10	RIM = 177.70 SUMP = 172.71 CB11–CB10 INV IN = 174.24 CB10A–CB10 INV IN = 173.81 CB10–CB9 INV OUT = 173.71
CB10A	RIM = 177.50 SUMP = 173.35 CB16–CB10A INV IN = 174.45 CB10A–CB10 INV OUT = 174.35

STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
CB11	RIM = 178.20 SUMP = 173.99 CB12–CB11 INV IN = 175.10 CB11–CB10 INV OUT = 174.99
CB12	RIM = 183.52 SUMP = 177.04 CB13–CB12 INV IN = 178.14 CB12–CB11 INV OUT = 178.04
CB13	RIM = 182.32 SUMP = 178.20 CB14–CB13 INV IN = 179.30 CB13–CB12 INV OUT = 179.20
CB14	RIM = 182.71 SUMP = 178.51 CB14–CB13 INV OUT = 179.51
CB16	RIM = 180.70 SUMP = 174.02 CB17–CB16 INV IN = 175.12 CB16–CB10A INV OUT = 175.02
CB17	RIM = 180.12 SUMP = 174.40 CB17–CB16 INV OUT = 175.40
FES A	RIM = 141.30 SUMP = ??? DET–FES A INV IN = 138.50

STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
CB18	RIM = 164.65 SUMP = 157.00 CB19–CB18 INV IN = 158.10 CB18–FES B1 INV OUT = 158.00
CB19	RIM = 173.64 SUMP = 167.02 CB20–CB19 INV IN = 170.61 CB19A–CB19 INV IN = 168.02 CB19–CB18 INV OUT = 168.02
CB19A	RIM = 171.84 SUMP = 167.52 CB19A–CB19 INV OUT = 168.52
CB20	RIM = 178.30 SUMP = 173.22 CB21–CB20 INV IN = 174.22 CB20–CB19 INV OUT = 174.10
CB21	RIM = 179.10 SUMP = 175.08 CB21–CB20 INV OUT = 176.08
FES B1	RIM = 0.00 SUMP = ???

STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
FES A1	RIM = 140.74 SUMP = ??? DET–FES A1 INV IN = 138.50
WQI1	RIM = 149.10 SUMP = 143.55 CB2–WQI1 INV IN = 144.65 CB1–DET INV OUT = 144.55

SANITARY SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
SMH8	RIM = 135.02 SMH9–SMH8 INV IN = 128.86 SMH13–SMH8 INV IN = 130.50 SMH8–SMH7 INV OUT = 128.76
SMH9	RIM = 134.82 SMH10–SMH9 INV IN = 129.90 SMH9–SMH8 INV OUT = 129.80
SMH10	RIM = 138.24 SMH11–SMH10 INV IN = 133.10 SMH10–SMH9 INV OUT = 133.00
SMH11	RIM = 146.83 SMH12–SMH11 INV IN = 139.00 SMH11–SMH10 INV OUT = 138.00
SMH12	RIM = 167.21 SMH12–SMH11 INV OUT = 162.00
SMH13	RIM = 146.00 SMH14–SMH13 INV IN = 138.50 SMH13–SMH8 INV OUT = 137.90
SMH14	RIM = 151.55 SMH15–SMH14 INV IN = 146.55 SMH14–SMH13 INV OUT = 145.00
SMH15	RIM = 166.10 SPA–SMH15 INV IN = 160.30 SMH15–SMH14 INV OUT = 160.20

SANITARY SEWER PIPE TABLE			
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
SMH9–SMH8	162 LF	8 inch PVC	0.58%
SMH10–SMH9	212 LF	8 inch PVC	1.46%
SMH11–SMH10	133 LF	8 inch PVC	3.68%
SMH12–SMH11	176 LF	8 inch PVC	13.08%
SMH13–SMH8	158 LF	8 inch PVC	4.67%
SMH14–SMH13	95 LF	8 inch PVC	6.86%
SMH15–SMH14	80 LF	8 inch PVC	17.05%
SPA–SMH15	80 LF	8 inch PVC	2.00%

STORM SEWER PIPE TABLE			
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
CB1–DET	5 LF	15" ø CORR HDPE	1.00%
CB1A–DET	75 LF	15" ø CORR HDPE	6.92%
CB1B–CB1A	90 LF	15" ø CORR HDPE	2.88%
CB2–WQI1	49 LF	15" ø CORR HDPE	0.80%
CB2A–CB2	55 LF	15" ø CORR HDPE	0.80%
CB3–CB2A	70 LF	15" ø CORR HDPE	0.95%
CB4–CB3	120 LF	15" ø CORR HDPE	0.80%
CB5–CB4	82 LF	15" ø CORR HDPE	0.68%
CB6–CB5	85 LF	15" ø CORR HDPE	0.50%
CB7–CB3	45 LF	15" ø CORR HDPE	4.61%
CB8–CB7	99 LF	15" ø CORR HDPE	3.92%
CB9–CB8	99 LF	15" ø CORR HDPE	2.36%
CB9A TO CB9	100 LF	12" ø CORR HDPE	1.16%
CB10–CB9	112 LF	15" ø CORR HDPE	7.22%
CB10A–CB10	54 LF	15" ø CORR HDPE	1.00%
CB11–CB10	75 LF	15" ø CORR HDPE	1.00%
CB12–CB11	86 LF	15" ø CORR HDPE	3.42%
CB13–CB12	106 LF	15" ø CORR HDPE	1.00%
CB14–CB13	21 LF	15" ø CORR HDPE	1.00%
CB16–CB10A	73 LF	15" ø CORR HDPE	0.79%

STORM SEWER PIPE TABLE			
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
CB17–CB16	28 LF	15" ø CORR HDPE	1.00%
DET–FES A	62 LF	24" ø CORR HDPE	12.67%
DET–FES A1	61 LF	24" ø CORR HDPE	12.69%

STORM SEWER PIPE TABLE			
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
CB18–FES B1	102 LF	15" ø CORR HDPE	22.53%
CB19–CB18	110 LF	15" ø CORR HDPE	9.06%
CB19A–CB19	50 LF	15" ø CORR HDPE	1.00%
CB20–CB19	179 LF	15" ø CORR HDPE	1.95%
CB21–CB20	186 LF	15" ø CORR HDPE	1.00%

LEGEND:

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INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES

CATCH BASINS PIPING AND FLARED END SECTIONS:

ALL CATCH BASINS, PIPING AND FLARED END SECTIONS SHALL BE INSPECTED EVERY SPRING AND FALL. LOOK FOR OBSTRUCTIONS, VEGETATION, DEBRIS, LITTER, SEDIMENT, ETC. BLOCKING THE STRUCTURES OR PIPES. UTILIZE VACUUM TRUCK IF NECESSARY. OBSERVE THE FLOW OF WATER AFTER A RAINFALL EVENT. ANY EVIDENCE OF PONDING IN THE STRUCTURE INDICATES A POTENTIAL BLOCKAGE. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.

RIP RAP OUTLET PROTECTION AND EMERGENCY OVERFLOW WEIR:

RIP RAP OUTLET PROTECTION AND THE EMERGENCY OVERFLOW WEIR SHALL BE INSPECTED QUARTERLY FOR SEDIMENT BUILD-UP, VEGETATION, DEBRIS, LITTER, AND OBSTRUCTIONS. IF SEDIMENT BUILDS UP ENOUGH TO FILL IN THE VOID SPACE BETWEEN THE STONES OR GRASS PAVERS, THEN THE RIP RAP OR PAVERS SHALL BE CLEANED OR REPLACED.

BIORETENTION AREA:

THE BIORETENTION AREA SHALL BE INSPECTED MONTHLY FOR SEDIMENT AND DEBRIS ACCUMULATION. ANY ACCUMULATED SEDIMENT OR DEBRIS SHOULD BE REMOVED AS NECESSARY. AFTER STORM EVENTS, THE BIORETENTION AREA'S DEWATERING DURATION SHOULD ALSO BE MONITORED. THE BIORETENTION AREA'S FLOOR SHALL BE MOWED WHEN THE GRASS REACHES A HEIGHT OF 18" (ONLY IF LAWN GRASS IS PRESENT). CUT ORNAMENTAL GRASSES ANNUALLY IN THE LATE FALL. SEDIMENT SHALL BE CLEANED OUT OF THE BASIN ANNUALLY, IN THE SPRING AND FALL. INSPECT INFLOW AND OUTFLOW POINTS FOR EROSION OR CLOGGING. INSPECT TREES, SHRUBS AND OTHER VEGETATION TO EVALUATE THEIR HEALTH AND REPLACE ANY DEAD OR DISEASED VEGETATION. INSPECT SURROUNDING DRAINAGE AREA FOR EROSION OR SIGNS OF SEDIMENT DELIVERY TO THE BIORETENTION AREA. REMOVE ANY INVASIVE PLANT SPECIES. REMOVE CLOGS FROM THE STORMWATER SYSTEM INFLOW AND OUTFLOW COMPONENTS. CHECK FOR SIGNS OF VEGETATION OVERGROWTH, OBSERVE DEWATERING CAPABILITY, CHECK FERTILIZER, AND TEST SOILS FOR PH ANNUALLY. HARVEST OVERGROWN VEGETATION AND REMOVE FROM THE BIORETENTION AREA. IF IT TAKES LONGER THAN 24 HOURS TO DEWATER THE BIORETENTION AREA, THE VALVE ON THE UNDERDRAIN SHALL BE OPENED SLIGHTLY TO PROVIDE FULL DEWATERING IN 24 HOURS. IF THE PH IS BELOW 5.2, LIME SHOULD BE APPLIED. IF THE PH IS ABOVE 7.0 TO 8.0, IRON SULFATE PLUS SULFUR CAN BE APPLIED TO REDUCE THE PH. REPLACE MULCH OVER ENTIRE AREA EVERY TWO TO THREE YEARS. IF DEWATERING IS A PROBLEM, CORE AERATION OF CULTIVATING UN-VEGETATED AREAS MAY BE REQUIRED TO ENSURE ADEQUATE FILTRATION.

UNDERGROUND DETENTION/INFILTRATION SYSTEM:

INFILTRATION BASINS SHALL BE INSPECTED MONTHLY FOR SEDIMENT AND DEBRIS ACCUMULATION DURING THE FIRST YEAR OF OPERATION. AFTER 50 YEARS OF SERVICE LIFE THE SYSTEM SHOULD BE EVALUATED, IF THE SYSTEM IS NO LONGER FUNCTIONING IN ACCORDANCE WITH THE ORIGINAL DESIGN, THE SYSTEM SHALL BE RESTORED OR REPLACED. THERE ARE FOUR INSPECTION PORTS AT THE CORNERS OF THE SYSTEM TO PROVIDE FOR VISUAL INSPECTION, AND A MEANS OF CLEANING SYSTEM WITH A VACUUM TRUCK. IN THE SPRING AND FALL, INSPECT THE INLET AND OUTLET FOR CLOGGING AND DEBRIS. REMOVE OBSTRUCTIONS, DEBRIS, ETC.. INSPECT THE INTERIOR OF THE STORMWATER MANAGEMENT CHAMBERS THROUGH INSPECTION PORT FOR DEBRIS EVERY FIVE YEARS. CLEAN DEBRIS FROM CHAMBERS AND FEED CONNECTORS.

EXISTING UNDERGROUND UTILITY NOTES:

1. CONTRACTOR SHALL DIG TEST PITS TO VERIFY LOCATION, SIZE AND PIPE MATERIAL OF EXISTING UNDERGROUND UTILITIES. IF ANY EXISTING UTILITIES ARE NOT IN THE LOCATION WHERE THEY ARE SHOWN ON THE PLAN, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.

GENERAL CONSTRUCTION NOTES:

1. ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE INCORPORATED PRIOR TO CONSTRUCTION. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANIES.
2. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL–OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1–800–962–7962.
3. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS & STORM SEWER LINES, SANITARY MANHOLES & SEWER LINES, WATERLINES AND OTHER UNDERGROUND UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS.
4. PIPE CONNECTIONS TO ALL CATCH BASINS SHALL BE MADE WATERTIGHT, WITH PARTICULAR ATTENTION BEING PAID TO CONNECTIONS LOCATED WITHIN 10 FEET OF SEWER MAINS (AND SERVICE LATERALS).

POST CONSTRUCTION NOTES:

1. UPON COMPLETION OF CONSTRUCTION OF THE STORMWATER FACILITIES, AS–BUILT DRAWINGS OF ALL STORMWATER PRACTICES AND AN OPERATION AND MAINTENANCE PLAN MANUAL SHALL BE PROVIDED TO THE CITY OF BEACON.

BUILDING SPRINKLER NOTES:

1. THE MANSION AND THE CHATEAU HOTEL SHALL BE PROVIDED WITH A FIRE SUPPRESSION SPRINKLING SYSTEM.
2. THE FIVE PROPOSED COTTAGES AS PART OF PHASE I SHALL ALSO BE PROVIDED WITH FIRE SUPPRESSION SPRINKLING SYSTEMS.

WATER METER NOTES:

1. THE APPLICANT/APPLICANT'S PLUMBER SHALL ACQUIRE WATER METERS AND MXU UNITS (SIGNAL SENDING AND RECEIVING UNIT) FOR ADVANCED METERING INFRASTRUCTURE (AMI) SYSTEM FROM THE CITY OF BEACON WATER DEPARTMENT. THE MXU UNIT SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING AND SHALL BE LOCATED 2 TO 3 FEET ABOVE THE EXTERIOR GROUND ELEVATION. IN CASE OF A METER LOCATED WITHIN AN UNDERGROUND CHAMBER, THE WIRING FOR THE MXU UNIT SHALL BE RUN UP THROUGH THE VENT PIPING AND THE MXU UNIT MOUNTED TO THE EXTERIOR OF THE VENT PIPE.

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.

Dig Safely. New York Call 811 before you dig

GRADING & UTILITY PLAN – NORTH
SCALE: 1" = 40'

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

DRAWN BY: CMB			CHECKED BY: MAB			
REVISIONS:			REVISIONS:			
NO.	DATE	DESCRIPTION BY	NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN CMB				
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL CMB				
14	3/29/24	PER DCDBCH COMMENTS CMB				
15	4/15/24	PER CITY AND DCDBCH COMMENTS MAB				

ARROWSTREET
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13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
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GRADING & UTILITY PLAN – NORTH

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 40'
TITLE:	GU–1
SHEET:	7 OF 29

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

SANITARY SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
SMH4	RIM = 107.10 SMH5–SMH4 INV IN = 100.91 SMH4–SMH2 INV OUT = 100.80
SMH5	RIM = 108.20 SMH6–SMH5 INV IN = 103.10 SMH5–SMH4 INV OUT = 103.00
SMH6	RIM = 120.83 SMH7–SMH6 INV IN = 115.30 SMH6–SMH5 INV OUT = 115.19
SMH7	RIM = 134.78 SMH8–SMH7 INV IN = 127.45 SMH7–SMH6 INV OUT = 127.35
SMH8	RIM = 135.02 SMH9–SMH8 INV IN = 128.86 SMH13–SMH8 INV IN = 130.50 SMH8–SMH7 INV OUT = 128.76

SANITARY SEWER PIPE TABLE			
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
SMH3–SMH2	175 LF	8 inch PVC	6.13%
SMH4–SMH2	73 LF	8 inch PVC	3.42%
SMH5–SMH4	348 LF	8 inch PVC	0.60%
SMH6–SMH5	302 LF	8 inch PVC	4.00%
SMH7–SMH6	185 LF	8 inch PVC	6.51%
SMH8–SMH7	215 LF	8 inch PVC	0.61%
SMH9–SMH8	162 LF	8 inch PVC	0.58%

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100 YEAR FLOODPLAIN LINE
- 250 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- CB 50 EXISTING CATCH BASIN

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S PROPOSED SEWER LINE
- SS SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W PROPOSED WATER LINE
- WS WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

AMENDED SITE PLAN NOTES:

THE AMENDED SITE PLANS AND ELEVATIONS IDENTIFY THE FOLLOWING CHANGES TO THE APPROVED SITE PLANS.

1. RETAIN THE DINING WING STRUCTURE WITHIN THE MANSION.
2. ELIMINATE THE 7 GROTTO ROOMS WITHIN THE MANSION.
3. ADD AN ELEVATOR AND EXTERIOR WALK IN COOLER & FREEZER ADJACENT TO THE WEST SIDE OF THE MANSION ALONG MIRBEAU LANE.
4. ELIMINATE 2 OF THE 4 MONET GARDEN PONDS.
5. DEFER THE WESTERN EMPLOYEE LOTS PAVING AND PROVIDE GRAVEL LOTS.
6. REPLACE THE PAVEMENT WITH CHIP SEAL SURFACE ON THE MAIN ENTRANCE DRIVE.
7. REPLACE VARIOUS REDI-ROCK WALLS WITH LARGE DIAMETER LANDSCAPE BOULDERS.
8. ELIMINATE THE CURB ADJACENT TO THE REDI-ROCK WALLS ALONG THE EASTERN EDGE OF THE CHATEAU EASTERN LOT AND INSTALL CONCRETE CURB STOPS AT EACH SPACE.
9. ELIMINATE THE WALKING PATH FROM THE FRONT CIRCULAR DRIVE OVER TO THE SPA ENTRANCE.
10. DEFER THE PAVEMENT ON MIRBEAU LANE FROM COTTAGE 3 TO GRANDVIEW UNTIL THE FUTURE DEVELOPMENT OF THE COTTAGES IN THE TRIANGULAR PARCEL.
11. ELIMINATE WATER SERVICE LINE TO CHATEAU HOTEL FROM CONNECTION WITH 8" SERVICE MAIN ADJACENT TO COTTAGE #4, AND PROVIDE A 6" SERVICE LINE TO THE CHATEAU HOTEL FROM THE 8" MAIN THAT CONNECTS TO THE EXISTING WATER MAIN IN HOWLAND AVENUE. THE RELOCATED 6" SERVICE LINE IS ALSO CONNECTED TO THE PREVIOUSLY APPROVED HYDRANT ON THE SOUTH END OF THE HOTEL WING.
12. INSTALLING A SECOND PRIMARY TRANSFORMER ADJACENT TO THE LAUNDRY ROOM WITHIN THE CHATEAU HOTEL.
13. INSTALLING A SECOND DUMPSTER ENCLOSURE AT THE BOTTOM OF THE DRIVE LEADING TO THE LAUNDRY ROOM WITHIN THE CHATEAU HOTEL.
14. CHANGED BIORETENTION AREA B TO AN INFILTRATION BASIN.
15. MOVED GREASE TRAP LOCATION TO THE SOUTH SIDE OF THE MANSION DINING WING.
16. MOVED ONSITE SEWER MAIN TO GATEHOUSE LANE.

GRADING & UTILITY PLAN – SOUTH
SCALE: 1" = 40'

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

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.

Dig Safely. New York. Call 811 before you dig

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB				
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB				
14	3/29/24	PER DCDBCH COMMENTS	CMB				
15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB				

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GRADING & UTILITY PLAN – SOUTH

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
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SCALE:	1" = 40'
TITLE:	GU-2
SHEET:	8 OF 29

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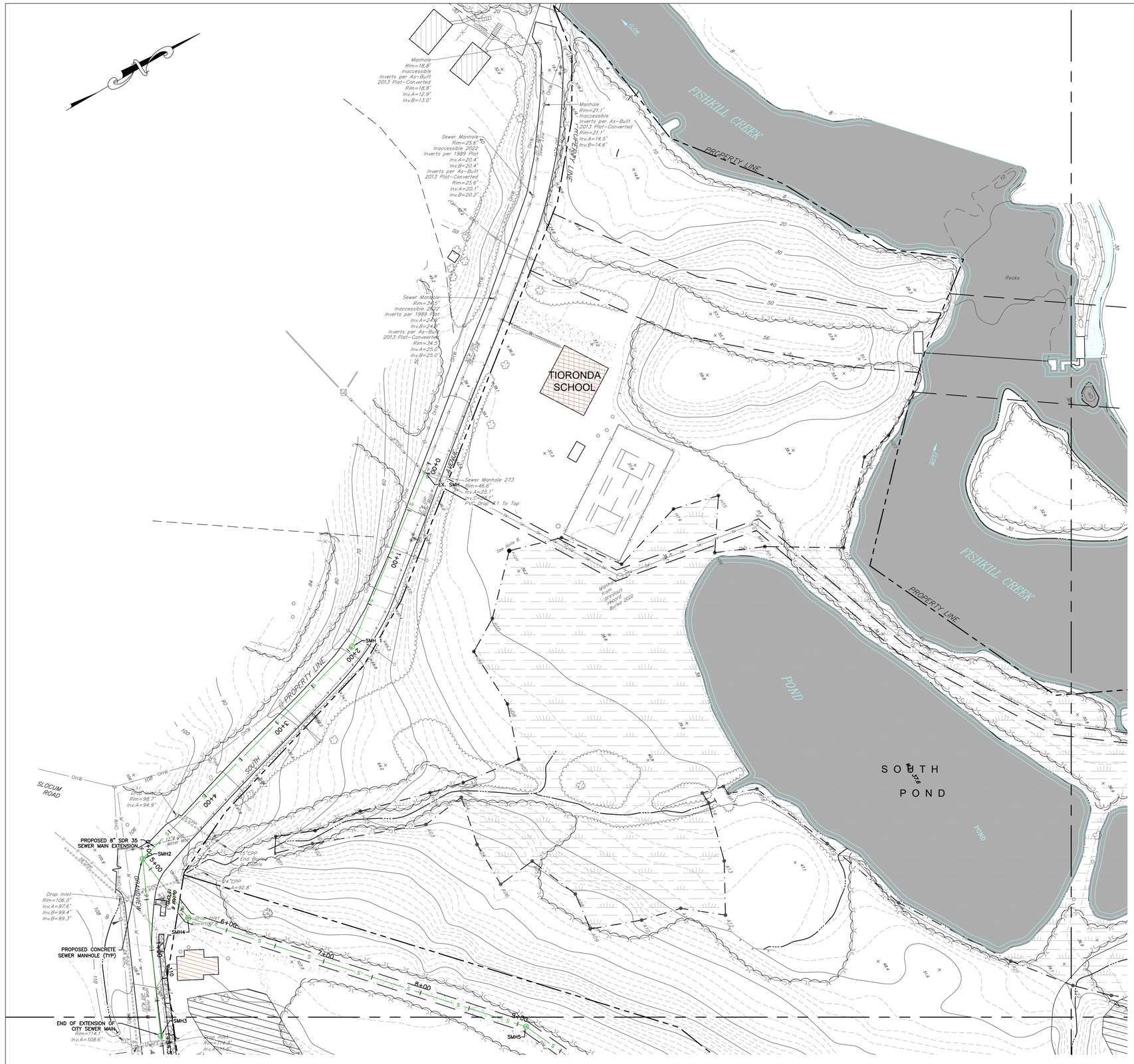

SANITARY SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
EX. SMH	RIM = 46.26 SMH1–EX. SMH INV IN = 39.00
SMH 1	RIM = 68.93 SMH2–SMH1 INV IN = 63.60 SMH1–EX. SMH INV OUT = 63.50
SMH2	RIM = 104.58 SMH4–SMH2 INV IN = 98.30 SMH3–SMH2 INV IN = 98.30 SMH2–SMH1 INV OUT = 96.80
SMH3	RIM = 114.08 SMH3–SMH2 INV OUT = 109.00
SMH4	RIM = 107.10 SMH5–SMH4 INV IN = 100.91 SMH4–SMH2 INV OUT = 100.80
SMH5	RIM = 108.20 SMH6–SMH5 INV IN = 103.10 SMH5–SMH4 INV OUT = 103.00

SANITARY SEWER PIPE TABLE			
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
SMH1–EX. SMH	185 LF	8 inch PVC	13.27%
SMH2–SMH1	293 LF	8 inch PVC	11.34%
SMH3–SMH2	175 LF	8 inch PVC	6.13%
SMH4–SMH2	73 LF	8 inch PVC	3.42%
SMH5–SMH4	348 LF	8 inch PVC	0.60%

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LEGEND:

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- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100 YEAR FLOODPLAIN LINE
- 250 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREE LINE
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- SS — EXISTING SEWER SERVICE LINE
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GRADING & UTILITY PLAN – SOUTH WEST

SCALE: 1" = 40'

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
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13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB				
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15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB				

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GRADING & UTILITY PLAN – SOUTHWEST

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 40'
TITLE:	GU-3
SHEET:	9 OF 29

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 YEAR FLOODPLAIN LINE
- 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 VALVE
- EXISTING STORM WATER LINE
- EXISTING CATCH BASIN

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- PROPOSED MAJOR CONTOUR
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- PROPOSED ROOF LEADER LINE
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- 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 PHASING LINE
- PROPOSED CATCH BASIN INLET PROTECTION
- PROPOSED CONSTRUCTION ENTRANCE

EROSION AND SEDIMENT CONTROL NOTES:

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

EROSION & SEDIMENT CONTROL PLAN – NORTH

SCALE: 1" = 40'

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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TAX ID: 6054-13-001258

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SHEET:	10 OF 29

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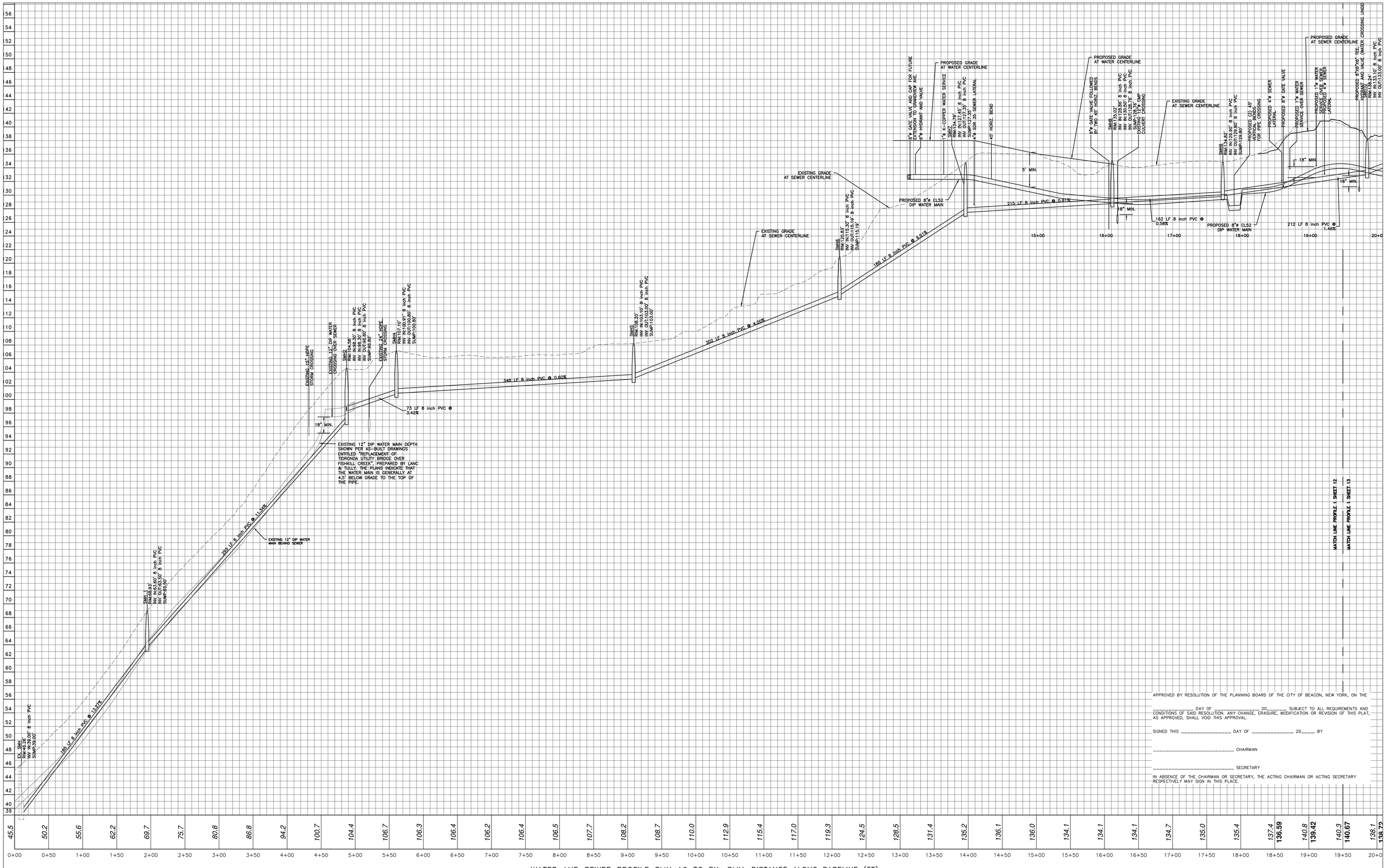
SEED AND MULCH IMMEDIATELY AFTER TRENCH IS BACKFILLED
PHASE IB – ONSITE SEWER AND WATER INFRASTRUCTURE AREA = 2.0 AC.
PHASE IV – COTTAGE AREAS 1 THROUGH 5 AREA = 1.12 AC.
PHASE V – MIRBEAU LANE WORK AND WALKING PATH AREA = 0.8 AC.
PROPOSED LIMIT OF DISTURBANCE LINE TOTAL DISTURBANCE = 15.21 AC.
PROPOSED SILT FENCE (TYP)
PHASE IB – ONSITE STORMWATER, SEWER AND WATER INFRASTRUCTURE AREA = 2.39 AC.
CONSTRUCTION PHASING LINE (TYP)
PROPOSED SOIL STOCKPILE WITH SILT FENCE PERIMETER
PROPOSED CATCH BASIN WITH INLET PROTECTION (TYP.)
ROUTE 9D
NEW YORK STATE
A.K.A. HOWLAND AVENUE
ARGENTUS
CRANDVIEW
AVENUE
Cottage #4
Cottage #5
Digitized Water Line
Asphalt Driveway
Gas Line
Gas Valve
Gas Meter
Utility Pole
Guide Rail
Concrete Pad
Fence Post
Sign
Bollard
Light Pole
Mail Box
Hydrant
Water Valve
Water Shut Off Valve
Water Meter
Well
Sewer Manhole
Sewer Clean Out
Catch Basin
Inlet
Flared End Section
Tree Line
Edge of Pavement
Edge of Gravel
Top of Bank
Toe of Slope
Retaining Wall
Stone Wall
Wood Fence
Chain Link Fence
Overhead Wire
Utility Pole
Sewer Service Line
Sewer Line
Water Service Line
Water Line
Storm Water Line
Roof Leader Line
Roof Leader
Sanitary Manhole
Sanitary Clean Out
Storm Water Manhole
Storm Water Line
Sanitary Service Line
Sanitary Sewer Line
Water Service Line



WATER AND SEWER PROFILE SMH 10 TO EX. SMH DISTANCE ALONG BASELINE (FT)

SCALE: 1" = 50' H
1" = 5' V

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SIGNED THIS _____ DAY OF _____ 20_____ BY

_____ CHAIRMAN

_____ SECRETARY

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

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB				
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB				
14	3/29/24	PER DCDBCH COMMENTS	CMB				
15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB				

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F: 845-440-6637

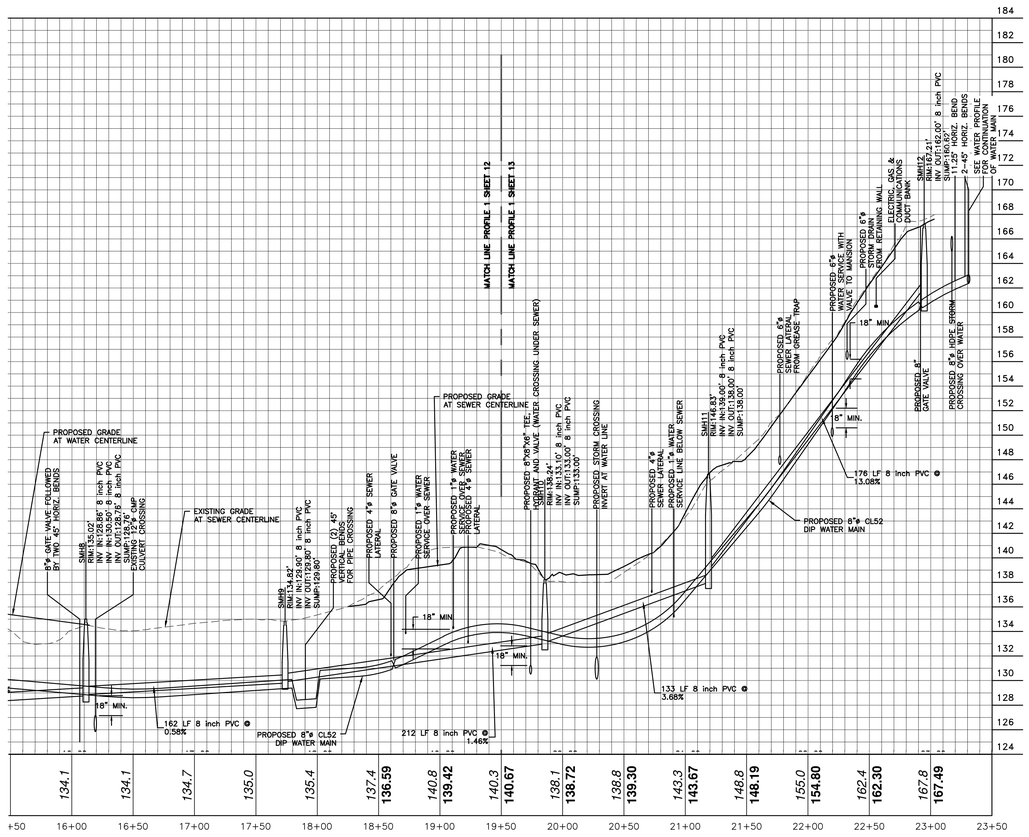
PROFILES 1

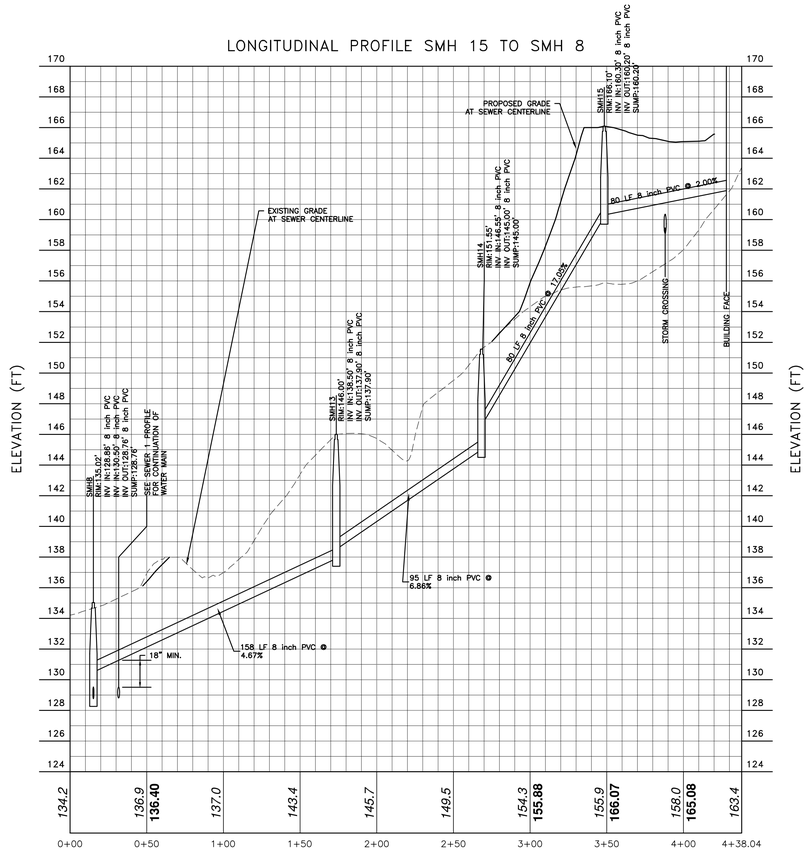
MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	AS SHOWN
TITLE:	PR-1
SHEET:	12 OF 29

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



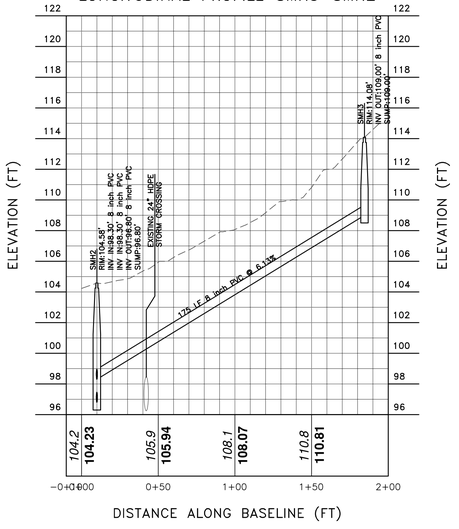


WATER AND SEWER PROFILE SMH 12 TO SMH 8

SCALE: 1" = 50' H
1" = 5' V

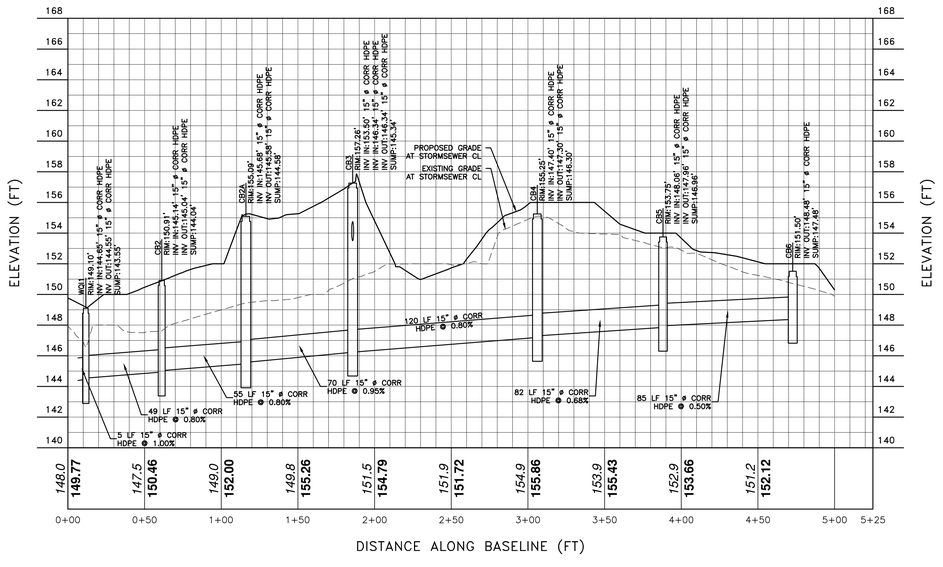
SEWER SMH 15 TO SMH 8 PROFILE

SCALE: 1" = 40' H
1" = 4' V



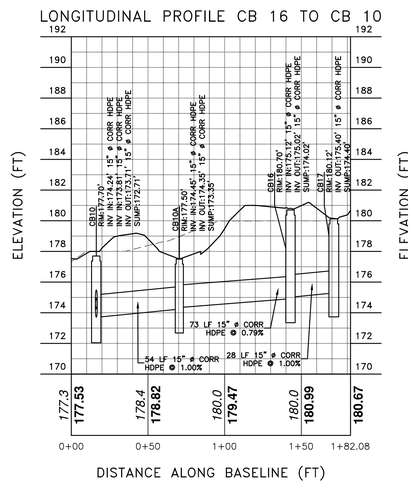
SEWER SMH 3 TO SMH 2 PROFILE

SCALE: 1" = 40' H
1" = 4' V



STORM PROFILE CB6 TO WQI1

SCALE: 1" = 40' H
1" = 4' V



STORM PROFILE CB16 TO CB10

SCALE: 1" = 40' H
1" = 4' V

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SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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REVISIONS:				REVISIONS:			
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14	3/29/24	PER DCDBCH COMMENTS	CMB				
15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB				

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PROFILES 2

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	AS SHOWN
TITLE:	PR-2
SHEET:	13 OF 29

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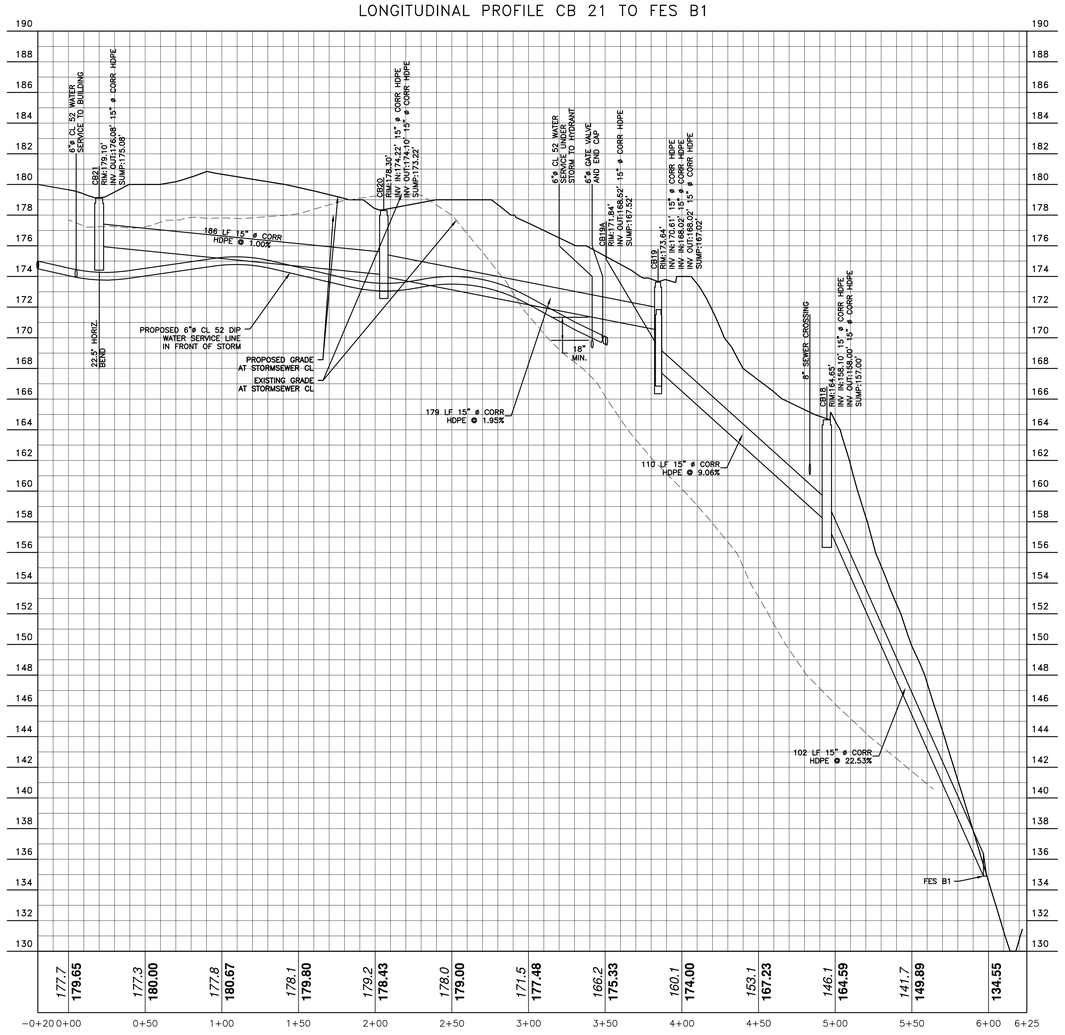
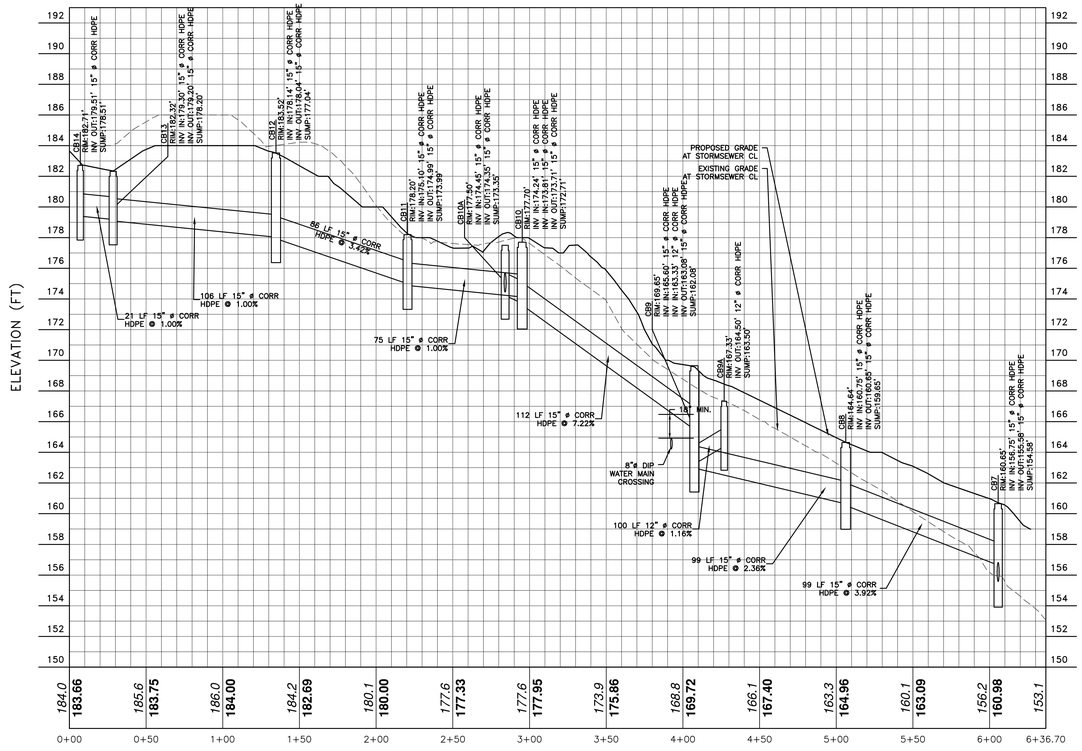
LONGITUDINAL PROFILE CB 21 TO FES B1



STORM AND WATER PROFILE CB21 TO FES B1
SCALE: 1" = 40' H
1" = 4' V

LONGITUDINAL PROFILE CB 14 TO CB 7



STORM PROFILE CB14 TO CB7
SCALE: 1" = 40' H
1" = 4' V

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PROFILES 3

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	AS SHOWN
TITLE:	PR-3
SHEET:	14 OF 29

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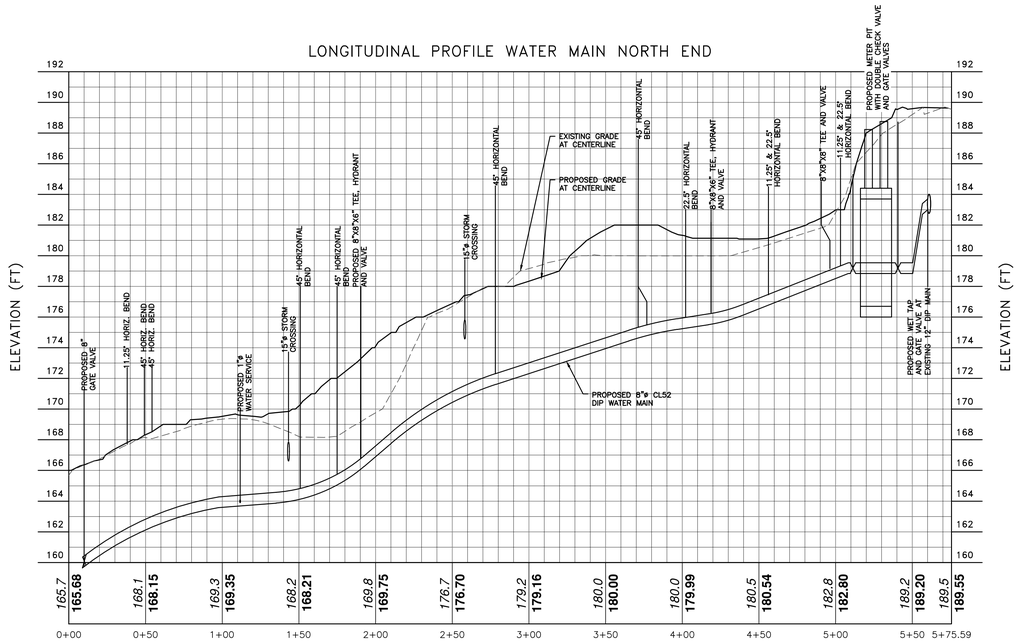
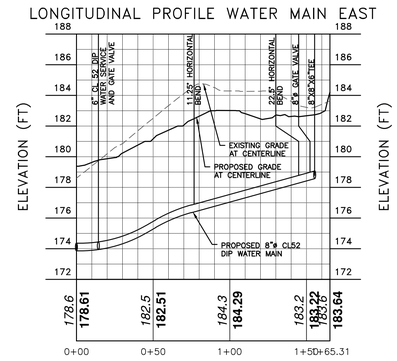


WATER PROFILE NORTH END
SCALE: 1" = 40' H
1" = 4' V



WATER PROFILE EAST
SCALE: 1" = 40' H
1" = 4' V

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MICHAEL A. BOEHNKE
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SEAL

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PROFILES 4

MIRBEAU BEACON

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CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	AS SHOWN
TITLE:	PR-4
SHEET:	15 OF 29

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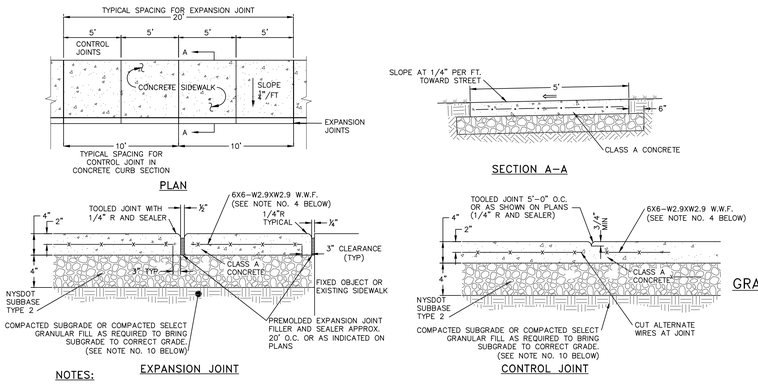
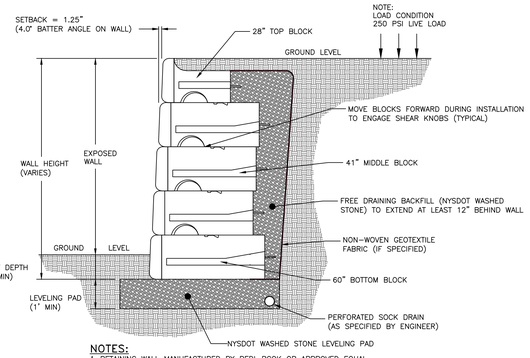


NOTES:

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.

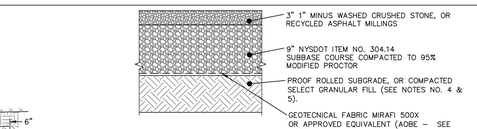
CONCRETE SIDEWALK DETAIL
NOT TO SCALE



NOTES:

1. RETAINING WALL MANUFACTURED BY REDI-ROCK OR APPROVED EQUAL.
2. REDI-ROCK WALLS ARE PROPOSED AT THE PARKING AREA NEAR BUILDINGS 1 AND 2, BEHIND BUILDING 5 & 6 AND AT THE WEST SIDE OF THE SITE ENTRANCE DRIVEWAY OFF BRANCH STREET. THE RETAINING WALL AT BUILDING 4 IS A CAST-IN-PLACE CONCRETE WALL DESIGNED BY OTHERS.
3. THE RETAINING WALL SHALL BE DESIGNED BY A NEW YORK STATE LICENSED ENGINEER AND PLANS SHALL BE SUBMITTED TO THE BEACON BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.
4. SEE MANUFACTURER'S DETAILS AND INSTALLATION GUIDELINES FOR FURTHER REQUIREMENTS.

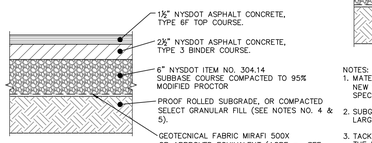
TYPICAL REDI-ROCK GRAVITY WALL WITH 41" BLOCKS
NOT TO SCALE



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. 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.
4. 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.

GRAVEL ROAD & PARKING AREA SECTION DETAIL
NOT TO SCALE



NOTES:

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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.
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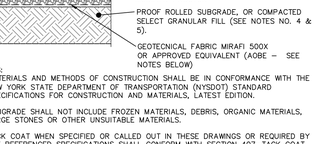
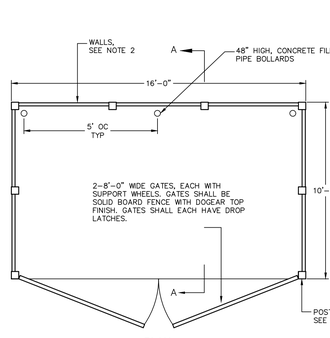
PAVEMENT SECTION DETAIL
NOT TO SCALE



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, LATEST EDITION.
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.
6. CHIP AGGREGATE COLOR SHALL MATCH THE COLOR OF THE DECOMPOSED GRANITE WALKWAYS AS SHOWN AND DETAILED ON THE LANDSCAPE SHEETS. SAMPLES OF THE AGGREGATE SHALL BE PROVIDED TO THE PROJECT OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
7. SEE SHEET C8.1 FOR CHIP SEAL SPECIFICATIONS.

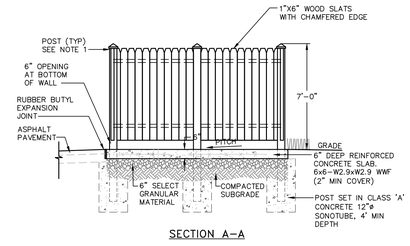
CHIP SEAL PAVEMENT SECTION DETAIL
NOT TO SCALE



PLAN

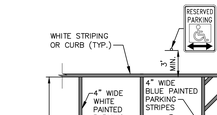
NOTES

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.



SECTION A-A

TRASH ENCLOSURE DETAILS
NOT TO SCALE



TYPICAL PARKING STRIPING

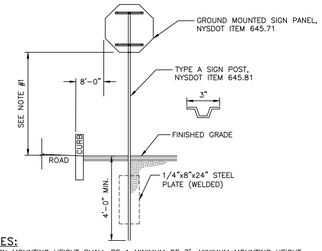
HANDICAP PARKING STRIPING

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

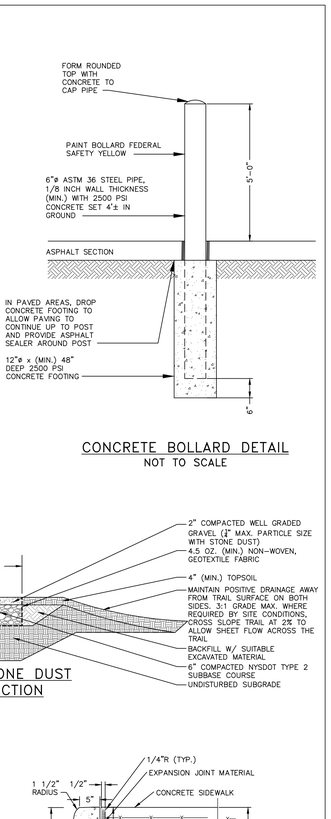
TEXT	APPROXIMTE SIZE OF SIGN	MUTCD NO.	COLOR		TYPE OF MOUNTING
			BACKGROUND	LEGEND	
STOP	30"x30"	R1-1	RED	WHITE	POST MOUNT



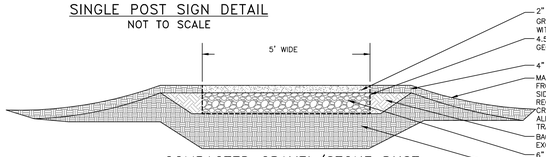
NOTES:

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. SIGN BRACING PER NYSDOT STANDARD SHEETS.
4. SIGN POSTS WITHIN THE COUNTY RIGHT-OF-WAY SHALL BE BREAKAWAY TYPE MEETING THE REQUIREMENTS OF THE NYSDOT.

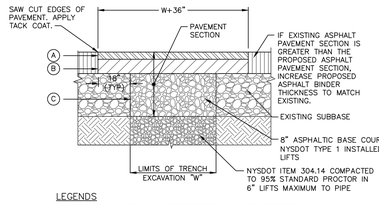
SINGLE POST SIGN DETAIL
NOT TO SCALE



CONCRETE BOLLARD DETAIL
NOT TO SCALE



COMPACTED GRAVEL/STONE DUST WALKWAY CROSS SECTION
NOT TO SCALE



LEGENDS

SOUTH AVENUE RESTORATION COURSES:

- (A) 1-1/2" ASPHALT CONCRETE TOP COURSE- NYSDOT TYPE 6F
- (B) 3-1/2" ASPHALT CONCRETE BINDER COURSE- NYSDOT TYPE 3
- (C) 3-1/2" ASPHALTIC BASE COURSE- NYSDOT TYPE 1 (4" LIFTS)

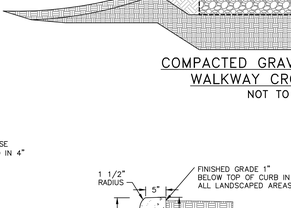
HOWLAND AVENUE RESTORATION COURSES:

- (A) 1-1/2" ASPHALT CONCRETE TOP COURSE- NYSDOT TYPE 6F
- (B) 2-1/2" ASPHALT CONCRETE BINDER COURSE- NYSDOT TYPE 3
- (C) 8" ASPHALTIC BASE COURSE- NYSDOT TYPE 1 (4" LIFTS)

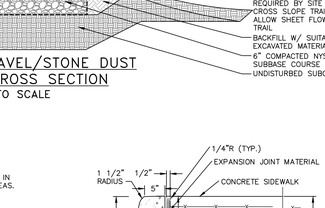
NOTES:

1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE IN TWO 4" LIFTS.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.
5. USE SOUTH AVENUE RESTORATION DETAIL FOR WORK WITHIN GRANDVIEW AVENUE.

PAVEMENT RESTORATION DETAIL
NOT TO SCALE



ABUTTING GRASS OR LANDSCAPE

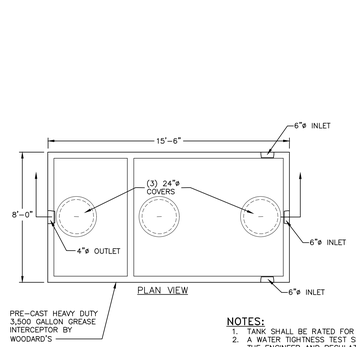


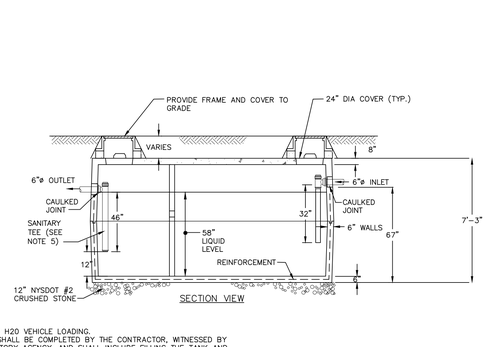
ABUTTING SIDEWALK

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

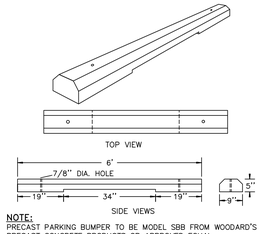




NOTES:

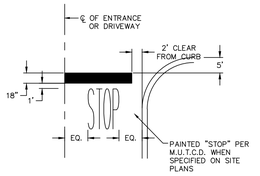
1. TANK SHALL BE RATED FOR H20 VEHICLE LOADING.
2. A WATER TIGHTNESS TEST SHALL BE COMPLETED BY THE CONTRACTOR, WITNESSED BY THE ENGINEER AND REGULATORY AGENCY, AND SHALL INCLUDE FILLING THE TANK AND MEASURING WATER LEVEL OVER A 24-HOUR PERIOD OR OTHER ACCEPTABLE METHOD.
3. ALL JOINTS SHALL BE WATER TIGHT.
4. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
5. SANITARY TEES ON OUTLET SIDE SHALL BE EXTENDED TO THE BOTTOM 1/3 OF THE TANK, BUT NO CLOSER THAN 12" TO THE TANK BOTTOM.
6. A RECORD OF MAINTENANCE OF THE GREASE INTERCEPTOR SHALL BE KEPT AND SHALL BE MADE AVAILABLE TO THE MUNICIPALITY AND/OR ITS CONSULTANTS.

PRECAST CONCRETE 3,500 GALLON GREASE INTERCEPTOR DETAIL (H20 LOAD RATED)
NOT TO SCALE

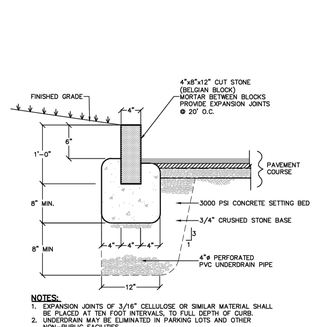


NOTE:
PRECAST PARKING BUMPER TO BE MODEL SBB FROM WOODARD'S PRECAST CONCRETE PRODUCTS OR APPROVED EQUAL.

PRECAST PARKING BUMPER DETAIL
NOT TO SCALE



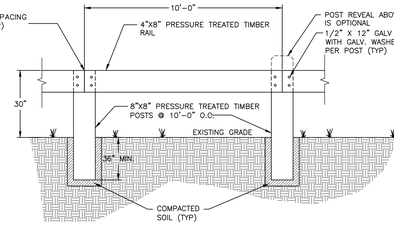
STOP BAR DETAIL
NOT TO SCALE



NOTES:

1. EXPANSION JOINTS OF 3/16" CELLULOSE OR SIMILAR MATERIAL SHALL BE PLACED AT TEN FOOT INTERVALS, TO FULL DEPTH OF CURB.
2. UNDERDRAIN MAY BE ELIMINATED IN PARKING LOTS AND OTHER NON-PUBLIC FACILITIES.

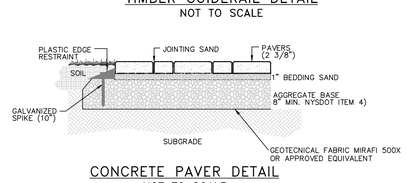
BELGIAN BLOCK CURB DETAIL
N.T.S.



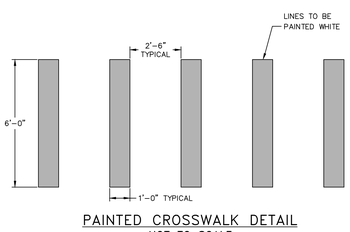
NOTES:

1. SOIL BACKFILL SURROUNDING POSTS TO BE COMPACTED.

TIMBER GUIDERAIL DETAIL
NOT TO SCALE



CONCRETE PAVER DETAIL
NOT TO SCALE



PAINTED CROSSWALK DETAIL
NOT TO SCALE

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB				
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB				
14	3/29/24	PER DCDBCH COMMENTS	CMB				
15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB				

ARROWSTREET
ARCHITECTURE & DESIGN
10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
arrowstreet.com

Mirbeau INN & SPA

LANDSCAPE ARCHITECTS:
LRC GROUP
85 Civic Center Plaza, Suite 204, Poughkeepsie NY 12601, Tel: 845.243.2880
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www.lrcconsult.com
LRC Engineering & Surveying, DPC
LRC Engineering & Surveying, LLC
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- Civil Engineering
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HUDSON LAND DESIGN

SEAL

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

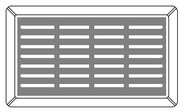
CONSTRUCTION DETAILS

MIRBEAU BEACON

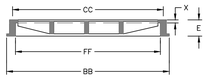
11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	AS SHOWN
TITLE:	CD-1
SHEET:	16 OF 29

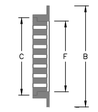
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



PLAN VIEW



SECTION VIEW 1



SECTION VIEW 2

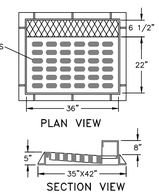
DIMENSION TABLE:

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. CATCH BASINS TO RECEIVE FLAT INLETS ARE: TBD

CAST IRON STORMWATER FLAT INLET GRATE DETAIL
NOT TO SCALE



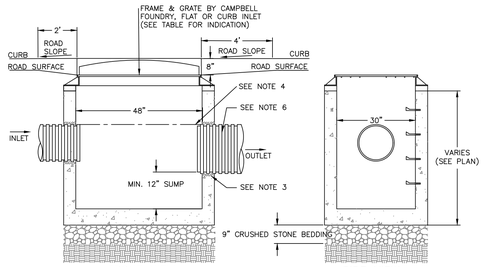
PLAN VIEW

SECTION VIEW

NOTES:

1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
2. ALL CATCH BASINS TO RECEIVE CURB INLETS UNLESS OTHERWISE NOTED.

CAST IRON STORMWATER CURB INLET GRATE DETAIL
NOT TO SCALE



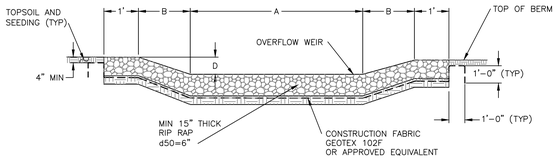
FRONT VIEW

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



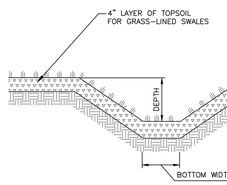
EMERGENCY OVERFLOW WEIR TABLE

SWM ID	OVERFLOW WEIR ELEVATION (FT)	DIMENSION A (FT)	DIMENSION B (FT)	DIMENSION D (IN)
INFILTRATION BASIN B FOREBAY	136.5	10	2	12
INFILTRATION BASIN B OVERFLOW WEIR	137.5	4	2	12

NOTES:

1. RIP RAP OUTLET PROTECTION SHALL BE 15" OF LIGHT STONE FILLING. STONE FILLING SIZE d50=6". RIVER ROCK MAY BE SUBSTITUTED FOR ANGULAR STONE.

EMERGENCY OVERFLOW WEIR DETAIL
NOT TO SCALE

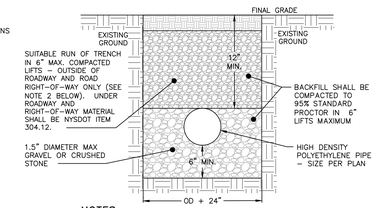


SECTION VIEW

NOTES:

1. MINIMUM 1' DEPTH AND 1' WIDTH FOR ALL SWALES.
2. SWALE SHALL BE SEEDED WITH FAST GERMINATING RYE 15 TO 25 POUNDS PER 1,000 SQUARE FEET AND MULCHED.

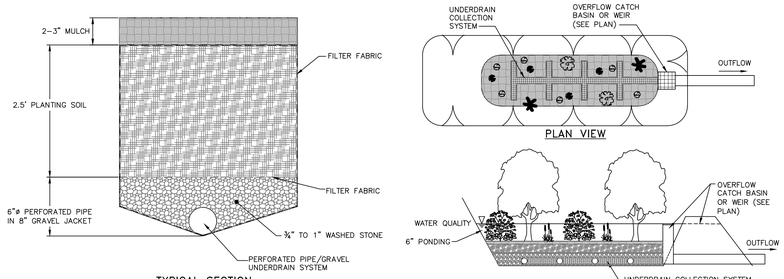
TEMPORARY GRASS LINED SWALE/DIKE DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

STORM LINE TRENCH DETAIL
NOT TO SCALE



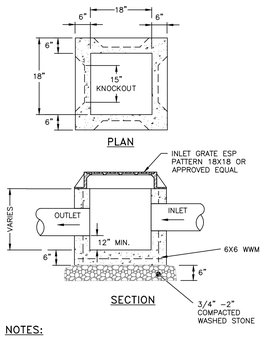
TYPICAL SECTION

PROFILE

NOTES:

1. NO RUNOFF IS TO ENTER THE BIORETENTION AREA UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.
2. LANDSCAPING TO BE PROVIDED BY THE PROJECT LANDSCAPE ARCHITECT AND AS FOLLOWS:
   - NATIVE PLANT SPECIES SHOULD BE SPECIFIED BASED ON SPECIFIED ZONE OF HYDRIC TOLERANCE
   - SELECTIONS OF TREES WITH AN UNDERSTORY OF SHRUBS AND HERBACEOUS MATERIALS SHOULD BE PROVIDED.
   - WOODY VEGETATION SHOULD NOT BE SPECIFIED AT INFLOW LOCATIONS.
   - TREES SHOULD BE PLANTED PRIMARILY ALONG THE PERIMETER OF THE FACILITY.
   - A TREE DENSITY OF 1 TREE PER 100 SQUARE FEET IS RECOMMENDED, AND SHRUBS/HERBACEOUS VEGETATION SHOULD GENERALLY BE PLANTED AT HIGHER DENSITIES (FIVE FEET ON CENTER AND 2.5 FEET ON CENTER, RESPECTIVELY).
3. SEE PLAN FOR PRETREATMENT.

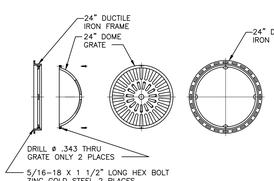
TYPICAL BIORETENTION DETAIL
NOT TO SCALE

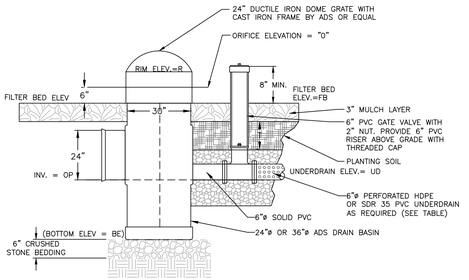


NOTES:

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. BACKFILL USING SELECT MATERIAL, COMPACTED IN 6" LIFTS.
3. SUMP SHALL BE 12".
4. FRAMES AND GRATES SHALL BE SET IN A FULL BED OF MORTAR.

PRE-CAST CONCRETE YARD INLET DETAIL
NOT TO SCALE



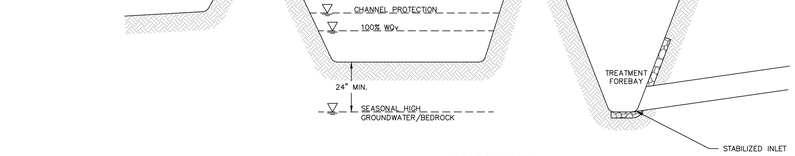


NOTES:

* UNDERDRAIN PIPE TO BE PROVIDED FOR DEWATERING PURPOSES ONLY. GATE VALVE TO REMAIN CLOSED.

OUTLET CONTROL STRUCTURE DATA

BIO ID	STRUCTURE DIMENSIONS	UNDERDRAIN PIPE REQ'D	"UD" (FT)	R (FT)	"I" (FT)	"FB" (FT)	OUTLET PIPE ø (IN)	"OP" (FT)	"O"	MIN. BERM ELEV. (FT)
B	30"X24" I.D.	YES*	134.75	138.50	2.5	138.0	15	134.75	N/A	139.00
C	30"X24" I.D.	YES*	136.75	140.5	2.5	140.00	15	136.75	N/A	141.00

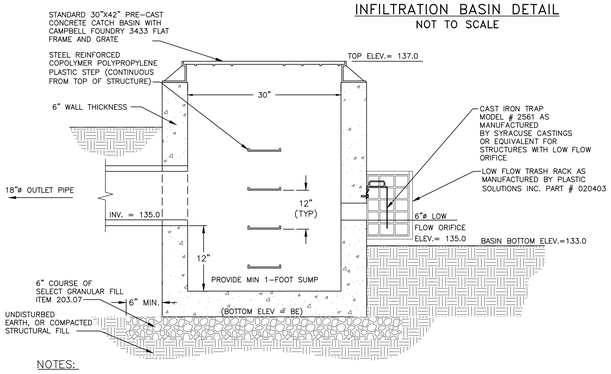


SECTION VIEW

INFILTRATION BASIN NOTES

1. THE INFILTRATION BASIN SHALL NOT SERVE AS A SEDIMENT TRAP DURING CONSTRUCTION AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITY.
2. RELATIVELY LIGHT TRACKED EQUIPMENT IS RECOMMENDED FOR CONSTRUCTION PURPOSES TO AVOID COMPACTION OF THE BASIN FLOOR.
3. A HIGHLY POROUS SURFACE TEXTURE SHALL BE RETAINED ALONG THE BASIN FLOOR, ESPECIALLY WITHIN THE AREA IDENTIFIED AS BEING USED FOR INFILTRATION.
4. ESTABLISH DENSE VEGETATION ON THE BASIN SIDE SLOPES AND FLOOR TO PREVENT EROSION AND SLOUGHING AND TO PROVIDE A NATURAL MEANS OF MAINTAINING RELATIVELY HIGH INFILTRATION RATES. GRASSES OF THE FESCUE FAMILY (ALTAI FESCUE, WESTERN FESCUE OR RED FESCUE) ARE SPECIFIED ON THIS PLAN, PRIMARILY DUE TO THEIR ADAPTABILITY TO DRY SANDY SOILS, DROUGHT RESISTANCE, HARDINESS, AND ABILITY TO WITHSTAND BRIEF INUNDATIONS. FESCUE WILL ALSO ALLOW FOR LONG INTERVALS BETWEEN MOWINGS. WHICH SHALL OCCUR TWICE PER YEAR MINIMUM, TYPICALLY IN JUNE AND SEPTEMBER IS SATISFACTORY.
5. THE BERMS SHALL BE SUFFICIENTLY COMPACTED AND OF SUCH MATERIAL TO PREVENT SEEPAGE.

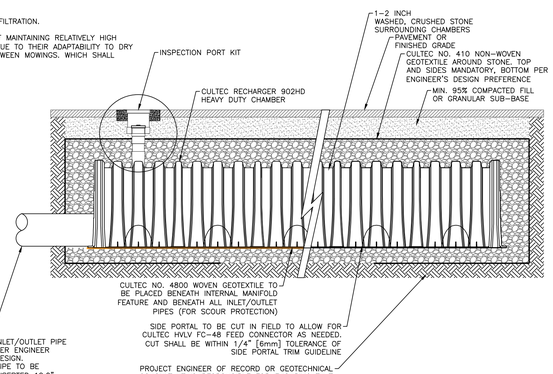
INFILTRATION BASIN DETAIL
NOT TO SCALE

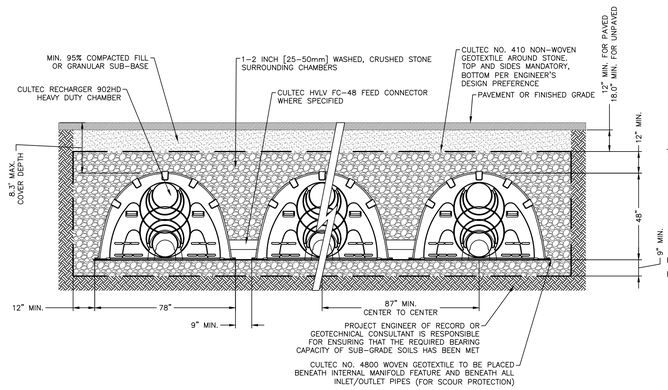


NOTES:

1. ALL TRASH RACKS SHALL HAVE UV PROTECTION MEETING OR EXCEEDING THE REQUIREMENTS OF ASTM D2565-99.
2. TRASH RACKS SHALL BE SECURED PER THE MANUFACTURER'S RECOMMENDATIONS.

INFILTRATION BASIN B OUTLET CONTROL STRUCTURE DETAIL
NOT TO SCALE



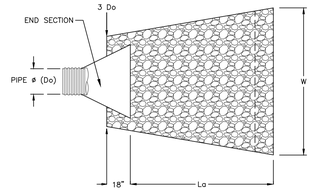


NOTES:

1. THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS." THE LOAD CONFIGURATION SHALL INCLUDE:
   1.a. INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER
   1.b. MAXIMUM PERMANENT (50-YEAR) COVER LOAD
   1.c. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD
2. THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F3430-20 "STANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS"
3. THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
   3.a. THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F3430
   3.b. THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75
   3.c. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95

UNDERGROUND DETENTION/INFILTRATION SYSTEM DETAIL
NOT TO SCALE

ADS DRAIN BASIN OUTLET CONTROL STRUCTURE DETAIL
NOT TO SCALE



SECTION VIEW

NOTES:

1. SIZING INFORMATION TAKEN FROM FIGURE 5B.12 (PAGE 5B.25) AND/OR FIGURE 5B.13 (PAGE 5B.26) OF THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" 2016 EDITION.
2. RIPRAP SHALL BE COMPOSED OF A WELL-GRADED MIXTURE OF STONE SIZE SO THAT 50% OF THE PIECES SHALL BE LARGER, BY WEIGHT, THAN THE SPECIFIED d50. THE LARGEST STONE SIZE SHALL BE 1.5 TIMES d50.
3. THE MINIMUM THICKNESS OF THE RIPRAP LAYER SHALL BE 1.5 TIMES THE MAXIMUM STONE DIAMETER FOR d50 OF 15 INCHES OR LESS; AND 1.2 TIMES THE MAXIMUM STONE SIZE FOR d50 GREATER THAN 15 INCHES.
4. A LAYER OF FILTER FABRIC (THICKNESS 20-60 MILS, GRAB STRENGTH 90-120 LBS, SHALL CONFORM TO ASTM D-1777 AND ASTM D-1682) SHALL BE PLACED BETWEEN THE RIPRAP AND THE UNDERLYING SOIL SURFACE. FILTER FABRIC SHALL HAVE A MINIMUM 1' OVERLAP AT ALL SEEMS.

OUTLET ID	PIPE ø	30o	W	La	d	d50 RIPRAP SIZE
FES A1	24 INCH X 2	12 FEET	18 FEET	30 FEET	20 INCHES	9 INCHES
FES B	18 INCH	54 INCHES	11.5 FEET	10 FEET	20 INCHES	9 INCHES
FES B1	15 INCH	45 INCHES	15.25 FEET	14 FEET	20 INCHES	9 INCHES
FES C	15 INCH	45 INCHES	5 FEET	5 FEET	14 INCHES	6 INCHES
FES D	15 INCH	45 INCHES	5 FEET	5 FEET	14 INCHES	6 INCHES

ROCK OUTLET PROTECTION DETAIL
NOT TO SCALE

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

DRAWN BY: CMB | CHECKED BY: MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB
14	3/29/24	PER DCDBCH COMMENTS	CMB
15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY

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ARCHITECTURE & DESIGN
10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
arrowstreet.com

Mirbeau INN & SPA

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160 West Street, Suite E, Cromwell, CT 06416, Tel: 860.635.2877
www.lrcconsult.com
LRC Engineering & Surveying, DPC
LRC Engineering & Surveying, LLC
LRC Environmental Services, Inc.
LRC Proj. No. 21-2809
● Landscape Architecture
● Civil Engineering
● Environmental Services
● Land Surveying
● Land Planning

HUDSON LAND DESIGN

STATE OF NEW YORK MICHAEL A. BIRCKBICHLER 084486 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

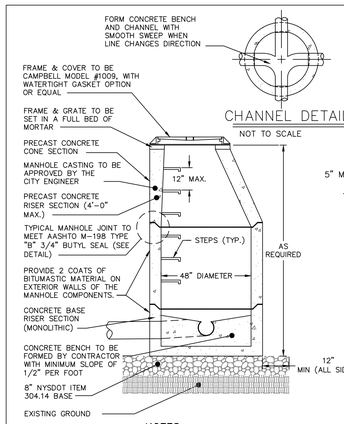
CONSTRUCTION DETAILS

MIRBEAU BEACON

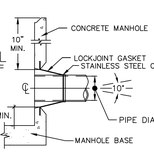
11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021.051
DATE:	3/29/2022
SCALE:	AS SHOWN
TITLE:	CD-2
SHEET:	17 OF 29

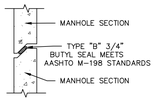
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



CHANNEL DETAIL
NOT TO SCALE



BOOT DETAIL
NOT TO SCALE

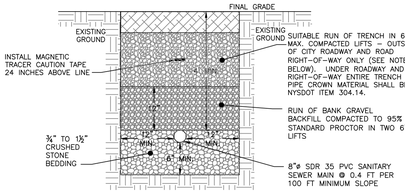


JOINT DETAIL
NOT TO SCALE

NOTES:

1. PIPE CONNECTION TO BE STANDARD "LOCKJOINT" BOOT 5" OFF BASE OF MANHOLE (SEE DETAIL).
2. CONCRETE STRENGTH OF MANHOLE COMPONENTS TO BE 4000 PSI @ 28 DAYS IN ACCORDANCE WITH ASTM C-478-86.
3. STEEL REINFORCEMENT OF MANHOLE COMPONENTS TO MEET ASTM A615-A497 REQUIREMENTS.
4. LOADING OF MANHOLE COMPONENTS TO MEET H-20 REQUIREMENTS.
5. CONCRETE USED IN MANHOLE COMPONENTS TO CONTAIN 6% AIR ENTRAINMENT.
6. 4" MAXIMUM FROM MANHOLE TO PIPE JOINT.

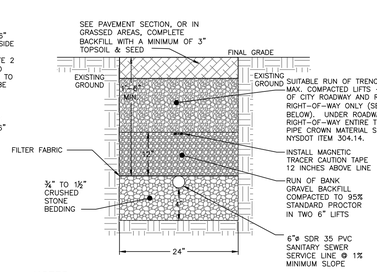
PRE-CAST CONCRETE SANITARY MANHOLE DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. SEWER MAIN MATERIAL SHALL BE 8" DIAMETER SDR-26 PVC BELL AND SPIGOT GRAVITY SEWER PIPE, WITH GASTIGHT AND WATERTIGHT JOINTS.

SANITARY SEWER MAIN TRENCH DETAIL
NOT TO SCALE



NOTES:

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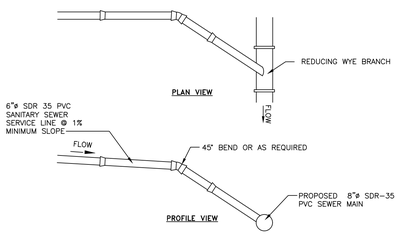
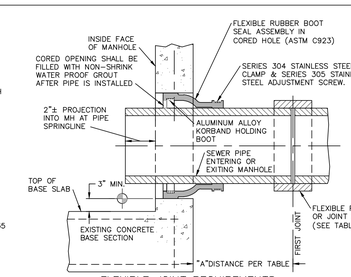
SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



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



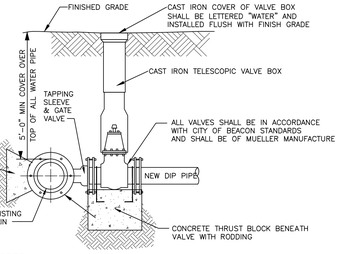
FLEXIBLE JOINT REQUIREMENTS

SEWER PIPE TYPE	FLEXIBLE JOINT TYPE IN & OUT	"A"DISTANCE (FEET)
DUCTILE IRON	STD RUBBER GASKET PIPE JOINT ONLY	10" MAX
PVC	STD RUBBER GASKET PIPE JOINT ONLY	3" MAX

NOTE:

REFERENCE MANHOLE DETAIL(S) FOR REQUIRED INVERT CHANNEL CONFIGURATION.

CORED HOLE AND INSERTED BOOT 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

SANITARY SEWER NOTES:

1. THE PROPOSED APARTMENTS ARE TO BE SERVED BY THE CITY OF BEACON MUNICIPAL SEWER SYSTEM. INSTALLATION OF ALL COMPONENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY CODE, CHAPTER 179.
2. REFER TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH STANDARD NOTES FOR ADDITIONAL PERTINENT INFORMATION.
3. THE DUTCHESS COUNTY DEPARTMENT OF HEALTH, CITY OF BEACON CHIEF SEWER OPERATOR, AND THE CERTIFYING PROFESSIONAL ENGINEER SHALL BE NOTIFIED PRIOR TO COMMENCEMENT OF THE SEWER MAIN INSTALLATION.
4. SEWER MAIN MATERIAL SHALL BE 8" DIAMETER SDR-35 OR SDR-26 PVC BELL AND SPIGOT GRAVITY SEWER PIPE, WITH GASTIGHT AND WATERTIGHT JOINTS.
5. SEWER MAIN SHALL BE LAID IN STRAIGHT ALIGNMENT. MANHOLES SHALL BE CONSTRUCTED AT ALL CHANGES IN SLOPE, ALIGNMENT OR AT INTERVALS NOT EXCEEDING 400 LINEAR FEET. STRAIGHT ALIGNMENT SHALL BE VERIFIED BY DEFLECTION TESTING.
6. THE SEWER MAIN SHALL BE INSTALLED AND TESTED FOR EXFILTRATION PRIOR TO BEING PERMITTED TO OPERATE. ALL NEW SANITARY SEWER GRAVITY LINES SHALL PASS A LOW PRESSURE AIR TEST IN ACCORDANCE WITH ASTM C-828 AT A PRESSURE OF 3.5 PSI.
7. MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH ASTM C-1244. IF PRESSURE DROP EXCEEDS THE SPECIFIED AMOUNT, THE NECESSARY REPAIRS OR REPLACEMENTS REQUIRED SHALL BE MADE TO REDUCE THE PRESSURE DROP TO WITHIN THE SPECIFIED LIMIT, AND THE TESTS SHALL BE REPEATED UNTIL THE REQUIREMENT IS MET.
8. SERVICE LATERALS SHALL BE 6" DIAMETER SDR-35 PVC WITH A MINIMUM SLOPE OF 1%, UNLESS OTHERWISE NOTED ON THE PLAN.
9. ALL SANITARY SEWER MAINS AND MANHOLES UP TO, BUT NOT INCLUDING, THE EXISTING CONNECTION MANHOLE ON BRANCH STREET SHALL BE OWNED, OPERATED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

WATER NOTES:

1. THE PROPOSED APARTMENT BUILDINGS ARE TO BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER SYSTEM. INSTALLATION OF ALL COMPONENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY CODE, CHAPTER 219.
2. REFER TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH STANDARD NOTES FOR ADDITIONAL PERTINENT INFORMATION.
3. THE WATER MAIN SHALL BE INSTALLED, PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C600 (SEE NOTES BELOW).
4. THE DUTCHESS COUNTY DEPARTMENT OF HEALTH, CITY OF BEACON WATER OPERATOR, AND THE CERTIFYING PROFESSIONAL ENGINEER SHALL BE NOTIFIED PRIOR TO COMMENCEMENT OF THE WATER MAIN INSTALLATION.
5. THE WATER MAIN SHALL BE DISINFECTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C651 (SEE NOTES BELOW).
6. WATER MAIN MATERIAL SHALL BE CLASS 52 CEMENT LINED DUCTILE IRON PIPE WITH MECHANICAL JOINTS AND SHALL MEET THE REQUIREMENTS OF AWWA C150 AND ANSI A21.51.
7. MEGALUG RESTRAINING SYSTEMS SHALL BE USED AT ALL FITTINGS, VALVES AND HYDRANTS (SEE SCHEDULE ON SHEET 14).
8. GATE VALVES SHALL BE MUELLER RESILIENT WEDGE, NON-RISING STEM, MECHANICAL JOINT.
9. HYDRANTS SHALL BE A-423 MUELLER CENTURION, WITH A MUELLER GATE VALVE BEFORE THE HYDRANT.
10. SERVICE LINES SHALL BE 6"ø CL 52 DIP, UNLESS OTHERWISE NOTED ON THE PLAN.
11. THE CONTRACTOR SHALL VERIFY THE EXISTING WATER MAIN MATERIAL AND BE PREPARED TO PROVIDE A SPECIAL COUPLING FOR CONNECTION OF THE PROPOSED DUCTILE IRON WATER MAIN.
12. A PRESSURE REDUCING VALVE SHALL BE INSTALLED FOR EACH NEW TOWNHOME, WATTS MODEL 25AUB-Z3 OR EQUAL AS APPROVED BY THE CITY OF BEACON WATER DEPARTMENT.
13. THE CITY OF BEACON SHALL OWN, OPERATE AND MAINTAIN THE WATER MAIN THROUGHOUT THE SITE, INCLUDING ALL APPURTENANCES.
14. THE HOA OR OWNER SHALL ANNUALLY EXERCISE ALL WATER VALVES.

WATER MAIN PRESSURE & LEAKAGE TESTING

GENERAL: ALL PIPING SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF AWWA C600, EXCEPT AS ADDED OR AMENDED BELOW:
1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR ANY AND ALL REQUIRED PIPE TAPS FOR TESTING, AND AS NECESSARY FOR TESTING AS SPECIFIED. EQUIPMENT WILL BE SUCH THAT THE ENGINEER MAY INSTALL HIS OWN PRESSURE GAUGE.
2. A PRESSURE TEST AND LEAKAGE TEST ARE REQUIRED FOR ALL PIPE.
3. TESTING TO BE PERFORMED ONLY AFTER PARTIAL OR COMPLETE BACKFILL AND RESTRAINT BLOCKING (USING HIGH EARLY CEMENT) HAS HAD 36 HOURS TO CURE OR BLOCKING USING STANDARD CEMENT HAS HAD 7 DAYS TO CURE.
4. THE MAIN SHALL BE PARTIALLY BACKFILLED OR BRACED AGAINST MOVEMENT DURING THE TEST. ALL AIR MUST BE BLED OUT OF THE SECTION TO BE TESTED. IF NECESSARY, CONTRACTOR SHALL INSTALL CORPORATION STOPS AT THE HIGH POINTS, FOR BLOW-OFFS. AFTER ALL AIR HAS BEEN EXPELLED, THE CORPORATION COCKS SHALL BE CLOSED AND THE PRESSURE TEST APPLIED. AFTER EXAMINATION OF EXPOSED PARTS OF THE SYSTEM, THE TEST PRESSURE SHALL BE INCREASED TO 1 1/2 TIMES THE NORMAL PRESSURE, BASED UPON THE ELEVATION OF THE LOWEST POINT IN THE LINE OR SECTION UNDER THE TEST, BUT SUCH PRESSURE SHALL NOT BE LESS THAN 150 PSI NOR MORE THAN 200 PSI, AND EXPOSED PARTS AGAIN EXAMINED. THE MINIMUM DURATION OF THE LEAKAGE TEST SHALL BE TWO (2) HOURS.
5. ALLOWABLE SYSTEM LEAKAGE AS SPECIFIED IN THE REFERENCED STANDARDS. IF LEAKAGE IN SYSTEM IS GREATER THAN ALLOWABLE, CONTRACTOR WILL LOCATE AND REPAIR SYSTEM AT HIS EXPENSE AND RETEST, CONTINUE TO TEST AND REPAIR THE SYSTEM UNTIL LEAKAGE IS WITHIN ACCEPTABLE LIMITS.
6. NO DUCTILE IRON PIPE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE IS GREATER THAN THAT DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

WHERE
L = LEAKAGE IN GALLONS PER HOUR
S = LENGTH OF PIPE TESTED, IN FEET
D = NOMINAL DIAMETER OF PIPE IN INCHES
P = AVERAGE TEST PRESSURE DURING LEAKAGE TEST, IN PSI (GAUGE)

WATERMAIN DISINFECTION & TESTING

1. THE CONTRACTOR SHALL NOTIFY THE CITY OF BEACON WATER DEPARTMENT PRIOR TO TESTING AND SHALL ALSO COORDINATE HIS ACTIONS WITH THE CITY ENGINEER SO AS TO AVOID UNDUE DISTURBANCE OF THE WATER SUPPLY TO ANY EXISTING USERS.
2. THE CONTRACTOR SHALL INFORM THE DESIGN ENGINEER'S AND CITY ENGINEER'S OFFICE A MINIMUM OF 24 HOURS PRIOR TO TESTING SUCH THAT WITNESSING CAN TAKE PLACE AND PROPER CERTIFICATIONS CAN BE ISSUED.
3. ALL NEWLY INSTALLED WATER MAINS SHALL BE FLUSHED AT A MINIMUM VELOCITY OF 2.5 FT/SECOND BEFORE AND AFTER DISINFECTION.
4. ALL WATER LINES SHALL BE DISINFECTED USING THE PROCEDURES DESCRIBED IN THE LATEST EDITION OF AWWA C651 SPECIFICATIONS FOR DISINFECTION OF WATER LINES (WITH THE EXCEPTION OF THE TABLET METHOD). WATER ENTERING THE NEW MAIN SHALL RECEIVE A DOSE OF CHLORINE FED AT A CONSTANT RATE SUCH THAT THE WATER WILL HAVE NOT LESS THAN 25 MG/L FREE CHLORINE. CHLORINE APPLICATION SHALL NOT CEASE UNTIL THE ENTIRE MAIN IS FILLED WITH HEAVILY CHLORINATED WATER.
5. DISINFECTED WATER SHALL REMAIN IN THE NEWLY INSTALLED WATER LINE FOR A MINIMUM OF 24 HOURS. AFTER THIS RETENTION PERIOD, THE HEAVILY CHLORINATED WATER SHALL BE FLUSHED FROM THE MAIN UNTIL CHLORINE MEASUREMENTS SHOW A CONCENTRATION IN THE WATER LEAVING THE MAIN HAS NO HIGHER THAN THAT GENERALLY PREVAILING IN THE SYSTEM. AT SUCH TIME, BACTERIOLOGICAL SAMPLING FOR SUBMITTAL TO STATE HEALTH LABORATORIES SHALL BE PERFORMED BY THE CONTRACTOR.
6. WATER SAMPLES SHALL BE TESTED FOR TOTAL COLIFORM, TPC (HETEROTROPHIC PLATE COUNT), TURBIDITY & COLOR.
7. CONTRACTOR WLL CONTINUE FLUSHING AND DISINFECTION OPERATION UNTIL ACCEPTABLE BACTERIOLOGICAL RESULTS ARE OBTAINED. TWO (2) SUCCESSIVE SAMPLES ARE TO BE TAKEN AT TWENTY-FOUR (24) HOUR INTERVALS.
8. THE ENVIRONMENT INTO WHICH THE HEAVILY CHLORINATED WATER IS TO BE DISCHARGED SHALL BE INSPECTED, AND IF THERE IS ANY LIKELIHOOD THAT THE CHLORINATED DISCHARGE WILL CAUSE DAMAGE, THEN A REDUCING AGENT SHALL BE APPLIED TO THE WATER TO BE WASTED TO THOROUGHLY NEUTRALIZE THE CHLORINE RESIDUAL IN THE WATER. PERMITS MAY BE REQUIRED. THE CITY ENGINEER SHALL BE NOTIFIED PRIOR TO DISPOSAL OF HIGHLY CHLORINATED WATER.

NOTES:

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

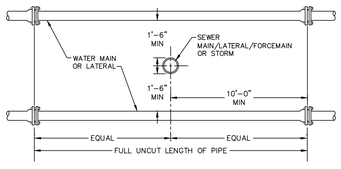
WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE

NOTES:

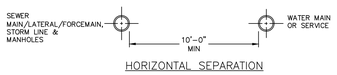
1. THE GATE VALVE SHALL BE LOCATED THIRTY SIX (36) INCHES FROM THE HYDRANT CENTER LINE.
2. ½" STEEL TIE RODS TO BE PROVIDED BETWEEN THE GATE VALVE AND THE HYDRANT.
3. ALL HYDRANTS SHALL BE PAINTED RED IN ACCORDANCE WITH NFPA AND CITY OF BEACON SPECIFICATIONS.

HYDRANT DETAIL
NOT TO SCALE

WATER MAIN TRENCH DETAIL
NOT TO SCALE



VERTICAL SEPARATION

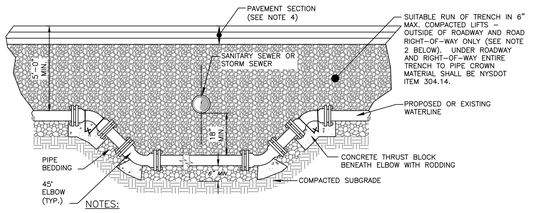


HORIZONTAL SEPARATION

NOTE:

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

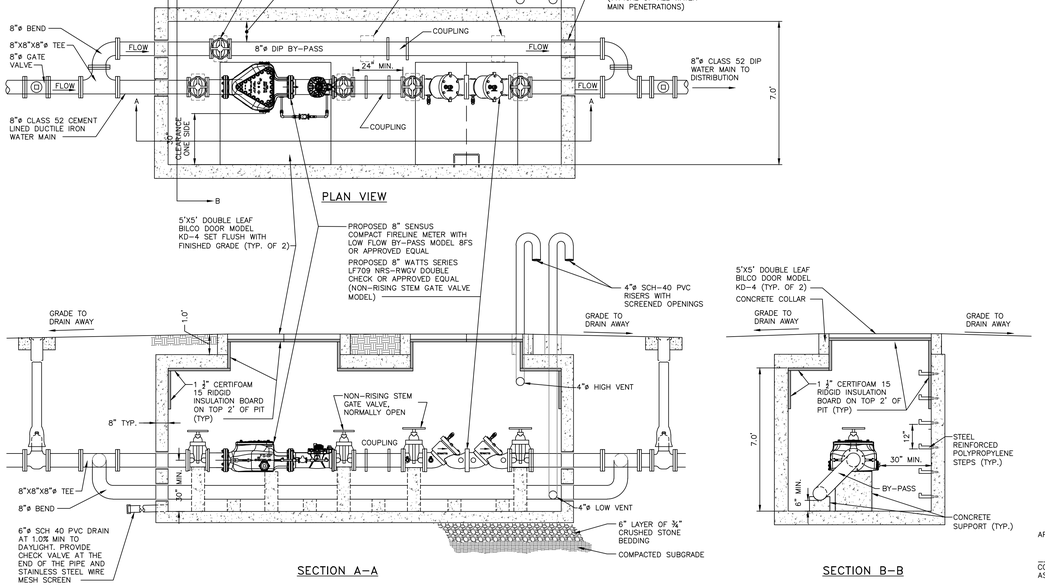
WATER LINE SEPARATION DETAIL
NOT TO SCALE



NOTES:

1. 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



1. WATER METER PIT AND ASSEMBLY AND SHOP DRAWING SHALL BE SUBJECT TO REVIEW AND FINAL APPROVAL BY THE CITY OF BEACON WATER DEPARTMENT.
2. WATER METER SHALL BE PROVIDED WITH A REMOTE READING SYSTEM WITH BRONZE WATERTIGHT ENCLOSURE. WATER PROOF REGISTERS SHALL BE PROVIDED. LOCATION SHALL BE APPROVED BY THE CITY OF BEACON WATER DEPARTMENT PRIOR TO CONSTRUCTION.
3. AN ALUMINUM WARNING PLATE SHALL BE RIVETED OR OTHERWISE PERMANENTLY ATTACHED TO THE MANHOLE COVER. THE PLATE SHALL BE A MINIMUM OF 12"x12" AND SHALL BE ENGRAVED WITH THE FOLLOWING LANGUAGE: "WARNING: CONFINED SPACE – ENTRY PROHIBITED WITHOUT AUTHORIZATION – CALL OWNER FOR APPROVAL TO ACCESS". VENTILATION SHALL CONFORM TO EXISTING LOCAL AND/OR STATE CODES AND AS PER SECTION 6.2.5 OF "RECOMMENDED STANDARDS FOR WATER WORKS – 1997" (TEN STATES STANDARDS).
4. PREPARED SURFACE (I.E., BOTTOM) OF EXCAVATION FOR PLACEMENT OF WATER METER PIT SHALL CONSIST OF A MINIMUM 9" DEPTH OF 3/4" CRUSHED STONE, LEVELED AND LAID OVER STABLE NATIVE SOIL. IF EXCAVATION REVEALS UNSTABLE SOIL MATERIAL, THIS BEDDING REQUIREMENT SHALL BE MODIFIED BY THE PROJECT ENGINEER.
5. WHEN INSTALLING FIRELINE METERS WITH A STRAINER, A MINIMUM OF TWO AND A HALF (2 1/2) PIPE DIAMETERS OF STRAIGHT RUN PIPE OR EQUIVALENT FULL OPEN COMPONENTS IS REQUIRED UPSTREAM AND DOWNSTREAM OF THE METER INLET FLANGE.
6. METER PIT TO BE PROVIDED WITH STEPS.

METER PIT DETAIL
SCALE: 1"=±3'

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

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB				
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB				
14	3/29/24	PER DCDBCH COMMENTS	CMB				
15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB				

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ARCHITECTURE & DESIGN
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BOSTON MA 02109
617.623.5555
arrowstreet.com

Mirbeau INN & SPA

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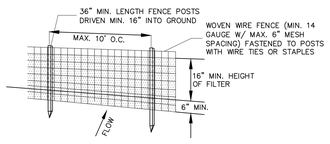
LRC GROUP
85 Civic Center Plaza, Suite 204, Poughkeepsie NY 12601, Tel: 845.243.2880
160 West Street, Suite E, Cromwell, CT 06416, Tel: 860.635.2877
www.lrcconsult.com
LRC Engineering & Surveying, DPC
LRC Engineering & Surveying, LLC
LRC Environmental Services, Inc.
LRC Proj. No. 21-2809
• Landscape Architecture
• Civil Engineering
• Environmental Services
• Land Surveying
• Land Planning

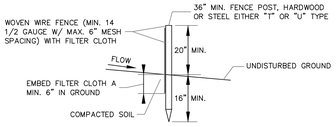
HUDSON LAND DESIGN

STATE OF NEW YORK MICHAEL A. BOKSER 084486 LICENSED PROFESSIONAL ENGINEER
SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGIN



PERSPECTIVE VIEW

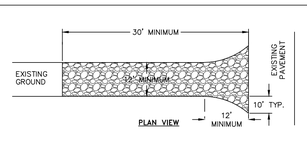


SECTION VIEW

NOTES:

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

SILT FENCE DETAIL
NOT TO SCALE



NOTES:

1) STONE SIZE – USE 1–4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.

2) LENGTH – NOT LESS THAN 30 FEET FOR A SINGLE RESIDENCE LOT.

3) THICKNESS – NOT LESS THAN SIX (6) INCHES.

4) WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.

5) GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

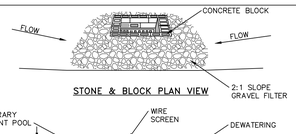
6) SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.

7) MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.

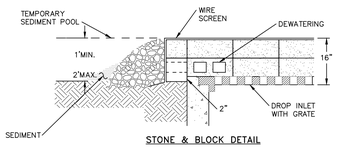
8) WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

9) PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

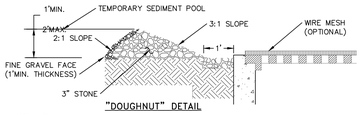
STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



STONE & BLOCK PLAN VIEW



STONE & BLOCK DETAIL

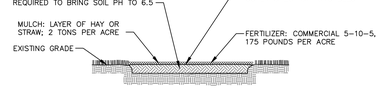


"DOUGHNUT" DETAIL

NOTES:

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2–3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE

CATCH BASIN INLET PROTECTION DETAIL
NOT TO SCALE



NOTES:

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

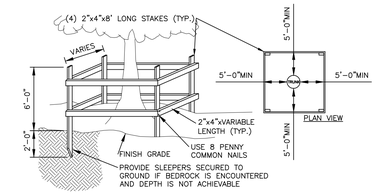
65% KENTUCKY BLUE GRASS BLEND	114 POUNDS PER ACRE
20% PERENNIAL RYEGRASS	35 POUNDS PER ACRE
15% FINE FESCUE	26 POUNDS PER ACRE
	175 POUNDS PER ACRE

3. SEED MIXTURE FOR USE IN SHADY AREAS:

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

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

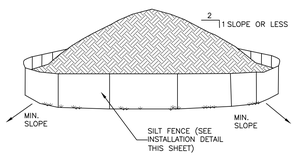
TOPSOIL, SEED AND MULCH DETAIL
NOT TO SCALE



NOTES:

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

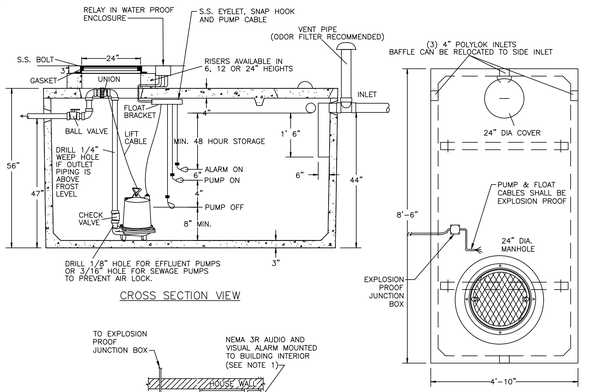
TEMPORARY TREE PROTECTION DETAIL
NOT TO SCALE



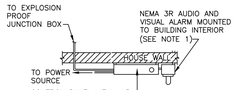
NOTES:

1. 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



CROSS SECTION VIEW



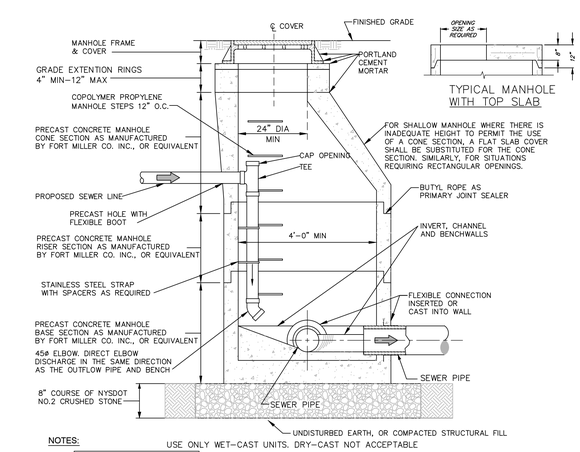
PLAN VIEW

PUMP CHAMBER NOTES

1. THREE FLOAT SWITCHES SHALL BE INSTALLED: PUMP ON, PUMP OFF, AND HIGH ALARM. VISIBLE AND AUDIBLE ALARMS SHALL BE PROVIDED. THE ALARMS SHALL BE LOCATED INSIDE THE HOUSE, CLEARLY VISIBLE AND AUDIBLE.
2. ALL ELECTRICAL WORK AND MATERIAL FOR PUMP INSTALLATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE.
3. AN ELECTRICAL UNDERWRITER'S CERTIFICATE FOR THE PUMP CHAMBER MUST BE PROVIDED TO THE ORANGE COUNTY DEPARTMENT OF HEALTH PRIOR TO THE ORANGE COUNTY DEPARTMENT OF HEALTH CONDUCTING A FINAL INSPECTION ON THE PUMP CHAMBER.
4. THERE SHALL BE A MINIMUM OF 2.5' COVER OVER THE CONDUIT CONVEYING THE FLOAT PUMP CABLES AND CONTROL WIRING. CONDUITS FROM ALARM BOX AND CONTROL PANEL TO RELAY PANEL AT PUMP CHAMBER SHALL SHARE THE SAME TRENCH.
5. PROVIDE ADDITIONAL CONDUIT FOR CONTROL WIRING AS PER THE MANUFACTURERS RECOMMENDATIONS. MINIMUM COVER SHALL BE 2.5'.
6. AN ALUMINUM WARNING PLATE SHALL BE RIVETED OR OTHERWISE PERMANENTLY ATTACHED TO THE CHAMBER COVER. THE PLATE SHALL BE A MINIMUM OF 12"x12" AND SHALL BE ENGRAVED WITH THE FOLLOWING LANGUAGE: "WARNING – CONFINED SPACE – ENTRY PROHIBITED WITHOUT AUTHORIZATION – CALL OWNER FOR APPROVAL TO ACCESS".
7. CONTROL PANELS SHALL BE LOCATED WITHIN THE BUILDING.
8. 4" ø SDR PVC SCREENED VENT SHALL EXTEND TO BUILDING ROOF LINE (REFER TO NOTE 12).
9. A WATER TIGHTNESS TEST SHALL BE COMPLETED BY THE CONTRACTOR, WITNESSED BY THE ENGINEER, AND SHALL INCLUDE FILLING THE TANK AND MEASURING WATER LEVEL.
10. CONTRACTOR SHALL CAULK INLET AND OUTLET JOINTS AND OTHER CONDUIT PENETRATIONS.
11. INSTALL STAINLESS STEEL GUIDE RAIL FOR PUMP REMOVAL AND MAINTENANCE.
12. LOCATION OF 4" DIA. SDR PVC VENTILATION PIPE SHALL BE APPROVED BY THE OWNER AND SHALL PROVIDE POSITIVE SLOPE TO SURFACE (IE: NO DIPS OR SAGS ALLOWED). THE INVERT OF THE VENT PIPE SHALL MATCH INLET INVERT. THE VENT PIPE SHALL BE SECURELY MOUNTED TO THE EXTERIOR OF THE BUILDING AND SHALL VENT A MINIMUM OF 12" ABOVE ROOF LINE. VENT PIPE AND BRACKETS TO MATCH EXTERIOR HOUSE COLOR. BUILDING OWNER HAS THE OPTION TO TIE VENT TO INTERIOR VENTING PIPING.
13. ALL ELECTRICAL WORK AND MATERIAL FOR PUMP INSTALLATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE.
14. AN ELECTRICAL UNDERWRITER'S CERTIFICATE FOR THE PUMP CHAMBER MUST BE PROVIDED TO THE DEPARTMENT PRIOR TO THE DEPARTMENT CONDUCTING A FINAL INSPECTION ON THE PUMP CHAMBER.
15. A PROFESSIONAL ENGINEER SHALL CERTIFY INSTALLATION AND TESTING OF PUMP CHAMBER TO PUTNAM COUNTY DEPARTMENT OF HEALTH.
16. PRE–CAST PUMP CHAMBER SHOWN IS GT–750, 750 GALLON RESIDENTIAL PUMP CHAMBER BY EXPANDED SUPPLY PRODUCTS, INC. 3330 ROUTE 9, COLD SPRING, NY 10516 (845) 265–3771.
17. PROVIDE AN ALL WEATHER JUNCTION BOX WITH AN OUTLET AND SCREWED COVER AT OR ABOVE GRADE AT THE PUMP CHAMBER TO ALLOW FOR A PLUG IN CONNECTION FOR THE PUMP.

DOSE			STORAGE (1 DAY)						
TOP OF TANK ELEVATION	DEPTH	VOLUME (GAL)	REQ'D (GAL)	DEPTH PROVIDED	VOLUME PROVIDED (GAL)	PUMP MAKE AND MODEL	FORCE MAIN SIZE	NO. OF PUMPS	PUMP TANK MODEL
155.0	4"	86.4	120	26"	562.3	GOULDS, MODEL 2WD 3/4 HP	2"	1	GT–750 PUMP CHAMBER

PUMP CHAMBER DETAIL
NOT TO SCALE



TYPICAL MANHOLE WITH TOP SLAB

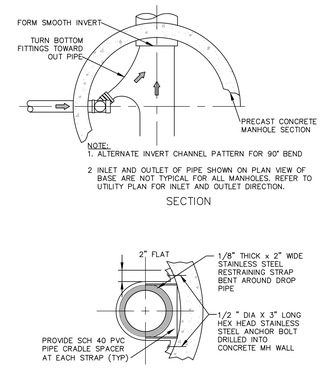
NOTES: USE ONLY WET–CAST UNITS. DRY–CAST NOT ACCEPTABLE

1.

CONE DIMENSIONS	
DIAM. OPENING	HEIGHT
24"	24" OR 42"
30"	34"

2. INVERT SHALL BE FILLETED.
3. REINFORCEMENT FOR MANHOLE AND SLAB TOP SHALL BE DESIGNED BY A LICENSED NEW YORK STATE PROFESSIONAL ENGINEER PRIOR TO CONSTRUCTION. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW. STRUCTURE SHALL BE DESIGNED FOR HS20–44 VEHICULAR LOADING PLUS 25% IMPACT.
4. CONCRETE TO TEST 4000 P.S.I. AT 28 DAYS IN CONFORMANCE WITH A.S.T.M. C–478–68.
5. BENCH SHALL BE BUILT FOR FLOW BETWEEN INLET AND OUTLET.
6. EACH MANHOLE EXTERIOR SHALL RECEIVE TWO BITUMINOUS COATS.

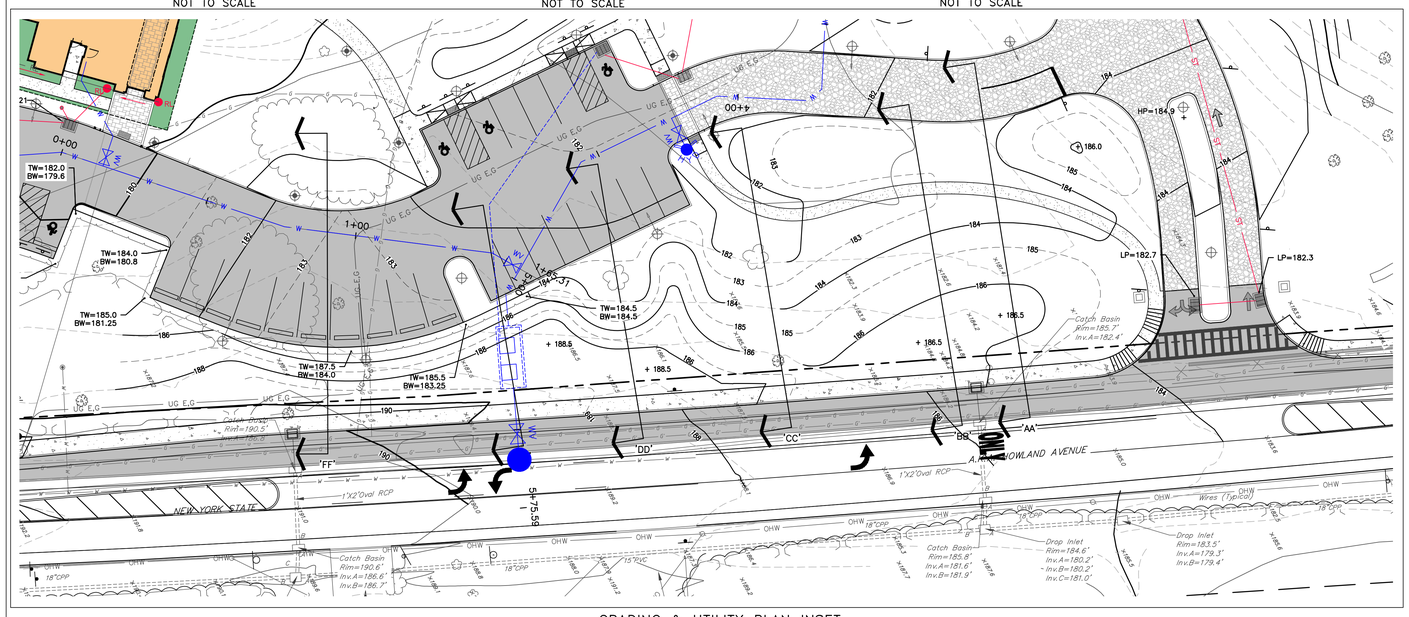
FORCE MAIN CONNECTION TO SEWER MANHOLE DETAIL
NOT TO SCALE



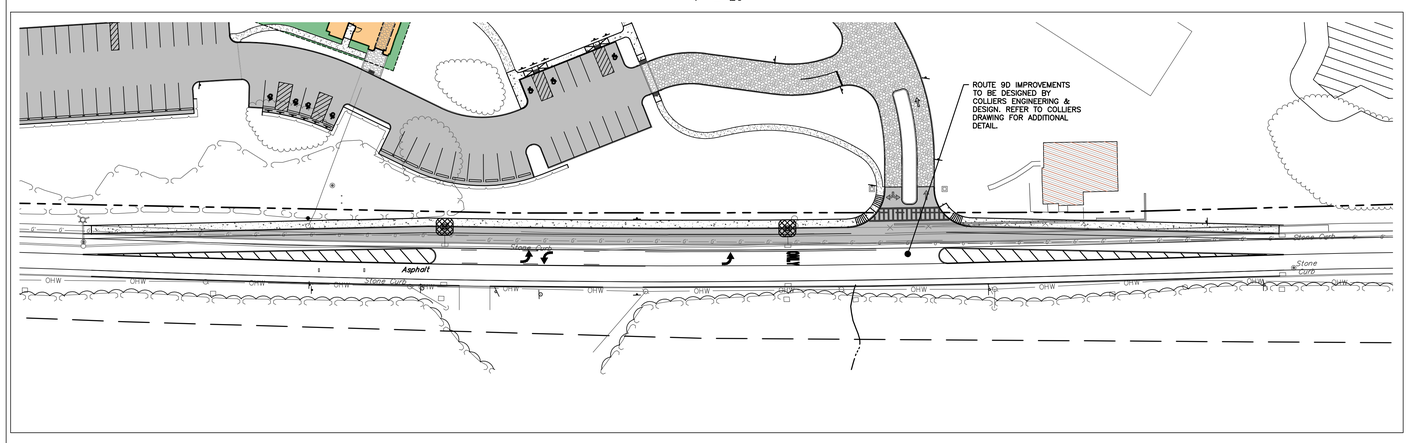
NOTE:
1. ALTERNATE INVERT CHANNEL PATTERN FOR 90° BEND
2 INLET AND OUTLET OF PIPE SHOWN ON PLAN VIEW OF BASE ARE NOT TYPICAL FOR ALL MANHOLES. REFER TO UTILITY PLAN FOR INLET AND OUTLET DIRECTION.

SECTION

RESTRAINING STRAP



GRADING & UTILITY PLAN INSET
1" = 20'



NYS DOT ENTRANCE DETAIL
1" = 40'

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.

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_____ CHAIRMAN

_____ SECRETARY

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

DRAWN BY: CMB | CHECKED BY: MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB
14	3/29/24	PER DCDBCH COMMENTS	CMB
15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY

ARROWSTREET
ARCHITECTURE & DESIGN
10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
arrowstreet.com

Mirbeau INN & SPA

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85 Civic Center Plaza, Suite 204, Poughkeepsie NY 12601, Tel: 845.243.2880
160 West Street, Suite E, Cromwell, CT 06416, Tel: 860.635.2877
www.lrcconsult.com
LRC Engineering & Surveying, DPC
LRC Engineering & Surveying, LLC
LRC Environmental Services, Inc.
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● Civil Engineering
● Environmental Services
● Land Surveying
● Land Planning

HUDSON LAND DESIGN

STATE OF NEW YORK – MICHAEL A. BENSON – 084455 – 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

CONSTRUCTION DETAILS

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054–13–001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	AS SHOWN
TITLE:	CD–4
SHEET:	19 OF 29

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

LEGEND:

STANDING STUMP (BEECH)	EXISTING TREE TO BE REMOVED
12" NORWAY MAPLE	EXISTING TREE TO BE REMOVED (IDENTIFIED, BUTNOT SHOWN ON BACKGROUND SURVEY)
30" SUGAR MAPLE	EXISTING TREE TO REMAIN AND PROTECT
18" LARCH	EXISTING TREE TO REMAIN AND PROTECT (IDENTIFIED, BUT NOT SHOWN ON BACKGROUND SURVEY).

NOTES:

1. SEE SPECIFICATIONS FOR ADDITIONAL TREE PROTECTION REQUIREMENTS.
2. IF THERE IS NO EXISTING IRRIGATION, SEE SPECIFICATIONS FOR WATERING REQUIREMENTS.
3. NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
4. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL EXCEPTING EQUIPMENT REQUIRED TO REMOVE IMMEDIATELY ADJACENT TREES OR CLUMPS OF VEGETATION. IN THOSE CASES, CARE SHALL BE TAKEN TO MINIMIZE IMPACT ON THE ROOTS ZONE OF THE EXISTING TREE TO REMAIN.
5. NO STOCKPILING OF MATERIALS OR EQUIPMENT SHALL OCCUR WITHIN THE TREE PROTECTION ZONES.
6. TREES MAY BE PROTECTED WITH FENCING INDIVIDUALLY OR IN MASS DEPENDING ON THE PARTICULAR CIRCUMSTANCES ENCOUNTERDED.
7. TREE REMOVAL CONTRACTOR SHALL TAKE EXTREME CARE WITH TREES IDENTIFIED FOR SPECIAL CARE OR CONSIDERATION. FOR THOSE TREES, AN ARBORIST SHALL BE RETAINED AND CONSULTED PRIOR TO COMMENCING CLEARING OR EARTHWORK ACTTIVIES TO ADVISE ON SPECIAL MEASURES NECESSARY TO PROTECT THESE TREES. THE ARBORIST SHALL REMAIN AVAILABLE TO CONSULT ON ONGOING ACTIVITIES PAST CLEARING AND SHALL MAKE PERIODIC VISITS TO THE SITE TO ADVISE ON THE MAINTENANCE OR NECESSARY ENHANCEMENT OF PROTECTION MEASURES IN PLACE.
8. COVER EXPOSED ROOT SYSTEMS OF TREES TO REMAIN WITH 8–10" OF WOOD CHIPS AND KEEP MOIST AT ALL TIMES.
9. TREES TO REMAIN WITHIN ACTIVE CONSTRUCTION ZONE SHALL BE WATERED THE EQUIVALENT OF 1" OF WATER FOR EVERY 10 DAYS FROM MAY THROUGH SEPTEMBER EXCEPTING ACCOUNTING FOR NATURAL RAINFALL.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MITIGATING CONSTRUCTION RELATED DUST ACCUMULATION ON ALL TREES BY SPRAYING THE TRUNKS, LIMBS, AND FOLIAGE WITH WATER TO A MAXIMUM HEIGHT OF 30 FEET DURING THE MONTHS OF APRIL THROUGH NOVEMBER AT MONTHLY INTERVALS.

GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

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REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	2/27/24	AMENDED SITE PLAN					
2	3/26/24	PER PB COMMENTS					

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TREE REMOVAL & PROTECTION PLAN – NORTH
MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	5/25/2022
SCALE:	1" = 40'
TITLE:	TP-2
SHEET:	20 OF 29

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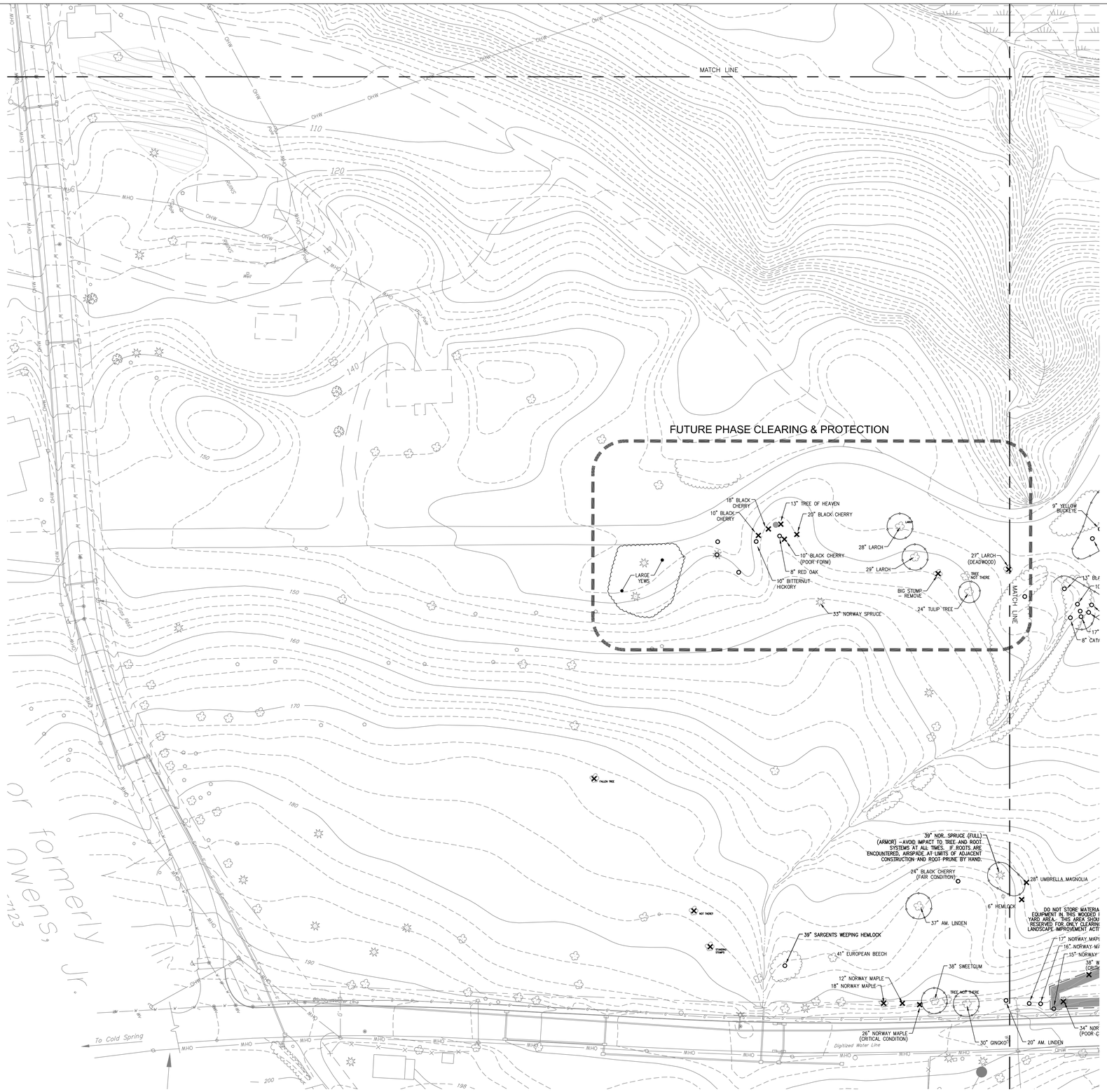
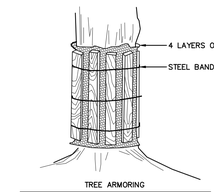
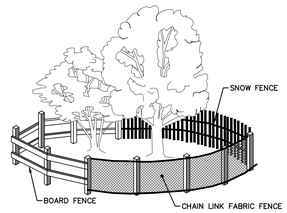




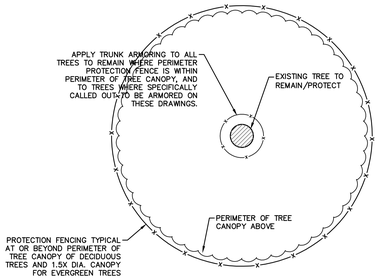
TREE ARMORING

CONSTRUCTION AREA WHERE PAVED SURFACES MAKE IT IMPRACTICAL TO ESTABLISH TREE PROTECTION ZONE.



FENCING AT TREE PROTECTION ZONES

INSTALL ONE OF THE FENCE TYPES (MIN. FENCE HT. 42") NOTED ABOVE UNLESS SPECIFICALLY INDICATED ON PLANS. MAY BE INSTALLED CONTINUOUSLY AROUND GROUPS OF TREES TO REMAIN.



X TREE PROTECTION DETAIL
SCALE: N.T.S.

GRAPHIC SCALE
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SCALE IN FEET

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TREE PROTECTION & REMOVAL PLAN – SOUTH

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	5/22/2022
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SHEET:	21 OF 29

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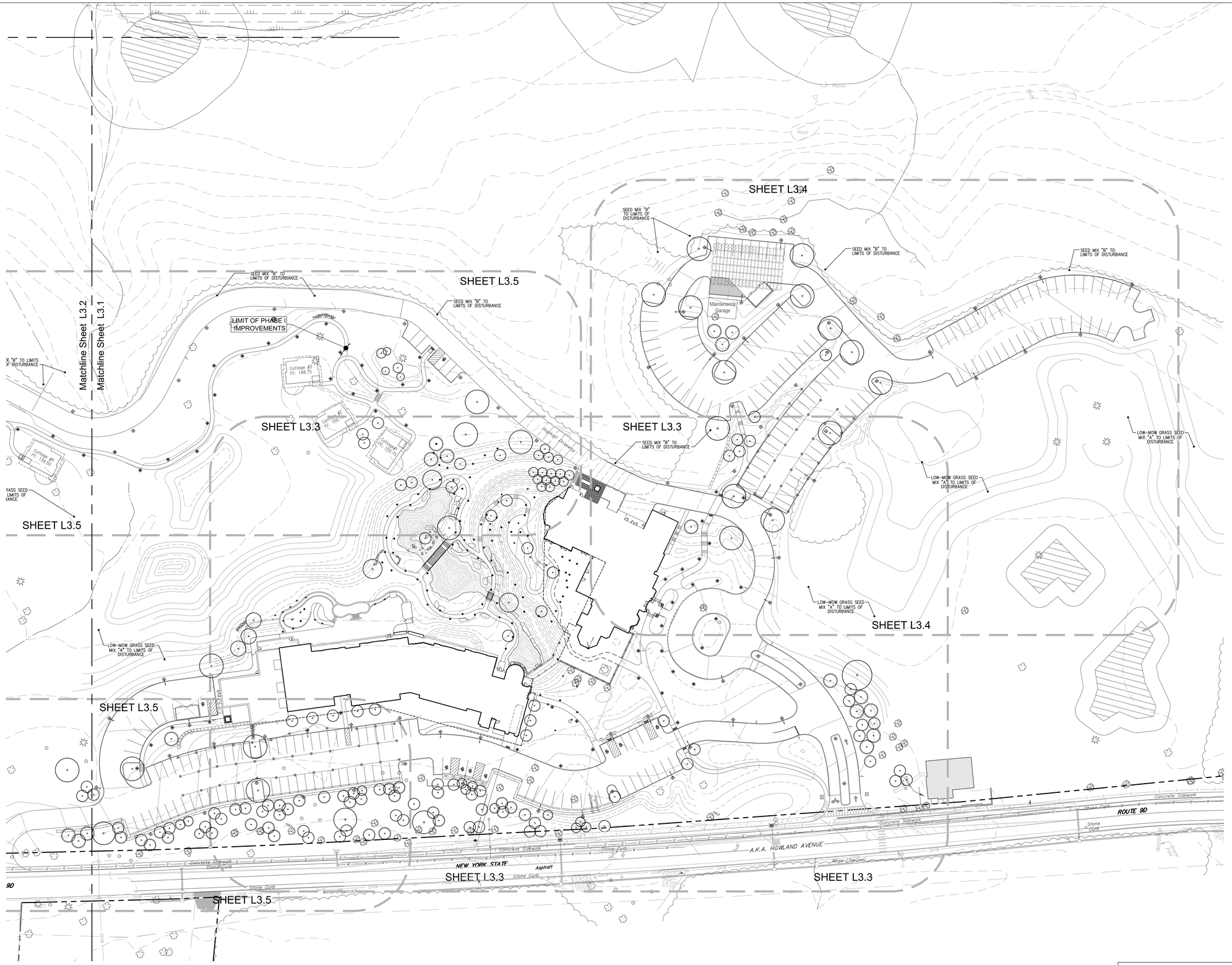

LEGEND:

- Existing Trees
- Deciduous Shade / Major Trees
- Ornamental and Flowering Trees (Understory Scale)
- Evergreen Trees (Major & Minor)
- Low Shrub Mass - 3-4' ht.
- Groundcovers
- Perennials and Grasses

SEEDING LEGEND:

SEED MIX A	=	LOW - MOW LAWN
SEED MIX B	=	SHADED ROADSIDE MIEX
SEED MIX C	=	RAIN GARDEN GRASS MIX
SEED MIX D	=	LOW-GROWING WILDFLOWER & GRASS MIX

PLANTING NOTES:

1. THE LANDSCAPE PLAN AND DETAIL SHEET ARE FOR LANDSCAPING INFORMATION ONLY. PLEASE REFER TO THE SITE LAYOUT PLAN, LIGHTING PLAN, GRADING PLAN AND UTILITIES PLAN FOR ALL OTHER INFORMATION.
2. THE CONTRACTOR SHALL GUARANTEE THAT ALL PLANTS, TREES, AND SHRUBS SHALL BE HEALTHY AND FREE OF DISEASE FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION AND ACCEPTANCE BY OWNER OR LANDSCAPE ARCHITECT. CONTRACTOR SHALL REPLACE ANY DEAD OR UNHEALTHY PLANTS AT CONTRACTOR'S EXPENSE. PLANT MATERIAL REPLACEMENTS SHALL BE GUARANTEED FOR ONE FULL YEAR FROM DATE OF REPLACEMENT. FINAL ACCEPTANCE SHALL BE MADE IF ALL PLANTS MEET THE GUARANTEE REQUIREMENTS INCLUDING MAINTENANCE. MAINTENANCE RESPONSIBILITIES INCLUDE CULTIVATING, SPRAYING, WEEDING, WATERING, TIGHTENING GUYS, PRUNING, FERTILIZING, MULCHING, AND ANY OTHER OPERATIONS NECESSARY TO MAINTAIN PLANT VIABILITY. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND CONTINUE UNTIL THE END OF THE ONE YEAR GUARANTEE PERIOD.
3. THE CONTRACTOR SHALL SUPPLY ALL LABOR, PLANTS, AND MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE DRAWINGS AND LISTED IN THE PLANT SCHEDULE. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE PLANT SCHEDULE AND THOSE REQUIRED BY THE DRAWINGS, THE LARGER SHALL APPLY.
4. ALL SHRUB MASSINGS SHALL BE MULCHED TO A DEPTH OF 3". ANNUAL AND PERENNIAL BEDS SHALL BE MULCHED TO A DEPTH OF 2" WITH SHREDDED HARDWOOD BARK MULCH.
5. NO PLANT SHALL BE PLACED IN THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY ENGINEER. STAKING THE LOCATION OF ALL TREES AND SHRUBS SHALL BE COMPLETED PRIOR TO PLANTING FOR APPROVAL BY THE OWNER OR LANDSCAPE ARCHITECT. STAKING OF THE INSTALLED TREE MUST BE COMPLETED THE SAME DAY AS IT IS INSTALLED. ALL TREES SHALL BE STAKED OR GUYED PER DETAIL. SEE SHEET 38 FOR PLANTING DETAILS.
6. COORDINATE PLANT MATERIAL LOCATIONS WITH SITE UTILITIES. SEE SITE LAYOUT, GRADING AND UTILITY DRAWINGS FOR STORM, SANITARY AND WATER LINES. SEE LIGHTING PLAN FOR ELECTRICAL AND LIGHTING LAYOUT AND DETAILS. UTILITY LOCATIONS ARE APPROXIMATE. EXERCISE CARE WHEN DIGGING IN AREAS OF POTENTIAL CONFLICT WITH UNDERGROUND OR OVERHEAD UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO CONTRACTOR'S NEGLIGENCE AND SHALL REPLACE OR REPAIR ANY DAMAGE AT CONTRACTOR'S EXPENSE.
7. LANDSCAPE PLANTING PITS MUST BE FREE DRAINING. PAVEMENT, COMPACTED SUBGRADE, AND BLASTED ROCK SHALL BE REMOVED FROM WITHIN TRAFFIC ISLANDS TO BE LANDSCAPED TO A DEPTH OF 2' OR TO A GREATER DEPTH IF REQUIRED BY PLANTING DETAILS OR SPECIFICATIONS. REPLACE SOIL WITHIN ISLANDS WITH MODERATELY COMPACTED LOAM OR SANDY LOAM FREE FROM STONES AND RUBBISH 1" OR GREATER IN DIAMETER AND ANY OTHER MATERIAL HARMFUL TO PLANT GROWTH AND DEVELOPMENT. PLANTING INSTALLATION WITHIN ISLANDS SHALL BE AS DETAILED AND CONTAIN PLANTING MIX AS SPECIFIED.
8. PLANTING SOIL MIXTURE FOR TREES AND SHRUBS:
   - 1 PART PEAT MOSS
   - 3 PARTS TOPSOIL
   - FERTILIZER/LIME (APPLY AS RECOMMENDED BY SOIL ANALYSIS)
   - MYCORRHIZA INOCULANT – "TRANSPLANT 1–STEP" AS MANUFACTURED BY ROOTS, INC. OR APPROVED EQUAL. USE PER MANUFACTURER'S RECOMMENDATIONS FOR TREES AND SHRUBS.
9. PLANTING SOIL MIXTURE FOR PERENNIAL AND ORNAMENTAL GRASS BEDS:
   - 1 PART PEAT MOSS
   - 1 PART MANURE (WEED FREE)
   - 3 PARTS TOPSOIL
   - FERTILIZER/LIME (APPLY AS RECOMMENDED BY SOIL ANALYSIS)
   - MILORGANITE APPLIED AT 5 LBS. PER 100 S.F.
10. TIME OF PLANTING: NEW PLANT MATERIALS SHALL BE INSTALLED BETWEEN APRIL 1 AND JUNE 1, OR AFTER SEPTEMBER 15TH AND NO LATER THAN OCTOBER 31ST.
11. TOPSOIL SHALL BE INSTALLED AT A MINIMUM DEPTH OF 6". CONTRACTOR SHALL SUBMIT TOPSOIL TO A CERTIFIED TESTING LABORATORY TO DETERMINE PH, FERTILITY, ORGANIC CONTENT AND MECHANICAL COMPOSITION. THE CONTRACTOR SHALL SUBMIT THE TEST RESULTS FROM REGIONAL EXTENSION OFFICE OF USDA TO THE OWNER OR LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTOR SHALL INCORPORATE AMENDMENTS FOR GOOD PLANT GROWTH AND PROPER SOIL ACIDITY RECOMMENDED FROM THE TOPSOIL TEST.
12. SEED MIX A:
    "LOW-MOW SEED MIX" – BLEND OF 3–5 RED AND CREEPING RED FESCUES.
    SEEDING RATE: 4.5 LBS PER 1,000 S.F. (ADD 10% TO QUANTITY IF HYDROSEEDED).
    SEEDING DATE: AUGUST 15–OCTOBER 1 AND APRIL 15–JUNE 15 UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT.
14. SEED MIX B:
    "PARTIALLY SHADED AREA ROADSIDE MIX" – ERNMX–140 AS BLENDED BY ERNST CONSERVATION SEEDS, MEADVILLE, PA; 1–800–873–3321.
    SEEDING RATE: 20 LBS PER ACRE WITH 30 LBS/AC OF A COVER CROP.
    SEEDING DATE: AUGUST 15–OCTOBER 1 (GRAIN RYE COVER) AND APRIL 15–JUNE 15 (GRAIN OATS COVER) UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT.
15. SEED MIX C:
    "RAIN GARDEN GRASS MIX" – ERNMX–180–1 AS BLENDED BY ERNST CONSERVATION SEEDS, MEADVILLE, PA; 1–800–873–3321.
    SEEDING RATE: 15 LBS PER ACRE WITH COVER CROP OF GRAIN RYE AT 30 LBS/AC.
    SEEDING DATE: AUGUST 15–OCTOBER 1 AND APRIL 15–JUNE 15 UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT.
16. SEED MIX D:
    "LOW–GROWING WILDFLOWER & GRASS MIX" – ERNMX–156 AS BLENDED BY ERNST CONSERVATION SEEDS, MEADVILLE, PA; 1–800–873–3321.
    SEEDING RATE: 30–40 LBS PER ACRE
    SEEDING DATE: AUGUST 15–OCTOBER 1 AND APRIL 15–JUNE 15 UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT.
17. SOD FOR LAWNS:
    SOD SHALL BE A BLEND OF CREEPING RED, CHEWNGS AND HARD FESCUES. CONTRACTOR SHALL SUBMIT CERTIFIED BLEND FOR APPROVAL PRIOR TO DELIVERY AND INSTALLATION.
18. ALL SLOPES GREATER THAN 3:1 RECEIVING A GRASS SEEDING MIXTURE SHALL BE COVERED WITH AN EROSION CONTROL BLANKET.

GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

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See sheet LL-3 for Plant List & sheet LL-5 for Planting Details.

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PLANTING PLAN – OVERALL NORTH

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 40'
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SHEET:	22 OF 29

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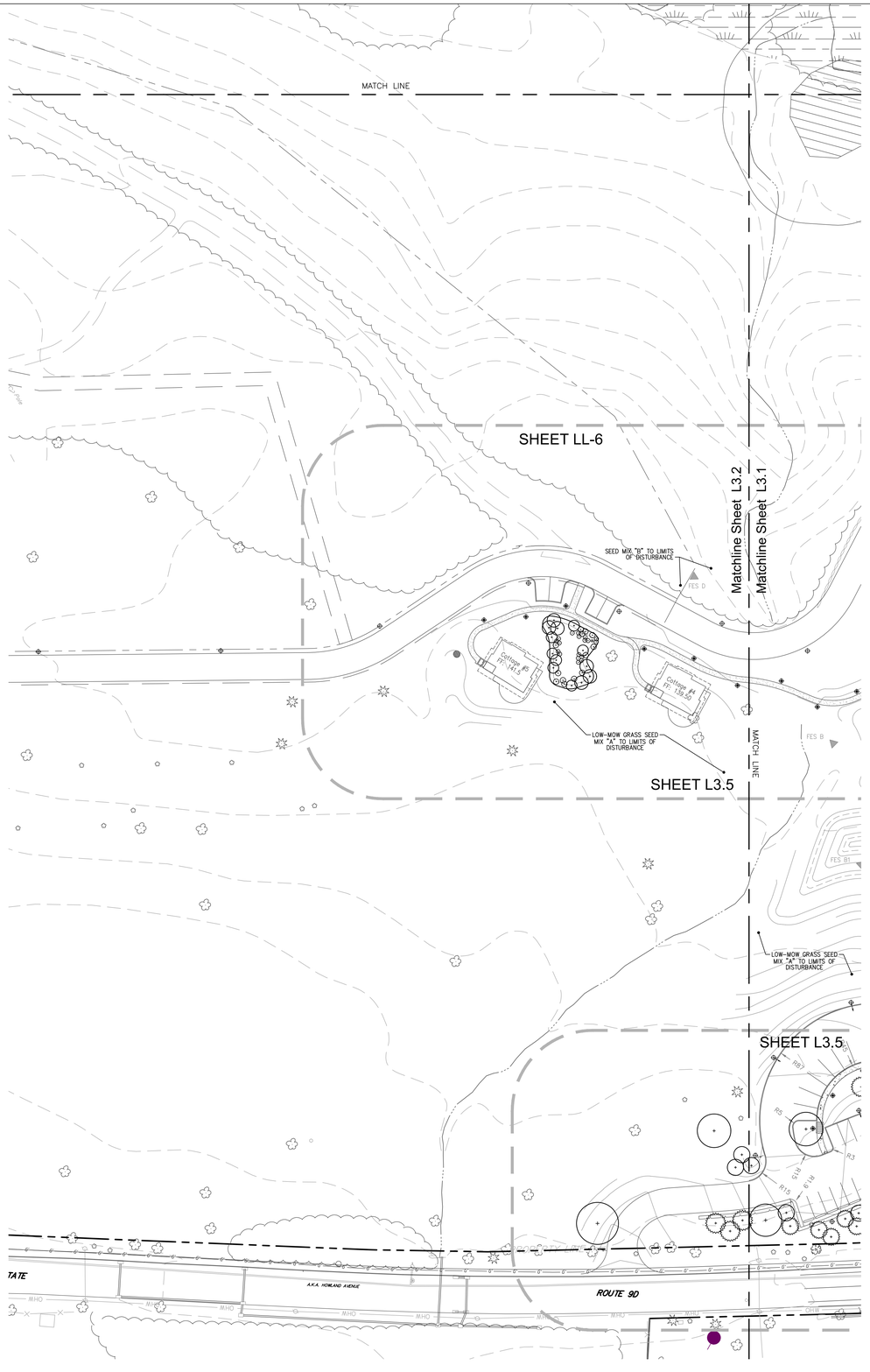

PLANT LIST cont'd:

GREEN ROOF AND ON-GRADE SHRUBS & ORNAMENTAL GRASSES:	APM	24	ADANTUM PEDATUM 'MISS SHARPLES'	MISS SHARPLES MAIDENHAIR FERN	POT	#1	24–30" ht.	
	ADK	183	ASTER DUMOSUS 'PROF. KIPPENBURG'	PROFESSOR KIPPENBERG ASTER	CONT.	#SP4	20" ht.	18" o.c.; Lav–Blue Late Sum.
	ANB	208	ASTER NOVAE–BELGII 'MARIE BALLARD'	MARIE BALLARD (NY) ASTER	POT	#SP4	30" ht.	18" o.c.; Vio–blue Late Sum.
	ANW	596	ASTER NOVAE–BELGII 'WIN. CHURCHILL'	WINSTON CHURCHILL (NY) ASTER	POT	#SP4	36" ht.	18" o.c.; Deep Red Fall
	CP	**1680**	**CAREX PENSYLVANICA**	**PENNSYLVANIA SEDGE**	**CONT.**	**#1 PINT**	**6–10" ht**	**12–18" w**
	CJS	6	CLEMATIS JACKMANII 'SUPERBA'	SUPERBA CLEMATIS	CONT.	#SP5	9–10' ht.	3' o.c.; Dark Purple Blue
	CLS	3	CLEMATIS 'SALLY'	SALLY CLEMATIS	CONT.	#SP5	4–5' ht.	3' o.c.; Pink
	CJO	3	CLEMATIS 'SAMARITAN JO'	SAMARITAN JO CLEMATIS	CONT.	#SP5	4–5' ht.	3' o.c.; White–Pink
	DCR	8	DRYOPTERIS CRISTATA	CRESTED WOOD FERN	POT	#1	to 3' ht.	
	ECH	70	ECHINACAEA 'B'S KNEES'	B'S KNEES ECHINACEA	CONT.	#SP4	30" ht.	18" o.c.
	HRA	25	HEMMEROCALLIS 'RUFFLED APRICOT'	RUFFLED APRICOT DAYLILY	CONT.	#SP4	28" ht.	Deep Apricot
	HSB	20	HEMMEROCALLIS 'SPELLBINDER'	SPELLBINDER DAYLILY	CONT.	#SP4	30" ht.	Bright Gold
	LAH	15	LAVENDULA ANGUSTIFOLIA 'HIDCOTE'	HIDCOTE VARIETY ENGLISH LAVENDER	POT	#SP5	24" ht.	18" O.C.
	LAP	20	LAVENDULA X INTERMEDIA 'PROVENCE'	PROVENCE LAVENDER	POT	#SP5	24" ht.	18" O.C.
	LSB	45	LEUCANTHEMUM SUP. 'BECKY'	SHASTA DAISY	CONT.	#SP4	30" ht.	White
	MCS	45	MOLINA CAER. 'STRAHLENQUELLE'	PURPLE MOOR GRASS	CONT.	#SP4	24" o.c.;	24" Blades, 2–4' Plumes
	PAH	190	PENNISETUM ALOPCUROIDES 'HAMELN'	HAMELN DWARF FOUNTAIN GRASS	CONT.	#SP4	24" ht.	18" o.c.
	PAP	529	PENNISETUM ALOPCUROIDES 'PIGLET'	PIGLET DWARF FOUNTAIN GRASS		#SP4	18" ht.	2' o.c.
	RVF	370	RUDBECKIA FULGIDA var. 'FULGIDA'	CONEFLOWER (Black Eyed Susan)	POT	#SP4	24–30" HT.	15" o.c.; July–Oct.
	SH	**140**	**SPOROBOLUS HETEROLEPSIS**	**PRAIRIE DROPSEED**	**CONT**	**#1**	**12–36"ht.**	**SEEDED FESCUE AREA INFILL**
	SNB	165	SALVIA NEMEROSA 'BLUE HILL'	BLUE HILL SALVIA	POT	#SP4	24" ht.	15" o.c.; Blue.
	SNM	268	SALVIA NEMEROSA 'MAY NIGHT'	BLUE MAY NIGHT	POT	#SP4	24" ht.	15" o.c.; Violet.
BIO-RETENTION PERENNIALS & GRASSES:	CXS	120	CAREX STRICTA	TUSSOCK SEDGE	PLUG	2"	1–3"x2" ht.	
	IVC	90	IRIS VERSICOLOR	BLUE FLAG IRIS	PLUG	2"	2–3"x2–3"	
	JEF	120	JUNCUS EFFUSUS	SOFT RUSH	PLUG	2"	3'x1–2" ht.	
	LOC1	160	LOBELIA CARDINALIS	CARDINAL FLOWER	PLUG	2"	30–36" ht.	18" O.C.
SEDUM PLUGS FOR ROOFTOP PLANTING:	SED	2330	SEDUM VARIETIES – DISTRIBUTE TOTAL QTY AMONG VARIETIES BELOW:		PLUG	2"		8" O.C.
		20%	SEDUM ALBUM					MID SUM. WHITE
		10%	SEDUM FLORIFERUM					MID – LATE SUM. YELLOW
		10%	SEDUM FORIFERUM 'WEIHENSTEPHANER'					LATE SP. YELLOW
		10%	SEDUM REFLEXUM 'BLUE SPRUCE'					MID–SUM. YELLOW
		15%	SEDUM SPURIUM 'FULDAGLUT'					EARLY SUM. RED
		15%	SEDUM SPURIUM 'RED CARPET'					MID SUM. RED
		20%	SEDUM SIEBOLDII					MID FALL PINK
BULBS:	NA	500	NARCISSUS SP.	DAFFODIL	BULB	MED		9" o.c., IN DRIFTS
	TU	500	TULIP SP.	SPECIES TULIP, PINKS, MAUVES, PURPLES	BULB	MED		9" o.c., IN DRIFTS

PLANT LIST:

	CODE	QTY.	BOTANICAL NAME	COMMON NAME	ROOT	SIZE INSTALLED	SIZE MATURE	COMMENTS
SPECIMEN & SHADE TREES:	APT	4	ACER PLATANOIDES x TRUNCATUM 'C.S."	CRIMSON SUNSET MAPLE	B&B	2.5–3" cal.	35'h 25'w	Purple leaf tolerates HOT sun
	ARO	4	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	B&B	2.5–3" cal.	40'h 25'w	Upright pyramidal crown
	ARR	3	ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	B&B	2.5–3" cal.	50'h 30'w	Upright rounded crown
	ASG	1	ACER SACCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	B&B	2.5–3" cal.	55' ht.	Upright oval crown
	BA	3	BETULA x AVALANCHE	AVALANCHE BIRCH	B&B	6–8' ht.	45'h 35'w	MULTI–STEM
	BPW	18	BETULA POPULIFOLIA 'WHITESPIRE'	WHITESPIRE GRAY BIRCH	B&B	12–14' ht.	30'h 25'w	MULTI–STEM
	BPW1	15	BETULA POPULIFOLIA 'WHITESPIRE'	WHITESPIRE GRAY BIRCH	B&B	5–6' ht.	30'h 25'w	MULTI–STEM
	LSA	1	LIQUIDAMBAR STYRACIFLUA	AMERICAN SWEETGUM	B&B	2.5–3" cal.	60' ht.	HVY.
	LT	2	LIRIODENDRON TULIPIFERA	TULIP TREE	B&B	2.5–3" cal.	80' ht.	
	NSR	2	NYSSA SYLVATICA 'RED SPLYNDOR'	RED SPLYNDOR BLACK GUM	B&B	2.5–3" cal.	25'x45' ht.	
	PAB	2	PLATANUS ACERIFOLIA 'BLOODGOOD'	LONDON PLANE TREE	B&B	2.5–3" cal.	50' ht.	Rounded crown
	PSP	1	PRUNUS SUB. 'PENDULA'	WEEPING HIGAN CHERRY	B&B	2.5–3" cal.	20–25' ht.	Pink–White bloom April–May
	QP	1	QUERCUS PALUSTRIS	PIN OAK	B&B	2.5–3" cal.	50–75' ht.	Orange–Scarlet fall
	QR	7	QUERCUS RUBRA	NORTHERN RED OAK	B&B	2.5–3" cal.	75' ht.	
	SAT	1	SALIX ALBA 'TRISTIS'	GOLDEN WEEPING WILLOW	B&B	3.5–4" cal.	50' ht.	HVY.
	SGC	1	SALIX MATSUDANA 'GOLDEN CURLS'	GOLDEN CURLS CORKSCREW WILLOW	B&B	2.5–3" cal.	20'x30' ht.	
	UA	2	ULMUS AMERICANA 'VALLEY FORGE'	VALLEY FORGE AMERICAN ELM	B&B	2.5–3" cal.	70' h/w	
SMALL SCALE TREES:	AMC1	8	AMELANCHIER CANADENSIS	SHADBLOW	B&B	5–6' ht.	25' ht.	Clump Form
	AMC	10	AMELANCHIER CANADENSIS	SHADBLOW	B&B	8–10' ht.	25' ht.	Clump Form
	AMA	2	AMELANCHIER x AUTUMN BRILLIANCE	AUTUMN BRILLIANCE SHADBLOW	B&B	6–8' ht.	15–25' h/w	Clump Form
	CFF	5	CARPINUS BET. 'FRANS FONTAINE'	FRANS FONTAINE HORNBEAM	B&B	2.5–3" cal.	35'h/15'w	
	CC	1	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	B&B	2–2.5" cal.	25–35' ht.	
	CCR	1	CERCIS CANADENSIS 'RISING SUN'	RISING SUN REDBUD	B&B	2–2.5" cal.	12–15' ht.	
	CFC	13	CORNUS FLORIDA 'CHEROKEE PRINCESS'	WHITE FLOWERING DOGWOOD	B&B	2–2.5" cal.	20–25' ht.	White
	CFR	18	CORNUS FLORIDA 'RUBRA'	PINK FLOWERING DOGWOOD	B&B	2–2.5" cal.	20–25' ht.	Pink
	CR	10	CORNUS RACEMOSA	GRAY DOGWOOD	Cont.	5–6'ht.	8'x8'	White
	MSJ	4	MAGNOLIA STELLATA 'JANE PLATT'	JANE PLATT STAR MAGNOLIA	Cont.	5–6' ht.	12'h/8'w	Pink
	SPC	1	STEWARTIA PSEUDOCAMELLIA	JAPANESE STEWARTIA	B&B	2.5–3" cal.	25'h/15w	July Flowers
EVERGREEN TREES:	AF	9	ABIES FRASERI	FRASIER FIR	B&B	7–8' ht.	30–50' ht.	
	IO	2	ILEX OPACA	AMERICAN HOLLY	B&B	7–8' ht.	40–50' ht.	20–40'w
	IJP	7	ILEX OPACA 'JERSEY PRINCESS'	JERSEY PRINCESS AMERICAN HOLLY	B&B	7–8' ht.	30–35' ht.	
	PA	16	PICEA ABIES	NORWAY SPRUCE	B&B	8–10' ht.	40–60' ht.	
	PAS	7	PICEA OMORIKA	SERBIAN SPRUCE	B&B	8–10' ht.	50–60' ht.	20–25'w
	PG	13	PICEA GLAUCA	WHITE OR CANADIAN SPRUCE	B&B	8–10' ht.	20'x60' ht.	
	PPG	5	PICEA PUNGENS GLAUCA	COLORADO BLUE SPRUCE	B&B	9–10' ht.	60' ht.	
LARGE SHRUBS:	AZ1	20	RHODENDRON 'ROBLEX' PP25073	AUTUMN LILY ENCORE AZALEA	CONT.	#7	4–5'h, 4'w	White bloom
	AZ2	19	RHODENDRON 'CONLEC' PP19899	AUTUMN ROYALTY ENCORE AZALEA	CONT.	#7	4.5'h x 4'w	Light Purple bloom
	AZV	35	AZALEA VISCOSUM	SWAMP AZALEA	CONT.	#3	4–6' ht.	
	CXP	5	CALLICARPA x PEARL GLAM	PEARL GLAM BEAUTYBERRY	B&B	#7	4–5' ht.	3–4'w
	CLP	6	CHAEMACYPARIS L. 'PEMBURY BLUE'	PEMBURY BLUE LAWSON CYPRESS	B&B	3–4' ht.	8–10' ht.	4–5'w
	CLG	5	CHAEMACYPARIS L. 'PIN. BLUE & GOLD'	PINPOINT BLUE & GOLD LAWSON CYPRESS	B&B	3–4' ht.	6–8' ht.	5–6'w
	CPS	3	CHAEMACYPARIS PISIFERA 'SOFT SERVE'	SOFT SERVE SAWARA CYPRESS	B&B	30" min.ht.	6–8' ht.	5–6'w; fern like foliage
	CAH	11	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SUMMERSWEET	CONT.	#5	3–4' ht.	
	CVS	**4**	**CLETHRA ALNIFOLIA 'VANILLA SPICE'**	**VANILLA SPICE SUMMERSWEET**	**CONT.**	**#3**	**3–6' ht.**	**3–6'w**
	FMB	4	FOTHERGILLA MAJOR 'BLUE SHADOW	BLUE SHADOW FOTHERGILLA	CONT.	36" min.ht.	8–10' ht.	
	HAA	**3**	**HYDRANGEA ARBOR. 'ANNABELLE'**	**ANNABELLE SMOOTH HYDRANGEA**	**CONT.**	**#7**	**3–5' ht.**	**12" dia. White Flowers**
	HQR	5	HYDRANGEA QUERC. 'RUBY SLIPPERS'	RUBY SLIPPERS OAKLEAF HYDRANGEA	CONT.	#7	6–8' ht.	White to Pink
	IGS	31	ILEX GLABRA 'SHAMROCK'	INKBERRY	CONT.	24–30" ht.	3–5' ht.	Compact
	IVG	15	ILEX VERTICILLATA 'LITTLE GOBLIN'	LITTLE GOBLIN WINTERBERRY	CONT.	#5	3–5' ht.	
	IVJ	1	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY (MALE) WINTERBERRY	CONT.	#5	6–8' ht.	
	IVR	10	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE WINTERBERRY	CONT.	#5	3–4' ht.	
	KLC	**5**	**KALMIA LATIFOLIA 'CAROL'**	**CAROL MOUNTAIN LAUREL**	**CONT.**	**#3**	**6–10' ht.**	**8–10'w**
	MPS	54	MORELLA PENSYLVANICA 'SILVER SPRITE'	SILVER SPRITE BAYBERRY	CONT.	30" min.ht.	4–5'h/5'w	
	PM	11	PINUS MUGO VAR. 'PUMILIO'	DWARF MUGO PINE	CONT.	24" min.ht.	4–5'h/6'w	
	RXD	**4**	**RHODODENDRON x DANDY MAN**	**DANDY MAN RHODODENDRON**	**CONT.**	**#5**	**6–8' h/w**	
	TMG	15	TAXUS x MEDIA 'GREENWAVE'	GREEN WAVE YEW	CONT.	24–30" ht.	4'x4'	
	VDB	5	VIBURNUM DENTATUM 'BLUE MUFFIN'	BLUE MUFFIN ARROWWOOD VIBURNUM	CONT.	#7	4–6' ht.	
SMALL SHRUBS:	AZ3	18	RHODODENRON 'ROBLEN' PP16248	AUTUMN SUNSET ENCORE AZALEA	CONT.	#5	3' h/w	Salmon–Red blooms
	CXC	33	CARYOPTERIS x CLAN. 'BEYOND MIDNIGHT'	BEYOND MIDNIGHT BLUEBEARD	CONT.	24" min.ht.	24–30" ht.	
	CSC	**12**	**CLETHRA ALNIFOLIA 'SUGARTINA C'**	**SURGARTINA CRYSTALINA SUMMERSWEET**	**CONT.**	**#3**	**30–36" ht.**	**36–48"w**
	CSA	86	CORNUS SERICEA 'ARCTIC FIRE'	ARCTIC FIRE REDTWG DOGWOOD	CONT.	24" min.ht.	3–4' ht.	
	FGA	38	FOTHERGILLA GARDENII 'APPALACHIA'	DWARF FOTHERGILLA	CONT.	24" min.ht.	2–3' ht.	
	FGB	11	FOTHERGILLA GARDENII 'BLUE MIST'	BLUE MIST DWARF FOTHERGILLA	CONT.	24" min.ht.	2–3' ht.	
	ICH	47	ILEX CRENATA 'HELLERI'	DWARF JAPANESE HOLLY	CONT.	#7	2–3'h, 4'w	
	IGB	10	ILEX GLABRA 'GEM BOX'	GEM BOX INKBERRY HOLLY	CONT.	#7	2.5'x2.5'	Compact – DO NOT SHEAR
	IVB	**8**	**ITEA VIRTICILLATA 'BERRY POPPINS'**	**BERRY POPPINS WINTERBERRY**	**CONT.**	**#3**	**3'h x 4'w**	
	IVL	37	ITEA VIRGINICA 'LITTLE HENRY'	LITTLE HENRY SWEETSPIRE	CONT.	#5	3'h x 4'w	
	KLT	**18**	**KALMIA LAT. 'TIDDLYWINKS'**	**TIDDLYWINKS MOUNTAIN LAUREL**	**CONT.**	**#3**	**2–3' ht.**	
	PO1	60	PHYSOCARPUS OPULIFOLIUS 'TINY WINE'	TINY WINE NINEBARK	CONT.	#5	3–4' ht.	
GROUNDCOVERS:	AML	173	ARONIA MEL. LOW SCAPE MOUND	LOW SCAPE MOUND CHOKEBERRY	CONT.	#1	12–24" ht.	
	AMG	**140**	**ARONIA MEL. GROUND HUG**	**GROUND HUG CHOKEBERRY**	**CONT.**	**#1**	**8–14" h**	**30–36" w**
	CRO	70	CROCUS SPECIES – MIXED	CROCUS	BULB	SMALL		
	JCB	**27**	**JUNIPERUS CONFERTA 'BLUE PACIFIC'**	**BLUE PACIFIC JUNIPER**	**CONT.**	**#1**	**6–12" ht.**	
	LST	220	LIRIOPE SPICATA	LILYTURF	POT	#SP2	10–12"ht	12" o.c.
	NA	500	NARCISSUS SPECIES – MIXED	DAFFODILS	BULB	MEDIUM		
	TT	500	TULIPA TURKESTANICA	SPECIES TULIP, PINK, MAUVES, PURPLES	BULB	MEDIUM	8"	9" o.c., IN DRIFTS
	VCL	18	VIBURNUM CASSINOIDES 'LIL DITTY'	LIL DITTY WITHEROD VIBURNUM	CONT.	#3	12–24" ht.	
	VM	967	VINCA MINOR	PERIWINKLE	CONT.	FLATS		Plant at 9" o.c.

GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

See sheet LL-2 for Planting Notes & sheet LL-5 for Planting Details.

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PLANTING PLAN – OVERALL SOUTH
MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 40'
TITLE:	LL-3
SHEET:	23 OF 29

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See sheet LL-2 for Planting Notes, LL-3 for Plant List & sheet LL-5 for Planting Details.

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2	3/26/24	PER PB COMMENTS					

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PLANTING PLAN – ENLARGEMENT 1

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 20'
TITLE:	LL-4
SHEET:	24 OF 29

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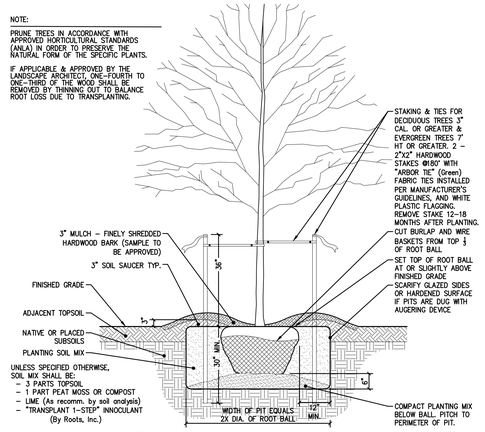
PLANTING DETAILS:

NOTE:
PRUNE TREES IN ACCORDANCE WITH APPROVED HORTICULTURAL STANDARDS (ANLA) IN ORDER TO PRESERVE THE NATURAL FORM OF THE SPECIFIC PLANTS.

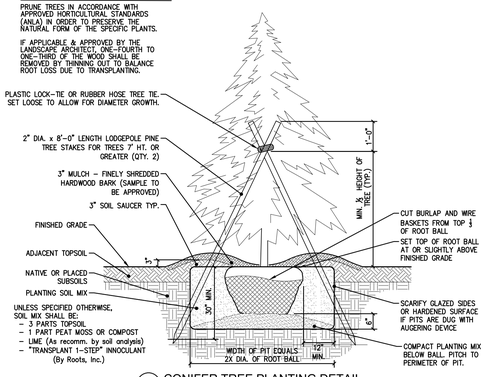
IF APPLICABLE & APPROVED BY THE LANDSCAPE ARCHITECT, ONE-FOURTH TO ONE-THIRD OF THE WOOD SHALL BE REMOVED BY THINNING OUT TO BALANCE ROOT LOSS DUE TO TRANSPLANTING.



1 TREE PLANTING DETAIL
SCALE: 1/2" = 1'-0"

NOTE:
PRUNE TREES IN ACCORDANCE WITH APPROVED HORTICULTURAL STANDARDS (ANLA) IN ORDER TO PRESERVE THE NATURAL FORM OF THE SPECIFIC PLANTS.

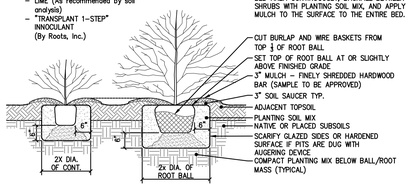
IF APPLICABLE & APPROVED BY THE LANDSCAPE ARCHITECT, ONE-FOURTH TO ONE-THIRD OF THE WOOD SHALL BE REMOVED BY THINNING OUT TO BALANCE ROOT LOSS DUE TO TRANSPLANTING.



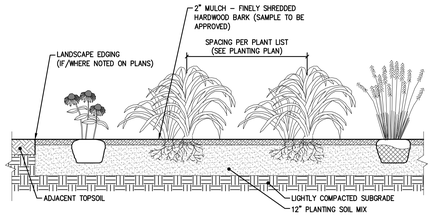
2 CONIFER TREE PLANTING DETAIL
SCALE: 1/2" = 1'-0"

UNLESS SPECIFIED OTHERWISE, SOIL MIX SHALL BE:
- 3 PARTS TOPSOIL
- 1 PART PEAT MOSS OR COMPOST
- LIME (As recommended by soil analysis)
- "TRANSPLANT 1-STEP" INNOCULANT (By Roots, Inc.)

NOTE: IN AREAS OF MASS PLANTING, EXCAVATE BED AREA CONTINUOUSLY, BACKFILL BETWEEN SHRUBS WITH PLANTING SOIL MIX, AND APPLY MULCH TO THE SURFACE TO THE ENTIRE BED.



3 SHRUB PLANTING DETAIL
SCALE: 1/2" = 1'-0"

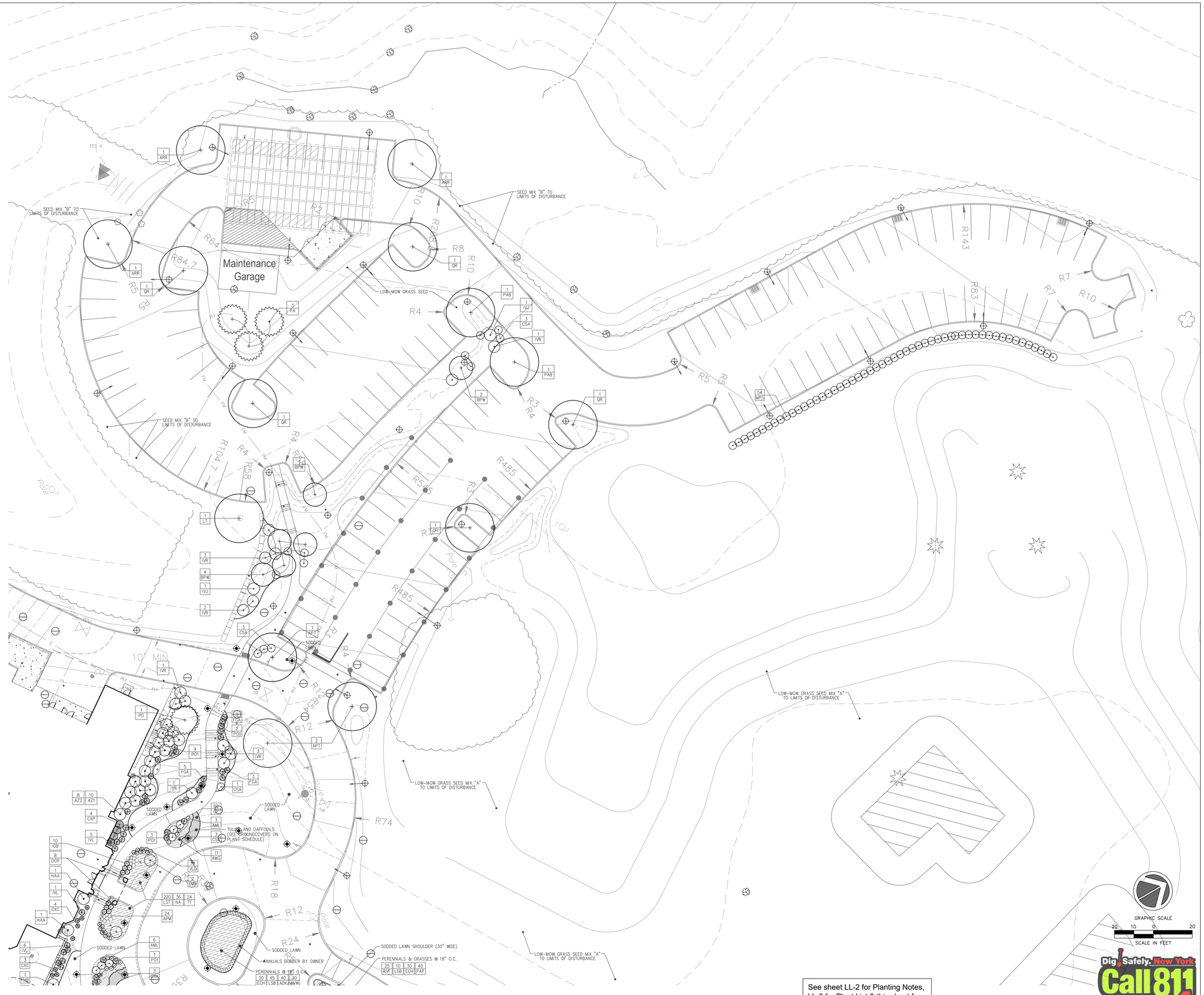


SECTION THROUGH PERENNIAL BED

PERENNIAL NOTES:
1. BULB/CORM PERENNIALS TO BE PLANTED IN FALL. POTTED PERENNIALS MAY BE PLANTED APRIL 15 TO OCTOBER 1.
2. ROTOTILL FERTILIZER AND LIME INTO SOIL PRIOR TO PLANTING AND IN ACCORDANCE TO SOIL ANALYSIS RECOMMENDATIONS.
3. DO NOT OVER COMPACT PLANTING BED. WATER THOROUGHLY AFTER PLANTING BULBS.
4. ADJUST PLANTING DEPTH AS RECOMMENDED BY BULB SUPPLIER.
5. PROVIDE DRAINAGE AS REQUIRED (PERF PIPE 4" ADS) WHEN SUBGRADE IS CLASSIFIED AS A HEAVY SOIL OR EXCESSIVELY COMPACTED.

UNLESS SPECIFIED OTHERWISE, PERENNIAL BED SOIL MIX SHALL BE:
- 3 PARTS TOPSOIL
- 1 PART MANURE (WEED FREE)
- 1 PART PEAT MOSS OR COMPOST
- LIME (As recommended by soil analysis)
- "MILORGANITE" AT 5 LBS. PER 100 SF.

4 ANNUAL/PERENNIAL AND GROUND COVER BEDS DETAIL
SCALE: 1/2" = 1'-0"



See sheet LL-2 for Planting Notes, LL-3 for Plant List & this sheet for Planting Details.

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PLANTING PLAN - ENLARGEMENT 2

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 20'
TITLE:	LL-5
SHEET:	25 OF 29

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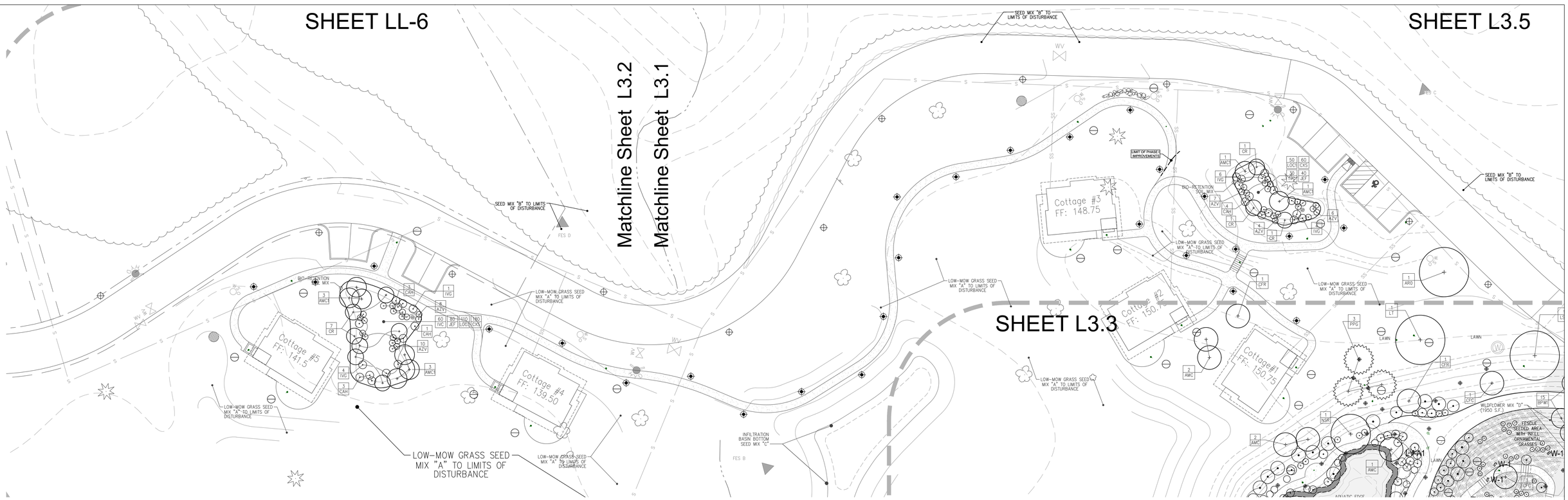
SHEET LL-6

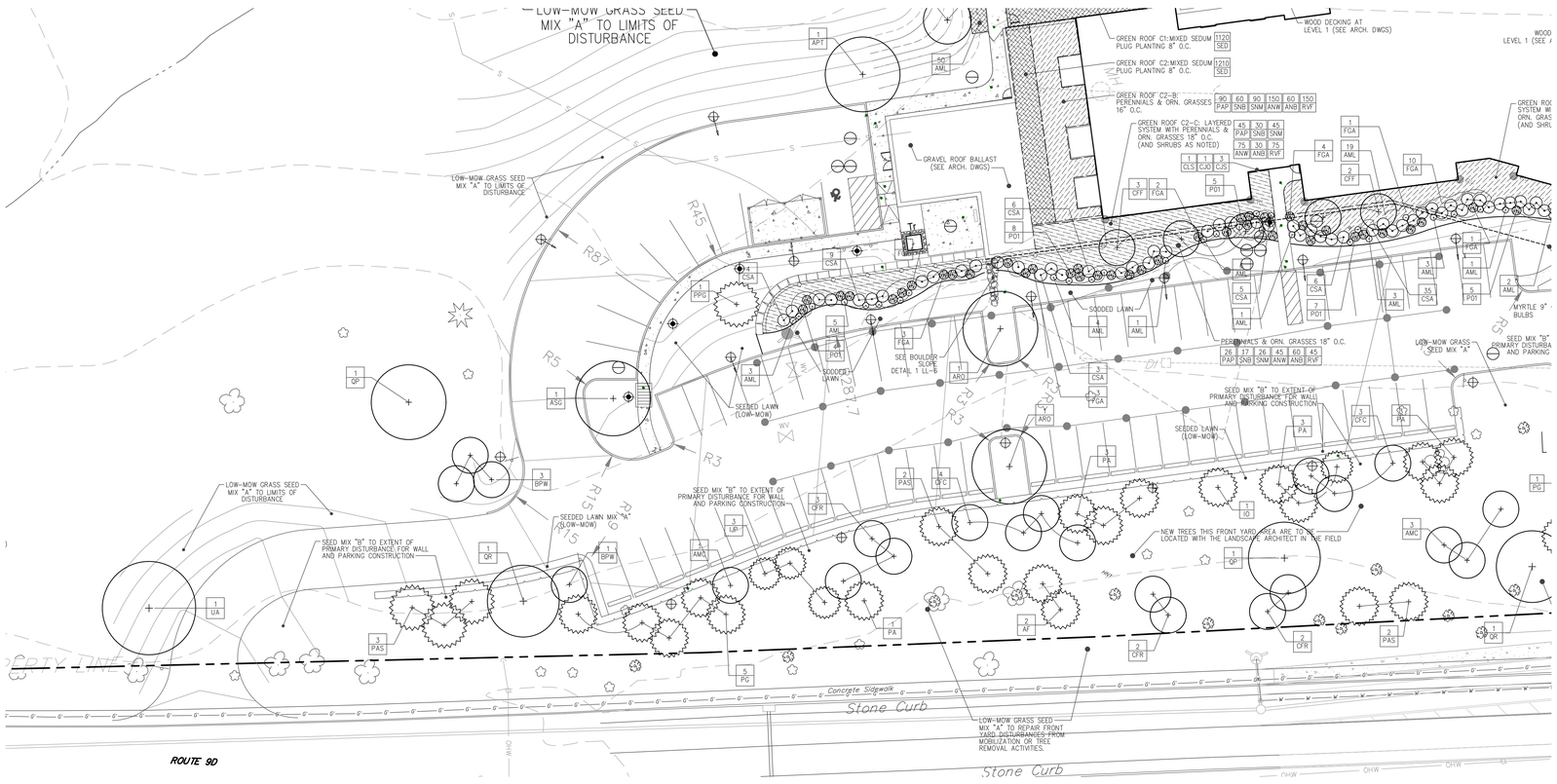
SHEET L3.5

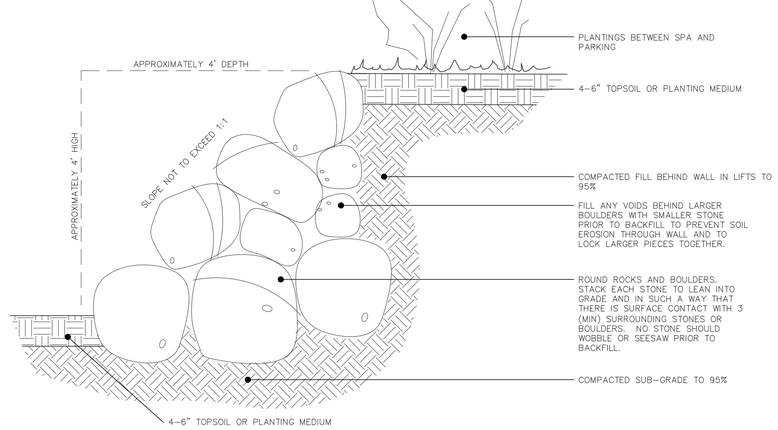
Matchline Sheet L3.2

Matchline Sheet L3.1

SHEET L3.3







1 BOULDER SLOPE RETENTION

SCALE: 1/2" = 1'-0"

GRAPHIC SCALE

20 10 0 20

SCALE IN FEET

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See sheet LL-1 for Planting Notes, LL-2 for Plant List & sheet LL-3 for Planting Details.

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PLANTING PLAN – ENLARGEMENT 3

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
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SHEET:	26 OF 29

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LIGHTING SCHEDULE:

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	BUG Rating	Mounting Height
⊕	11	P2-S	Single	PROS-Y2-2030	1.000	1792	25.1	276.1	B1-U0-G1	10'
⊕	11	P3-S	Single	PROS-Y3-2030	1.000	1829	25.1	276.1	B1-U0-G1	10'
⊕	10	P4-S	Single	PROS-Y4-2030	1.000	1793	25.1	251	B1-U0-G1	10'
⊕	7	P5-S	Single	PROS-Y5-2030	1.000	1735	25.1	175.7	B1-U0-G1	10'
⊕	12	P2-M	Single	PROV2-36L-295-3K7-2	1.000	3597	34.1	409.2	B1-U0-G1	16'
⊕	12	P3-M	Single	PROV2-36L-295-3K7-3	1.000	3471	34.1	409.2	B1-U0-G1	16'
⊕	7	P4-M	Single	PROV2-36L-295-3K7-4W	1.000	3501	34.1	238.7	B1-U0-G1	16'
⊕	9	P5-M	Single	PROV2-36L-295-3K7-5Q	1.000	3818	34.1	306.9	B2-U0-G1	16'
⊕	5	B2	Single	PROB-Y2-3030	1.000	2975	43.2	216	B1-U0-G1	2.5'
⊕	37	B3	Single	PROB-Y3-3030	1.000	3030	43.7	1616.9	B1-U0-G1	2.5'
⊕	16	B5	Single	PROB-Y5-3030	1.000	2892	43.2	691.2	B2-U0-G1	2.5'

KEY TO LIGHT FIXTURES:

P2–S, P2–M,
P3–S, P3–M,
P4–S, P4–M,
P5–S & P5–M

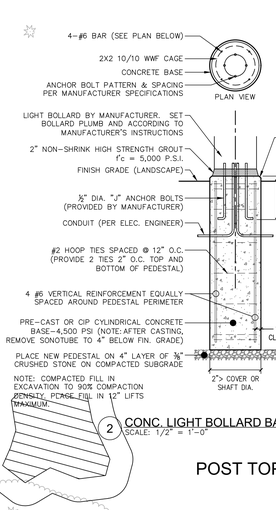
POLE MOUNTED LIGHTS: "PROVIDENCE" BY ARCHITECTURAL AREA LIGHTING WITH LED LAMP TYPE WITH COLOR TEMPERATURE OF 3000K. LAMP IS FITTED IN CAP OF FIXTURE WITH POLE HEIGHTS TO SET FACE DOWNWARD AT A 10' OR 16' HEIGHT ABOVE GRADE PER PLAN. OPTICAL DISTRIBUTION PATTERNS TYPE 2, 3, 4 ND 5 AS NOTED ON PLAN. LED FIXTURE PERFORMANCE IS FULL CUT–OFF. ALL LAMPS SHALL HAVE A CRI OF 80 OR GREATER.

B2, B3 & B5

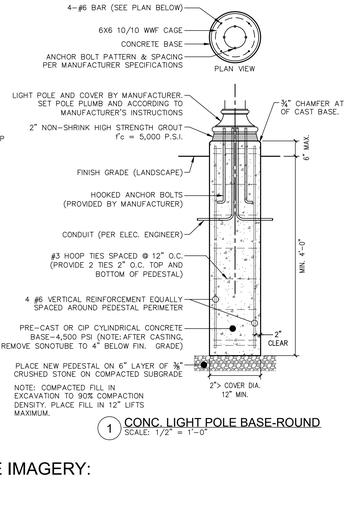
BOLLARD LIGHTS: "PROVIDENCE" BOLLARD BY ARCHITECTURAL AREA LIGHTING WITH LED LAMP TYPE WITH COLOR TEMPERATURE OF 3000K. HEIGHT TO BASE OF LAMP HEAD IS 42" ABOVE GRADE. OPTICAL DISTRIBUTION PATTERNS ARE TYPE 2, 3 OR 5 AS NOTED ON PLAN AND SHOWN ON CUT SHEET. ALL LAMPS SHALL HAVE A CRI OF 80 OR GREATER.

NOTE: ALL BOLLARD LIGHTS TO BE EQUIPPED WITH DIMMER CONTROLS TO ALLOW FOR REDUCING LIGHT OUTPUT TO 50% OF FULL LIGHT LEVELS SHOWN ON THE PHOTOMETRIC PLAN.

See sheet LP-3 for Fixture Specification Order Sheets.



2 CONC. LIGHT BOLLARD BASE-ROUND
SCALE: 1/2" = 1'–0"



1 CONC. LIGHT POLE BASE-ROUND
SCALE: 1/2" = 1'–0"

POST TOP FIXTURE IMAGERY:

GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

Dig Safely. New York. Call 811 before you dig

DRAWN BY: HT/CH/DW				CHECKED BY: HT			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	2/27/24	AMENDED SITE PLAN	HT				
2	3/26/24	PER PB COMMENTS					

ARROWSTREET
ARCHITECTURE & DESIGN
10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
arrowstreet.com

Mirbeau INN & SPA

LANDSCAPE ARCHITECTS:
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HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
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SITE LIGHTING PLAN – NORTH

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054–13–001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 40'
TITLE:	LP–2
SHEET:	27 OF 29

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LIGHT FIXTURE SPEC SHEETS:

"B" - BOLLARD FIXTURE:

Providence® LED™ – Bollard PROB **(B2, B3, B5)** | TYPE

FEATURES

- Reliable uniform illumination
- Types II, III, IV and V distributions
- 3000K, 4000K, 5000K CCT
- 0-10V dimmable
- 20kV/10kA surge suppression
- Thermal Protection
- 13 standard powder coat finishes
- Die-Cast housing
- Full Cutoff optical system

SPECIFICATIONS

BOTTOM VIEW

- Diameter: 11.60" / 294.64 mm
- Height: 42.44" / 1,078 mm
- Weight: 27 lbs / 12kg
- IP Rating: 66

3000K and warmer CCTs only

ORDERING INFORMATION

1	2	3	4	5	6
PROB	Y2, Y3, Y5	3030	BLT		
Model	Distribution	Lumen Package	Color	Options	Mounting

1. MODEL

PROB	*Providence Bollard LED*

2. DISTRIBUTION

Y2	*Type 2*
Y3	*Type 3*
Y4	*Type 4*
Y5	*Type 5*

3. LUMEN PACKAGE

3050	*5000K CCT, 42 watts*
3040	*4000K CCT, 42 watts*
3030	*3000K CCT, 42 watts*
2050	*5000K CCT, 25 watts*
2040	*4000K CCT, 25 watts*
2030	*3000K CCT, 25 watts*

4. COLOR

BLS	Black Gloss Smooth
BLT	Black Matte Textured
DBS	Dark Bronze Gloss Smooth
DBT	Dark Bronze Matte Textured
GTT	Graphite Matte Textured
LGS	Light Grey Gloss Smooth
LGT	Light Grey Matte Textured
PSS	Platinum Silver Gloss Smooth
VGT	Verde Green Matte Textured
WHS	White Gloss Smooth
WHT	White Matte Textured
CC [1]	Custom Color

[1] Consult factory for custom color, marine and corrosive finish

5. OPTIONS

FS1	*Fusing*
DSC	*Dark Sky Cap*
PFC	*Brass Painted Finial*
BPS	*Brass Painted Struts*
LDL	*Lightly Diffused Lens*

6. MOUNTING

FL	*Fluted Shaft 6" DIA.*
RD	*Round Shaft 5" DIA.*
PM	*Pier Mount*

MANUFACTURER TO PROVIDE 80 CRI.

LUMINAIRE PERFORMANCE

Light Engine	Lensing	Distribution	Ordering Code	5000K CCT Delivered Lumens	5000K CCT Efficacy (Lm/W)	5000K CCT BUG Rating B	U	G	4000K CCT Delivered Lumens	4000K CCT Efficacy (Lm/W)	4000K CCT BUG Rating B	U	G	3000K CCT Delivered Lumens	3000K CCT Efficacy (Lm/W)	3000K CCT BUG Rating B	U	G	Average System Watts
				5050					4040					3030					
3000 Series	Clear Lens (Standard)	TYPE 2	Y2	3238	75	1	0	1	3247	76	1	0	1	2975	69	1	0	1	43
		TYPE 3	Y3	3261	75	1	0	1	3270	76	1	0	1	3038	70	1	1	1	
		TYPE 4	Y4	3053	75	1	0	1	3362	76	1	0	1	2988	69	1	0	1	
		TYPE 5	Y5	3148	73	2	0	1	3157	73	2	0	1	2892	67	2	0	1	
	Lightly Diffused Lens	TYPE 2	Y2..LDL	2386	56	1	1	1	2342	54	1	1	1	2092	49	1	1	1	
		TYPE 3	Y3..LDL	2385	57	1	1	1	2341	56	1	1	1	2091	50	1	1	1	
		TYPE 4	Y4..LDL	2295	53	1	2	1	2252	52	1	2	1	2012	47	1	2	1	
		TYPE 5	Y5..LDL	2234	52	1	1	1	2193	51	1	1	1	1959	46	1	1	1	

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HUBBELL Lighting

architectural area lighting
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JOB
TYPE
NOTES

I 1 I

"M" - MEDIUM POST TOP FIXTURE:

architectural area lighting

PROV2
ARCHITECTURAL AREA/SITE

(P2-16, P3-16, P4W-16, P5Q-16)

DATE: 5-11-22 | LOCATION: BEACON, NY
TYPE: 2,3,4,5Q | PROJECT: MIRBEAU SPA AT HOWLAND ESTATE
CATALOG #:

PROV2 ON 4" FLUTED ALUM. POLES W/ LENS HEIGHT OF 16' ABOVE GRADE.

PROVIDENCE®

Providence Medium

RELATED PRODUCTS

PROL2 | PROL2-LK | PROS | PROB

FEATURES

- Reliable, uniform, glare free illumination
- Types I, 2, 3, 4W, 5Q, and 5W distributions
- Amber, 3000K, 4000K, 5000K CCT
- 0-10V dimming ready
- Integral Surge protection; 10k in parallel, 20k in series
- Upgrade Kits

3000K and warmer CCTs only

Non-Conformance Specifications

DELIVERED LUMENS

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

LED #	Drive Current	Lumen Package	Lens	Distribution	3000K 70CRI Lumen	3000K 70CRI Bug Rating	3000K 70CRI Efficacy (Lm/W)	4000K 70CRI Lumen	4000K 70CRI Bug Rating	4000K 70CRI Efficacy (Lm/W)	5000K 70CRI Lumen	5000K 70CRI Bug Rating	5000K 70CRI Efficacy (Lm/W)
36	295	450mA Mcrocone Equivalent	None	1	3807	1 0 1	111.6	3960	1 0 1	116.1	4128	1 0 1	121.0
				2	3596	1 0 1	105.4	3740	1 0 1	109.7	3899	1 0 1	114.3
				3	3471	1 0 1	101.8	3611	1 0 1	105.9	3764	1 0 1	110.4
				4W	3501	1 0 1	102.7	3642	1 0 1	106.8	3796	1 0 1	111.3
				1-HS	2355	0 0 1	69.1	2450	0 0 1	71.8	2554	0 0 1	74.9
				2-HS	2049	0 0 1	60.1	2132	0 0 1	62.5	2222	0 0 1	65.2
				3-HS	1981	0 0 1	58.1	2061	0 0 1	60.4	2148	0 0 1	63.0
				4W-HS	2044	0 0 1	59.9	2126	0 0 1	62.3	2216	0 0 1	65.0
				5Q	3818	2 0 1	112.0	3971	2 0 1	116.5	4140	2 0 1	121.4
				5W	3529	2 0 1	103.5	3670	2 0 1	107.6	3826	2 0 1	112.2
			Clear	1-CL	3242	1 0 1	95.0	3373	1 0 1	98.8	3516	1 0 1	103.0
				2-CL	3062	1 0 1	89.7	3186	1 0 1	93.3	3321	1 0 1	97.3
				3-CL	2957	1 0 1	86.6	3075	1 0 1	90.1	3206	1 0 1	93.9
				4W-CL	2982	1 0 1	87.4	3102	1 0 1	90.9	3233	1 0 1	94.7
				1-CL-HS	2006	0 0 1	58.8	2087	0 0 1	61.1	2175	0 0 1	63.7
				2-CL-HS	1746	0 0 1	51.1	1816	0 0 1	53.2	1893	0 0 1	55.5
				3-CL-HS	1688	0 0 1	49.4	1755	0 0 1	51.4	1830	0 0 1	53.6
				4W-CL-HS	1740	0 0 1	51.0	1810	0 0 1	53.0	1887	0 0 1	55.3
				5Q-CL	3252	2 0 1	95.3	3382	2 0 1	99.1	3526	2 0 1	103.3
				5W-CL	3005	2 0 1	88.1	3126	2 0 1	91.6	3259	2 0 1	95.5
			Diffused	1-DL	2243	1 0 1	65.8	2334	1 0 1	68.4	2433	1 0 1	71.3
				5W-DL	2280	1 0 1	66.9	2372	1 0 1	69.6	2473	1 0 1	72.5

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HUBBELL Lighting

architectural area lighting

PROV2
ARCHITECTURAL AREA/SITE

DATE: 5-11-22 | LOCATION: BEACON, NY
TYPE: 2,3,4,5Q | PROJECT: MIRBEAU SPA AT HOWLAND ESTATE
CATALOG #:

ORDERING GUIDE

CATALOG #: **Example:** PROV2-36L-325-3K7-4W-BL-SLA1-DF-HS-AD5-UNV

HOUSING

PROV2

Housing	LED Quantity	Lumen output	CCT CRI	Distribution	Finish
PROV2 Providence Medium 2.0	36L 36 LED	295 450mA Mcrocone Equivalent	AMB [1] Amber-595nm Peak	1 Type I	BLS Black Gloss Smooth
		325 325mA, 4500 Lumens	3K7 3000K 70 CRI	2 Type II	BLT Black Matte Textured
		510 510mA, 6500 Lumens	4K7 4000K 70 CRI	3 Type III	DBS Dark Bronze Gloss Smooth
		525 700mA Mcrocone Equivalent	5K7 5000K 70 CRI	4W Type IV Wide	DBT Dark Bronze Matte Textured
		615 615mA, 7500 Lumens	Contact factory for options listed below	5Q Type V Square	GTT Graphite Matte Textured
			27K8 2700K, 80 CRI	5W Type V Wide	LGS Light Grey Gloss Smooth
			80 or 90 CRI for standard color temperatures		LGT Light Grey Matte Textured
					PSS Platinum Silver Gloss Smooth
					VGT Verde Green Matte Textured
					WHS White Gloss Smooth
					WHT White Matte Textured
					Color Option
					CC [4] Custom Color

MANUFACTURER TO PROVIDE 80 CRI.

Mounting	Optional Lens	Options	Mounting Options	Voltage
Pole Mount	CL Clear Lens	HS [2,3] House Side Shield	ADS Adaptor-5" OD Pole	UNV 120-277V
STND_MNT [4] Standard Mount	DL [4] Diffused Lens	PFN Brass Colored Finish	PCA-C Photocontrol Adapter-Contemporary	
PT20 2 3/8" tenon		SPK Cast Spikes	EPA-C Egress Adapter Contemporary	
PT3 3" tenon		BPS Brass Colored Struts		
PT4 4" tenon		SF Single Fuse (120..277)		
Arm Mount		DF Double Fuse (208..240)		
SLA1 4" pole or tenon		**BRASS SPIKES & BRASS FINIALS.**		
SLABU-4 4" pole or tenon				
SLABU-5 4" pole or tenon				
TRASU-4 4" pole or tenon				
TRABU-4 4" pole or tenon				
TRASU-5 5" pole or tenon				
TRABU-5 5" pole or tenon				
TRABU-5 5" pole or tenon				
TRAS6-5 5" pole or tenon				
TRAB6-5 5" pole or tenon				
Wall Mount				
WMA6S Wall Mount				
WMA6E Wall Mount				
Pier Mount				
PM1 Pier Mount 1				
PM2 Pier Mount 2				
PM3 Pier Mount 3				

DIMENSIONS

Notes:
1 Turtle-Friendly
2 Diffused Lens is available only with T3 and T3W distribution
3 House side Shield is available only with T1, T2, T3 and T4W distributions
4 Consult factory for custom color, marine and corrosive finish options
5 Contact factory for additional glare shield options
6 Slide over 4" OD Pole

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HUBBELL Lighting

"S" - SMALL POST TOP FIXTURE:

architectural area lighting

PROS
ARCHITECTURAL AREA/SITE

(P3-10, P4-10, P5-10)

DATE: 5-11-22 | LOCATION: BEACON, NY
TYPE: 3,4,5Q | PROJECT: MIRBEAU SPA AT HOWLAND ESTATE
CATALOG #:

PROS ON 4" FLUTED ALUM. POLES W/ LENS HEIGHT OF 10' ABOVE GRADE.

PROVIDENCE®

FEATURES

- Reliable, uniform, glare free illumination
- Types II, III, IV and V distributions
- 3000K, 4000K, 5000K CCT
- 0-10V dimming ready
- Integral surge suppression
- 15 standard powder coat finishes
- Upgrade Kits

3000K and warmer CCTs only

DIMENSIONS

Providence Small

RELATED PRODUCTS

PROL2 | PROV2

ORDERING GUIDE

CATALOG # **Example:** PROS-Y3-3030-BLS-BPS-WMA59D

HOUSING

PROS

Housing	Distribution	Lumen Package	Finish	Options	Mounting
PROS Providence Small LED	Y2 Type II	2030 3000K CCT 25 watts	BLS Black Gloss Smooth	FS1 Fusing	Standard Mount
	Y3 Type III	2040 4000K CCT 25 watts	BLT Black Matte Textured	PFN Brass Painted Finial	Slips over a 3"/75mm pole or may choose one
	Y4 Type IV	2050 5000K CCT 25 watts	DBS Dark Bronze Gloss Smooth	SPK Brass Painted Spike	Wall Mount
	Y5 Type V	3030 3000K CCT 43 watts	DBT Dark Bronze Matte Textured	BPS Brass Painted Struts	WMA59D Mount down
		3040 4000K CCT 43 watts	GTT Graphite Matte Textured	LDL Lightly diffused lens	WMA59U Mount up
		3050 5000K CCT 43 watts	LGS Light Gray Gloss Smooth	AD4 Adapter used only with standard AAL arms and post top mount fixtures to slip over a 4"/100mm O.D. pole	Pole Mount/Side Mounts
			LGT Light Gray Matte Textured		TRA59D Mount down
			PSS Platinum Silver Gloss Smooth		TRA59U Mount up
			VGT Verde Green Matte Textured		
			WHS White Gloss Smooth		
			WHT White Matte Textured		
			Color Options		
			CC Custom Color [1]		

MANUFACTURER TO PROVIDE 80 CRI.

DELIVERED LUMENS

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

System Watts	Lumen Package	Lens	Distribution	3000K 70CRI Lumen	3000K 70CRI Bug Rating B	U	G	3000K 70CRI Efficacy (Lm/W)	4000K 70CRI Lumen	4000K 70CRI Bug Rating B	U	G	4000K 70CRI Efficacy (Lm/W)	5000K 70CRI Lumen	5000K 70CRI Bug Rating B	U	G	5000K 70CRI Efficacy (Lm/W)
25	2000	Clear Lens (Standard) Lightly Diffused Lens	Type 2	1792	1	0	1	72	1957	1	0	1	78	1951	1	0	1	78
			Type 3	1830	1	0	1	73	1970	1	0	1	79	1958	1	0	1	78
			Type 4W	1793	0	0	1	72	1957	0	0	1	78	1900	0	0	1	76
			Type 5	1735	1	1	1	69	1894	1	0	1	76	1889	1	0	1	76
			Type 2	1216	1	1	1	49	1361	1	1	1	54	1387	1	1	1	55
			Type 3	1216	1	1	1	49	1391	1	1	1	54	1386	1	1	1	55
			Type 4W	1298	1	1	1	52	1417	1	1	1	57	1419	1	1	1	57
			Type 5	1139	1	1	1	46	1275	1	1	1	51	1299	1	1	1	52

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HUBBELL Lighting

POST TOP FIXTURES POLE:

DB1 – Decorative Pole | TYPE POST TOP FIXTURES (P1, P2, P3, P4 and P5) | TYPE

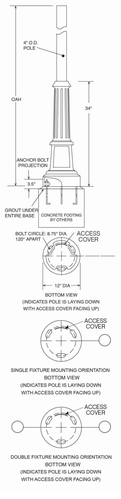
4" ROUND (RD) & FLUTED (FL) DECORATIVE BASE

Note: Adjust pole heights on site to set lenses at heights per plan (10' & 16')

1. BASE	2. POLE	3. OAH	4. COLOR	5. OPTIONS/ACCESSORIES

DB1

DIMENSIONS



MAXIMUM ALLOWABLE EPA (MPH)

1. BASE	2. POLE	3. OAH	SHAFT	WT	85	90	100	110	120	130	140	150
DB1	4R10-125	10' (3.1m)	4" RD x .125"	44	19.4	17.1	13.5	10.8	8.9	7.4	6.3	5.5
DB1	4R12-125	12' (3.7m)	4" RD x .125"	48	15.3	13.4	10.5	8.3	6.7	5.6	4.7	4.0
DB1	4R14-125	14' (4.3m)	4" RD x .125"	51	12.3	10.7	8.2	6.3	5.0	4.1	3.4	2.9
DB1	4R16-125	16' (4.9m)	4" RD x .125"	55	10.0	8.6	6.4	4.8	3.6	2.9	2.4	2.0
DB1	4R10-226	10' (3.1m)	4" RD x .226"	55	23.8	21.0	16.7	13.5	11.1	9.3	8.0	6.9
DB1	4R12-226	12' (3.7m)	4" RD x .226"	61	19.2	16.9	13.3	10.6	8.6	7.2	6.1	5.3
DB1	4R14-226	14' (4.3m)	4" RD x .226"	67	15.9	13.9	10.8	8.4	6.8	5.6	4.7	4.0
DB1	4R16-226	16' (4.9m)	4" RD x .226"	74	12.4	12.3	9.4	7.3	5.7	4.7	4.0	3.3
DB1	4F10-188	10' (3.1m)	4" FL x .188"	51	22.1	19.5	15.4	12.4	10.2	8.5	7.1	6.1
DB1	4F12-188	12' (3.7m)	4" FL x .188"	56	17.6	15.4	12.1	9.6	7.7	6.4	5.3	4.4
DB1	4F14-188	14' (4.3m)	4" FL x .188"	61	14.3	12.5	9.6	7.5	5.9	4.8	3.9	3.2
DB1	4F16-188	16' (4.9m)	4" FL x .188"	67	11.7	10.1	7.6	5.8	4.4	3.5	2.7	2.2

Note: Overall height is measured to top of pole.

2. COLOR

BLS	Black Gloss Smooth
BLT	Black Matte Textured
DBS	Dark Bronze Gloss Smooth
DBT	Dark Bronze Matte Textured
GTT	Graphite Matte Textured
LGS	Light Grey Gloss Smooth
LGT	Light Grey Matte Textured
PSS	Platinum Silver Smooth
VGT	Verde Green Textured
WHS	White Gloss Smooth
WHT	White Matte Textured
Color Option	
CC*	Custom Color

** Consult factory for custom color, marine and corrosive finish options*

3. OPTIONS / ACCESSORIES

FH (Flag holder. Specify location on pole)
FS1 (Single weatherproof fuse holder. Fuse by others.)
FS2 (Double weatherproof fuse holder. Fuse by others.)
LR (Ladder rest. Slips over a 4" O.D. pole.)
PCA-T(Rotatablephotocellhousing.Thehousingslipsover a4"/100mmO.D.pole,allofitsfeaturesliepowerthe4"/100mmO.D.tenon. Includeuptoonemedium-basesocketedphotocellandaraceswaycoverwith integralflangesandstainlesssteelsetscrewsthatsecurethephotocellinplace. Addits5"/125mmtotheoverall heightofthepole.Allfeaturesexceptfor5.Providedontheblackaluminumfinish.)
PCPR(Lowprofilebeltedstockphotocellreceptacle(withcaptivecapstop.Securestothetopofthepolewiththreestainlesssteelsetscrews. Photocell by others.)
PLT(PaintHangerFor4"OD.Poles.Specifylocationonpole)
RBC(Castaluminumreceptaclehousing,integrallyweldedtothepole.IncludesaRECapprovedsleevewiththerpoolcover.Doesnot include a receptacle or internal wiring.)

SPECIFICATIONS

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

WARNINGS

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom

CAUTION

Poles should never be erected without the luminaire installed.

Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

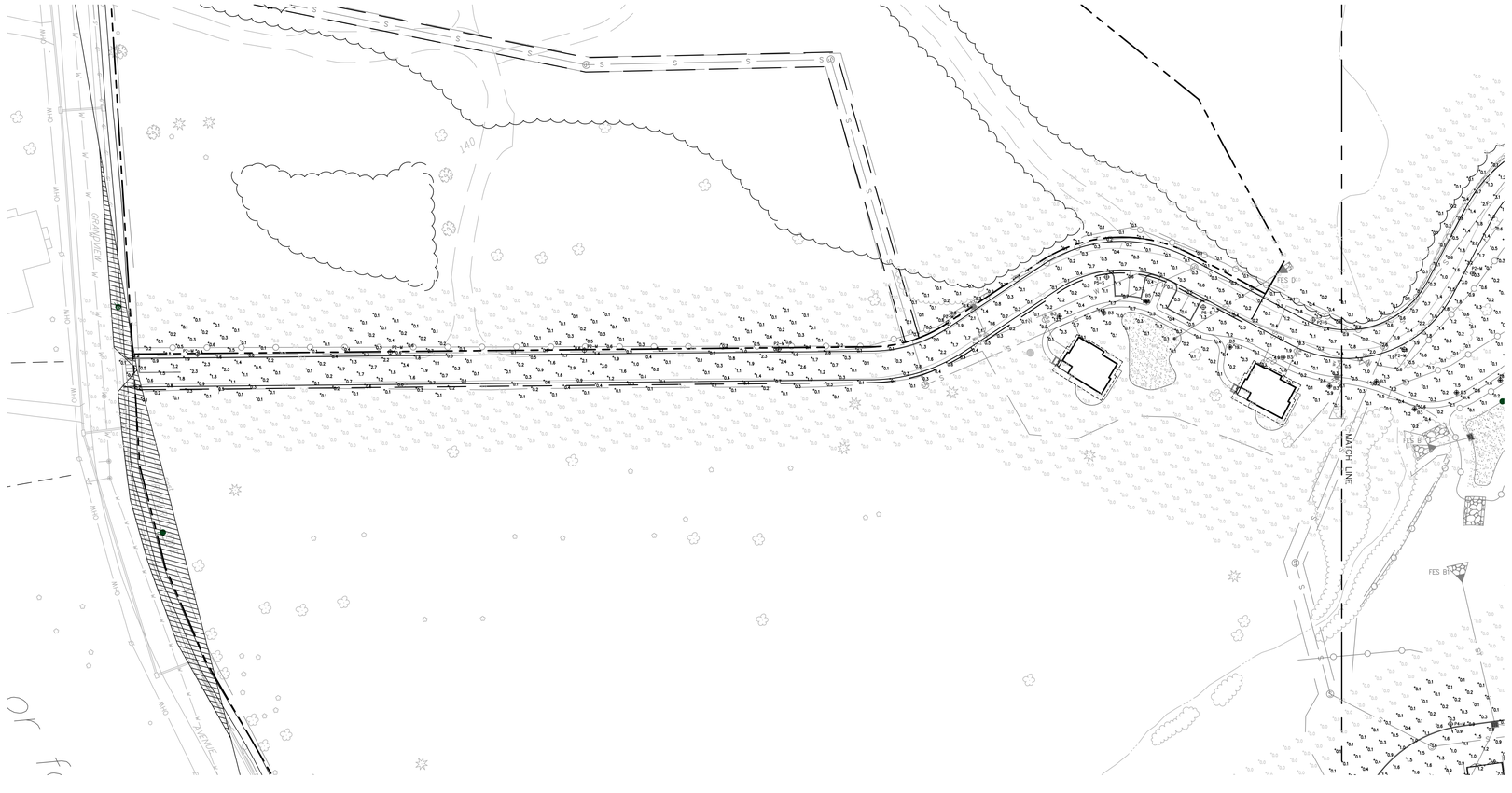
CERTIFICATION

Certified UL 1598 in accordance with Article 410 of ANSI/NFPA 70, National Electrical Code.

architectural area lighting
ARCHITECTURAL AREA LIGHTING
17760 Rowland Street | City of Industry | CA 91748
P 626.968.5666 | F 626.369.2695 | www.aal.net
Copyright © 2016 November 9, 2020 7:01 PM

JOB
TYPE
NOTES

I 1 I



See Sheet LP-2 for Lighting Schedule/Computations and Light Pole Base Detail.

GRAPHIC SCALE
40 20 0 40
SCALE IN FEET

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DRAWN BY: HT/CH/DW			CHECKED BY: HT			
REVISIONS:			REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	2/27/24	AMENDED SITE PLAN	HT				
2	3/26/24	PER PB COMMENTS					

ARROWSTREET
ARCHITECTURE & DESIGN
10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
arrowstreet.com

Mirbeau INN & SPA

LANDSCAPE ARCHITECTS:
LRC GROUP
- Landscape Architecture
- Civil Engineering
- Environmental Services
- Land Surveying
- Land Planning

55 Civic Center Plaza, Suite 204
Poughkeepsie NY 12601
Tel: 845.243.2880

160 West Street, Suite E
Cromwell, CT 06416
Tel: 860.635.2877

www.lrcconsult.com
LRC Engineering & Surveying, DPC
LRC Engineering & Surveying, LLC
LRC Environmental Services, Inc.

LRC Proj. No. 21-2809

HUDSON LAND DESIGN

REGISTERED LANDSCAPE ARCHITECT HENRY THOMAS 434 NO. 002094 STATE OF NEW YORK
SEAL

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

SITE LIGHTING PLAN – SOUTHEAST

MIRBEAU BEACON

11 MIRBEAU LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 40'
TITLE:	LP-3
SHEET:	28 OF 29

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

GENERAL NOTES:

1. THE FUTURE PHASE CONCEPTUAL IMPROVEMENTS ARE SHOWN FOR STATE ENVIRONMENTAL QUALITY REVIEW (SEQR) PURPOSES ONLY. SUCH IMPROVEMENTS ARE SUBJECT TO SITE PLAN REVIEW BY THE CITY OF BEACON PLANNING BOARD.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100 YEAR FLOODPLAIN LINE
- 250 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW — EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS — SS — EXISTING SEWER SERVICE LINE
- S — EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W — EXISTING WATER LINE
- WS — WS — EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- CB 50 — EXISTING CATCH BASIN

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 — PROPOSED MAJOR CONTOUR
- 252 — PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S — PROPOSED SEWER LINE
- SS — SS — PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST — PROPOSED STORM WATER LINE
- RL — PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W — PROPOSED WATER LINE
- WS — WS — PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

AMENDED SITE PLAN NOTES:

THE AMENDED SITE PLANS AND ELEVATIONS IDENTIFY THE FOLLOWING CHANGES TO THE APPROVED SITE PLANS.

1. RETAIN THE DINING WNG STRUCTURE WITHIN THE MANSION.
2. ELIMINATE THE 7 GROTTO ROOMS WITHIN THE MANSION.
3. ADD AN ELEVATOR AND EXTERIOR WALK IN COOLER & FREEZER ADJACENT TO THE WEST SIDE OF THE MANSION ALONG MIRBEAU LANE.
4. ELIMINATE 2 OF THE 4 MONET GARDEN PONDS.
5. DEFER THE WESTERN EMPLOYEE LOTS PAVING AND PROVIDE GRAVEL LOTS.
6. REPLACE THE PAVEMENT WITH CHIP SEAL SURFACE ON THE MAIN ENTRANCE DRIVE.
7. REPLACE VARIOUS REDI-ROCK WALLS WITH LARGE DIAMETER LANDSCAPE BOULDERS.
8. ELIMINATE THE CURB ADJACENT TO THE REDI-ROCK WALLS ALONG THE EASTERN EDGE OF THE CHATEAU EASTERN LOT AND INSTALL CONCRETE CURB STOPS AT EACH SPACE.
9. ELIMINATE THE WALKING PATH FROM THE FRONT CIRCULAR DRIVE OVER TO THE SPA ENTRANCE.
10. DEFER THE PAVEMENT ON MIRBEAU LANE FROM COTTAGE 3 TO GRANDVIEW UNTIL THE FUTURE DEVELOPMENT OF THE COTTAGES IN THE TRIANGULAR PARCEL.
11. ELIMINATE WATER SERVICE LINE TO CHATEAU HOTEL FROM CONNECTION WITH 8" SERVICE MAIN ADJACENT TO COTTAGE #4, AND PROVIDE A 6" SERVICE LINE TO THE CHATEAU HOTEL FROM THE 8" MAIN THAT CONNECTS TO THE EXISTING WATER MAIN IN HOWLAND AVENUE. THE RELOCATED 6" SERVICE LINE IS ALSO CONNECTED TO THE PREVIOUSLY APPROVED HYDRANT ON THE SOUTH END OF THE HOTEL WING.
12. INSTALLING A SECOND PRIMARY TRANSFORMER ADJACENT TO THE LAUNDRY ROOM WITHIN THE CHATEAU HOTEL.
13. INSTALLING A SECOND DUMPSTER ENCLOSURE AT THE BOTTOM OF THE DRIVE LEADING TO THE LAUNDRY ROOM WITHIN THE CHATEAU HOTEL.
14. CHANGED BIORETENTION AREA B TO AN INFILTRATION BASIN.
15. MOVED GREASE TRAP LOCATION TO THE SOUTH SIDE OF THE MANSION DINING WNG.
16. MOVED ONSITE SEWER MAIN TO GATEHOUSE LANE.

OVERALL MASTER PLAN WITH FUTURE PHASE CONCEPTUAL IMPROVEMENTS

SCALE: 1" = 100'
GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

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DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
12	2/27/24	AMENDED SITE PLAN	CMB				
13	3/19/24	PER PB COMMENTS & DCDBCH SUBMITTAL	CMB				
14	3/29/24	PER DCDBCH COMMENTS	CMB				
15	4/15/24	PER CITY AND DCDBCH COMMENTS	MAB				

ARROWSTREET
ARCHITECTURE & DESIGN
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Mirbeau INN & SPA

LANDSCAPE ARCHITECTS:
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Cromwell, CT 06416
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www.lrcconsult.com
LRC Engineering & Surveying, DPC
LRC Engineering & Surveying, LLC
LRC Environmental Services, Inc.
LRC Proj. No. 21-2809
- Landscape Architecture
- Civil Engineering
- Environmental Services
- Land Surveying
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13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
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F: 845-440-6637

OVERALL AMENDED MASTER PLAN WITH FUTURE PHASE CONCEPTUAL IMPROVEMENTS
MIRBEAU BEACON

7 CRAIG HOUSE LANE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-13-001258

JOB #:	2021:051
DATE:	3/29/2022
SCALE:	1" = 100'
TITLE:	SP-1A
SHEET:	29 OF 29

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

SEQR 24-07, 338

City of Beacon
Planning Board
One Municipal Plaza, Suite 4
Beacon, NY 12508
Phone: 845-838-5002

DESIGNATION OF LEAD AGENCY RESPONSE FORM

To: City of Beacon Planning Board **Date:** 4/15/2024

From (agency name): New York STATE Dept of TRANSPORTATION

Subject: **Designation of Lead Agency in Accordance with SEQRA**
2-11 Mirbeau Lane, Beacon, NY 12508, Tax Grid No. 6054-13-001258

The City of Beacon Planning Board intends to continue to serve as the Lead Agency for the environmental review of the proposed action consisting of modifications to a proposal to convert the Howland Estate into a 75-room hotel with additions to the renovated mansion, spa, 100-seat restaurant, five cottages, and an event space located on property known and designated as 6054-13-001258 (the "Property") in the R1-80 zoning district and in the Historic District and Landmark Overlay (HDLO) zone.

The above identified agency: *(please check one below)*

☑ Has no objection to the Planning Board serving as Lead Agency.

☐ Takes no position with respect to the Planning Board serving as Lead Agency.

☐ Objects to the Planning Board serving as Lead Agency.

DAVID GROUCHER
Printed Name

Signature

Title

Mercedes Perez, Planning Board Secretary: **mperez@beaconny.gov**

City of Beacon
Planning Board
One Municipal Plaza, Suite 1
Beacon, NY 12508
Phone: 845-838-5002

John Gunn, Chair

April 3, 2024

RECEIVED
APR 09 2024
Traffic & Safety Group
Region 8

New York State Department of Transportation
Attn: Regional Permit Coordinator
4 Burnett Boulevard
Poughkeepsie, NY 12603

Subject: **Designation of Lead Agency in Accordance with SEQRA**
2-11 Mirbeau Lane, Beacon, NY 12508 *(formerly 7 Craig House Lane)*
Tax Grid No. 6054-13-001258

To Whom It May Concern:

The City of Beacon Planning Board is hereby notifying you that it has received an application for an amended Site Plan and Certificate of Appropriateness approvals in connection with a proposal to convert the Howland Estate into a 75-room hotel with additions to the renovated mansion, spa, 100-seat restaurant, five cottages, and an event space. Future phases will include restoration of the former school and south gatehouse, a farm and farm store, recreational uses, and development of rental cottages on a 7-acre lot recently subdivided from the 64.39-acre site. The site, known and designated as 6054-13-001258 (the "Property") is located in the R1-80 zoning district, in the Historic District and Landmark Overlay (HDLO) zone. The Planning Board is the approval authority for the Amended Site Plan Approval application.

The City of Beacon Planning Board previously circulated for lead agency on April 25, 2022, and hereby declares its continued intent to serve as the Lead Agency for the environmental review of the proposed action, which is classified as Type I pursuant to SEQRA. Enclosed for your use, if you choose, is a form for responding to the Planning Board.

In accordance with the requirements of SEQRA, enclosed for your review are Part 1 of the Environmental Assessment Form (EAF) which has been prepared by the project sponsor for the proposed action, and a copy of the applications and site plan. Agenda materials are also available online through the City of Beacon website: https://beaconny.gov/index.php/agendas-minutes/

Thank you.

John Gunn, Chair

JG/mp

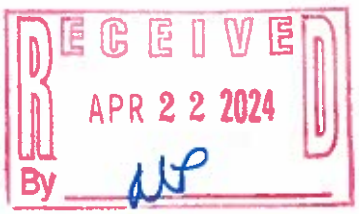
SUE SERINO
COUNTY EXECUTIVE

LIVIA SANTIAGO-ROSADO, MD, FACEP
COMMISSIONER

ANTHONY J. RUGGIERO, MPA
ASSISTANT COMMISSIONER

DUTCHESS COUNTY GOVERNMENT
DEPARTMENT OF BEHAVIORAL & COMMUNITY HEALTH

April 19, 2024



City of Beacon Planning Board
John Gunn, Chair
One Municipal Plaza, Suite 1
Beacon, NY 12508

Re: Continuation of Lead Agency in Accordance with SEQRA
2-11 Mirbeau Lane, Beacon NY, Tax ID: 6054-13-001258

Dear Mr. Gunn,

This department has received a Notice of SEQR Positive Declaration (dated April 3, 2024; received April 9, 2024),

1. This Department has no objection to the City of Beacon Planning Board continuing as the lead agent for SEQR, and requests that the undersigned continue to be notified of SEQR determinations, proceedings and hearings in this matter.
2. Detailed plans and specifications will have to be submitted to this Department by a New York State licensed professional for approval of proposed water supply and sewage disposal system arrangements. Reference is made to the Dutchess County Sanitary Code Articles 5, 16, and 19.

Should you find that we can be of assistance please contact us at (845) 486-3404.

Sincerely,

William 'Jay' Gieseler, PE
Senior Public Health Engineer
Environmental Health Services

cc: file 122782

LANC & TULLY
Engineering and Surveying, P.C.

May 8, 2024

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

RE: Mirbeau of Beacon, LLC
Site Plan Amendment
City of Beacon
Tax Map No. 6054-13-001258

Dear Mr. Gunn:

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

- Response correspondence dated April 19, 2024, from The Mirbeau Companies.
- Viewshed Diagrams, dated April 19, 2024, as prepared by Arrowstreet.
- Response correspondence dated April 22, 2024, from Hudson Land Design.
- Plan titled "Overall Elevations", dated March 26, 2024, as prepared by Arrow Street Architecture & Design.
- Plan set titled "Mirbeau Beacon Inn & Spa", with Sheets 1 through 19 and Sheet 29 having the latest revision date of April 15, 2024, and Sheets 20 through 28 having the latest revision date of March 26, 2024, as prepared by Hudson Land Design, Arrow Street Architecture, and LRC Group.

The project was previously approved by the Planning Board in April of 2023 to develop a Spa and Inn at the Craig House property located on the southerly side of the City along Howland Avenue, which is 64.39 acres in size. At that time, the applicant also proposed to subdivide 7 acres from the parent parcel, along Grandview Avenue, that will contain Phase II of the project in the future. Based upon our review of the above referenced documents and plans, we offer the following comments:

General Comments:

1. The applicant previously submitted to the Dutchess County Department of Health (DCDOH) for proposed revisions to the water distribution system and sewer collection system. The applicant shall provide an update to the Planning Board as to the status of review and approval by the DCDOH.

2. A Performance Bonds shall be posted for all public improvement required on Wolcott Avenue, as well as along Grandview and South Avenue. The resolution for the project should incorporate the required language as to when each of the bonds are

to be posted, and the City's Building Department should be in agreement as to when the bonds are to be posted.

Sheet 2 of 29:

1. A note shall be added to the plan referencing the previously filed subdivision plat for Mirbeau, which was filed with the County Clerk's office on May 31, 2023 (Filed Map #5450A) that created Lot 2.

Sheet 3 of 29:

1. Note No. 5 of the amended site plan notes state that the paving of the western employee parking lots is to be deferred. As the Applicant in their recent submission is requesting that they be allowed three (3) years from the date of opening to determine if the surface conditions in the parking lots can remain or require pavement, the note shall be revised to reflect this time frame.

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** 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: Jennifer Gray, Esq.
Natalie Quinn, Planner
Bruce Flower, Building Inspector

KARC
PLANNING CONSULTANTS, INC.

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

FR: KARC Planning Consultants, Inc.

DATE: May 10, 2024

RE: 11 Mirbeau Lane Site Plan Amendment, Mirbeau of Beacon, LLC

I have reviewed the following additional materials regarding the proposed Amended Site Plan for 11 Mirbeau Ln:

- Cover letter by Edward A. Kellogg of Mirbeau of Beacon LLC, dated April 19, 2024
- Response letter by Michael Bodendorf, Hudson Land Design, dated April 22, 2024
- Cost Estimates Colliers Engineering, dated May 12, 2023
- Site Plan Set (29 sheets) by Hudson Land Design and LRC Group, last revised April 15, 2024
- Viewshed Diagrams by Arrowstreet Architecture & Design, dated April 19, 2024
- Stormwater Pollution Prevention Plan for Mirbeau Beacon Inn & Spa by Hudson Land Design, last revised March 26, 2024, Page 13 last revised April 19, 2024

Project Description:
The applicant is proposing amendments to a site plan previously approved by the Board in April of 2023. Proposed amendments to the approved site plan are listed on Site Plan Sheet SP-1 (Sheet 3 of 29) and include retention of the existing dining wing structure, relocation of seven Grotto rooms, addition of elevator and exterior walk-in cooler, elimination of two proposed garden ponds, changes in proposed paving materials, and deferred improvements, amongst others.

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

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

Natalie Quinn
Beacon Planning Consultant

Cc: Bruce Flower, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer
Edward A Kellogg, Applicant Representative

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "**Yes"** to a numbered question, please complete all the questions that follow in that section.
- If you answer "**No"** to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land
Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)
If "Yes", answer questions a - j. If "No", move on to Section 2.

☐ NO ☑ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	☑	☐
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	☑	☐
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	☑	☐
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	☑	☐
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	☑	☐
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	☑	☐
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	☑	☐
h. Other impacts: _____ _____		☐	☐

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) ☑ NO ☐ YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	☐	☐
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	☐	☐
c. Other impacts: _____ _____		☐	☐

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) ☑ NO ☐ YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	☐	☐
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	☐	☐
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	☐	☐
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	☐	☐
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	☐	☐
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	☐	☐
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	☐	☐
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	☐	☐
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	☐	☐
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	☐	☐
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	☐	☐

l. Other impacts: _____ _____		☐	☐

4. Impact on groundwater

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)

☑ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 5.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	☐	☐
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	☐	☐
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	☐	☐
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	☐	☐
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	☐	☐
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	☐	☐
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	☐	☐
h. Other impacts: _____ _____		☐	☐

5. Impact on Flooding

The proposed action may result in development on lands subject to flooding. (See Part 1. E.2)

☑ NO ☐ YES

If "Yes", answer questions a - g. If "No", move on to Section 6.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	☐	☐
b. The proposed action may result in development within a 100 year floodplain.	E2j	☐	☐
c. The proposed action may result in development within a 500 year floodplain.	E2k	☐	☐
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	☐	☐
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	☐	☐
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	☐	☐

g. Other impacts: _____ _____		☐	☐

6. Impacts on Air

The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2.h, D.2.g) ☑ NO ☐ YES

If "Yes", answer questions a - f. If "No", move on to Section 7.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. More than 1000 tons/year of carbon dioxide (CO_2)	D2g	☐	☐
ii. More than 3.5 tons/year of nitrous oxide (N_2O)	D2g	☐	☐
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	☐	☐
iv. More than .045 tons/year of sulfur hexafluoride (SF_6)	D2g	☐	☐
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions	D2g	☐	☐
vi. 43 tons/year or more of methane	D2h	☐	☐
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	☐	☐
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	☐	☐
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	☐	☐
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	☐	☐
f. Other impacts: _____ _____		☐	☐

7. Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) ☑ NO ☐ YES

If "Yes", answer questions a - j. If "No", move on to Section 8.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	☐	☐
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	☐	☐
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	☐	☐
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	☐	☐

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	☐	☐
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	☐	☐
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	☐	☐
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ _____	E1b	☐	☐
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	☐	☐
j. Other impacts: _____ _____		☐	☐

8. Impact on Agricultural Resources

The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) ☑ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 9.

	Relevant Part I Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	☐	☐
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, Elb	☐	☐
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	☐	☐
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	☐	☐
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	El a, E1b	☐	☐
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	☐	☐
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	☐	☐
h. Other impacts: _____		☐	☐

9. Impact on Aesthetic Resources

The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.)

☐ NO ☑ YES

If "Yes", answer questions a - g. If "No", go to Section 10.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	☑	☐
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	☑	☐
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	☑ ☑	☐ ☐
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	☑ ☑	☐ ☐
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	☑	☐
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile ½ -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	☑	☐
g. Other impacts: _____ _____		☐	☐

10. Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.)

☐ NO ☑ YES

If "Yes", answer questions a - e. If "No", go to Section 11.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places.	E3e	☑	☐
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	☑	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	☑	☐

d. Other impacts: _____ _____		☐	☐
e. If any of the above (a-d) are answered "Moderate to large impact may occur", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	☐	☐
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	☐	☐
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	☐	☐

11. Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.
(See Part 1. C.2.c, E.1.c., E.2.q.)
If "Yes", answer questions a - e. If "No", go to Section 12.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	☐	☐
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	☐	☐
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	☐	☐
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	☐	☐
e. Other impacts: _____ _____		☐	☐

12. Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)
If "Yes", answer questions a - c. If "No", go to Section 13.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	☐	☐
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	☐	☐
c. Other impacts: _____ _____		☐	☐

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems. ☑ NO ☐ YES
(See Part 1. D.2.j)
If "Yes", answer questions a - f. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	☐	☐
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	☐	☐
c. The proposed action will degrade existing transit access.	D2j	☐	☐
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	☐	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	☐	☐
f. Other impacts: _____ _____		☐	☐

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy. ☑ NO ☐ YES
(See Part 1. D.2.k)
If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	☐	☐
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	☐	☐
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	☐	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	☐	☐
e. Other Impacts: _____ _____		☐	☐

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting. ☑ NO ☐ YES
(See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	☐	☐
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	☐	☐
c. The proposed action may result in routine odors for more than one hour per day.	D2o	☐	☐

d. The proposed action may result in light shining onto adjoining properties.	D2n	☐	☐
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	☐	☐
f. Other impacts: _____ _____		☐	☐

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.) ☑ NO ☐ YES

If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No,or small impact may cccur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	☐	☐
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	☐	☐
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	☐	☐
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	☐	☐
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	☐	☐
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	☐	☐
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	☐	☐
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	☐	☐
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	☐	☐
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	☐	☐
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	☐	☐
m. Other impacts: _____ _____		☐	☐

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans. ☑ NO ☐ YES

(See Part 1. C.1, C.2. and C.3.)

If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	☐	☐
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	☐	☐
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	☐	☐
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, Elb	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	☐	☐
h. Other: _____ _____		☐	☐

18. Consistency with Community Character

The proposed project is inconsistent with the existing community character. ☑ NO ☐ YES

(See Part 1. C.2, C.3, D.2, E.3)

If "Yes", answer questions a - g. If "No", proceed to Part 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	☐	☐
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	☐	☐
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	☐	☐
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	☐	☐
g. Other impacts: _____ _____		☐	☐

PRINT FULL FORM

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:
To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

Please see attached.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☐ Type 1 ☑ Unlisted

Identify portions of EAF completed for this Project: ☑ Part 1 ☑ Part 2 ☑ Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information
All application materials submitted by the Applicant, memoranda from City Staff and consultants, agency and public comments, and testimony during public hearings and meetings on the application.

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the City of Beacon Planning Board as lead agency that:

☑ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: Mirbeau Inn & Spa	
Name of Lead Agency: City of Beacon Planning Board	
Name of Responsible Officer in Lead Agency: John Gunn	
Title of Responsible Officer: Chairperson	
Signature of Responsible Officer in Lead Agency:	Date: 5-14-2024
Signature of Preparer (if different from Responsible Officer)	Date: 5-14-2024

For Further Information:

Contact Person: Mercedes Perez, Planning Board Secretary

Address: 1 Municipal Plaza, Beacon NY 12508

Telephone Number: 845-838-5002

E-mail: mperez@beaconny.gov

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

PRINT FULL FORM

ATTACHMENT TO
NEGATIVE DECLARATION
REASONS SUPPORTING DETERMINATION

APPLICATION FOR AMENDED SITE PLAN
FOR 11 MIRBEAU LANE (FORMERLY, 7 CRAIG HOUSE LANE)

Parcel Nos. 6054-13-001258 & 6054-13-934182

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 Full 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.

A Negative Declaration for the original Proposed Action was adopted by the Planning Board as Lead Agency on October 12, 2022 thereby concluding the Project will not result in any significant adverse environmental impacts. Thereafter, the Planning Board adopted a resolution approving applications for Special Permit, Site Plan, Subdivision and Certificate of Appropriateness for the Project. The 2022 Negative Declaration was the result of the Planning Board's review of the original Proposed Action which was the adaptive re-use of the existing Howland Estate for a 75-room hotel with additions to the renovated mansion, with accessory uses including a spa, 110-seat fine dining restaurant, 5 cottages, event facilities, gardens, water features and site amenities ("Original Proposed Action"). The Original Proposed Action included hotel rooms that would be located in the renovated mansion and a newly constructed building, including the spa. The new hotel/spa building will be located in the area of the existing dormitory building. An addition to the Mansion is also proposed. Future site improvements include restoration of an existing gate house located in the northeast portion of the site, restoration of the former Tioronda School located in the southwest portion of the site, renovation of a gate house located in the southern portion of the site along South Street, farming operations, recreational uses and additional rental cottages. At that time, a 6.5-acre parcel was subdivided from the parent parcel for the future rental cottages. These future improvements and activities were included in the Original Proposed Action on a conceptual level as concrete, definitive plans have not been developed. The site is located at 11 Mirbeau Lane (formerly, 7 Craig House Lane) in the R1-80 zoning district and in the Historic District and Landmark Overlay (HDLO) zone.

Project Description:

The Applicant is now proposing several modifications to the approved site plan. The modifications to the approved site plan are analyzed herein to determine whether such modifications will result in a significant adverse environmental impact as compared to the Original Proposed Action. The proposed modifications are as follows:

- The dining wing within the existing mansion is proposed to be retained and renovated, instead of being demolished.
- The seven previously proposed ground floor grotto rooms have been eliminated from the design. The overall guest room count remains the same as previously proposed by reconfiguration of certain rooms within the mansion and hotel wing.
- An elevator and exterior walk-in cooler/freezer was added to the mansion.
- Two of the four proposed Monet garden ponds were eliminated from the design.
- Employee parking lots are proposed to be surfaced with gravel instead of paving.
- The pavement for the main drive is proposed to be replaced with chip seal.
- Various proposed Redi Rock walls have been replaced with large diameter landscape boulders.
- The curb in front of the Redi Rock walls along the eastern edge of the Chateau has been replaced with curb stops.
- The walking path from the circular drive to the spa entrance has been eliminated.
- Bioretention Area B was changed to an Infiltration Basin.
- A second dumpster is proposed at the south end of the hotel adjacent to the laundry entrance.
- Pavement on Mirbeau Lane from Cottage 3 to Grandview Avenue is proposed to be deferred until the future development of the new 6.5-acre parcel created as part of the original approval.
- The proposed sanitary sewer line from Grandview Avenue is proposed to be shifted to the north and west to be located closer to the internal property line separating the new 6.5 acre parcel from the remaining portion of the parent parcel.
- Adjustments to the location of proposed water service lines.

The Original Proposed Action was a Type I action. While the modifications currently proposed would not be classified as Type I, the Planning Board nonetheless followed all Type I procedural requirements. The Planning Board circulated its Notice of Intent to continue to act as Lead Agency and received no objections.

Summary of Rationale for Negative Declaration

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

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

The proposed amendments to the Site Plan will not have a significant adverse environmental impact as a result of any physical change to the project site. The proposed amendments to the Site Plan result in a general reduction in impacts related to the overall project as certain elements of the original Site Plan have been eliminated or reduced.

Therefore, no significant adverse environmental impacts are expected as a result of any physical change to the project site as compared to the previous approval which was the subject of the 2022 SEQRA Negative Declaration.

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.

The proposed amendments include replacing Bioretention Area B with an infiltration basin. Another bioretention area which was part of the original approved site plan will remain as originally proposed. The Amended Stormwater Pollution Prevention Plan continues to demonstrate a decrease in post-development flows from the site.

The Applicant proposes to relocate the proposed sanitary sewer line extending from Grandview Avenue to the site improvements. No significant impact is anticipated as result of this relocation. Water and sanitary sewer demand remain the same as was studied in the 2022 Negative Declaration.

For the reasons set herein, and in the 2022 SEQRA Negative Declaration, the Project will not result in a significant adverse impact on 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.

The proposed amendments will not impact drainage flows or patterns, or surface water runoff as compared to that which was studied in the 2022 SEQRA Negative Declaration.

For the reasons set herein, and in the 2022 SEQRA Negative Declaration, the Project will not result in a significant adverse impact on flooding.

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

Potential impacts on air quality remain unchanged since the 2022 SEQRA Negative Determination.

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

The proposed amendments will not impact flora or fauna as compared to that which was studied in the 2022 SEQRA Negative Declaration.

For the reasons set herein, and in the 2022 SEQRA Negative Declaration, the Project will not result in a significant adverse impact on plants and animals.

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 amendments will not impact aesthetic resources as compared to that which was studied in the 2022 SEQRA Negative Declaration.

The Planning Board reviewed elevations and renderings of the proposed amendments to the building, including a review of any proposed rooftop mechanical units, and determined that the proposed amendments will not result in a significant adverse visual impact. All originally proposed landscaping along Wolcott Avenue will remain as-approved. As such, the viewsheds from Wolcott Avenue will remain largely the same as that which was extensively studied in 2022.

For the reasons set herein, and in the 2022 SEQRA Negative Declaration, the Project will not result in a significant adverse 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 proposed amendments will not impact historic and archeological resources as compared to that which was studied in the 2022 SEQRA Negative Declaration. The proposed amendments retain more of the existing structures on-site and reduce the scale of the proposed design. Also, the Applicant has continued to work with the State Historic Preservation Office to further preserve and protect historic and archeological resources on-site beyond what was studied in the 2022 SEQRA Negative Declaration.

For the reasons set herein, and in the 2022 SEQRA Negative Declaration, the Project will not result in a significant adverse impact on historic or archeological resources.

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

No changes are proposed which will impact open space or recreation. For the reasons set forth herein and in the 2022 SEQRA Negative Declaration, no significant adverse impacts on open space or recreation are anticipated to result from the Amended Site Plan.

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.

No changes are proposed which will impact traffic or transportation. For the reasons set forth herein and in the 2022 SEQRA Negative Declaration, no significant adverse impacts on traffic or transportation are anticipated to result from the Amended Site Plan.

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

No changes are proposed which will impact energy. For the reasons set forth herein and in the 2022 SEQRA Negative Declaration, no significant adverse impacts on energy are anticipated to result from the Amended Site Plan.

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.

No changes are proposed which will impact noise, order or light. For the reasons set forth herein and in the 2022 SEQRA Negative Declaration, no significant adverse impacts on noise, odor or light are anticipated to result from the Amended Site Plan.

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.

No changes are proposed which will impact human health. For the reasons set forth herein and in the 2022 SEQRA Negative Declaration, no significant adverse impacts on human health from exposure to new or existing sources of contaminants are anticipated to result from the Amended Site Plan.

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

No changes are proposed which will impact community plans or community character. The project remains consistent with the City Comprehensive Plan and City Zoning Code, will not have a significant adverse impact on municipal services, and is generally consistent with the character of the existing neighborhood. For the reasons set forth herein and in the 2022 SEQRA Negative Declaration, no significant adverse impacts on community plans and community character are anticipated to result from the Amended Site Plan.

Based upon this information and the information in the Full 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 14, 2024
Beacon, New York

Motion by _____, seconded by _____:

Kevin Byrne	Voting ____	Leonard Warner	Voting ____
Donna Francis	Voting ____	J. Randall Williams	Voting ____
David Jensen	Voting ____	John Gunn, Chairman	Voting ____
Karen Quiana	Voting ____		

RESOLUTION

PLANNING BOARD
BEACON, NEW YORK

AMENDED SITE PLAN APPROVAL &
AMENDED CERTIFICATE OF APPROPRIATENESS
FOR MIRBEAU INN & SPA
(11 MIRBEAU LANE, formerly 7 Craig House Lane)

Parcel Nos. 6054-13-001258 & 6054-13-934182

WHEREAS, Mirbeau of Beacon LLC (the "Applicant") submitted an application to the City of Beacon Planning Board (the "Planning Board") for approval of an Amended Site Plan for a hotel and spa on property located at 11 Mirbeau Lane (formerly 7 Craig House Lane) and designated on the Tax Map of the City of Beacon as Parcel ID 6054-13-001258 and 6054-13-934182 (the "Property") located in the R1-80 Zoning District and the Historic District Landmark and Overlay ("HDLO") District (the "Amended Project" or "Amended Proposed Action"); and

WHEREAS, on October 12, 2022 the Planning Board adopted a SEQRA Negative Declaration for the original Proposed Action; and

WHEREAS, on December 13, 2022 the Planning Board approved a Subdivision, Special Permit, Site Plan and Certificate of Appropriateness for the original Project by resolution filed in the Office of the City Clerk on December 14, 2022; and

WHEREAS, the original Project approved in 2022 included the conversion of the Howland Estate into a 75-room hotel with additions to the renovated Mansion, spa, 110-seat restaurant, five cottages, and an event space and associated site improvements, and to subdivide 6.5 acres from the parent parcel for a future phase of development which may include additional rental cottages, farming operations, recreational uses and the restoration of the former school and southern gatehouse, on the 64.39 acre property; and

WHEREAS, the Applicant now proposes certain modifications to the approved Site Plan, including (1) the dining wing within the existing mansion is proposed to be retained and renovated, instead of being demolished; (2) the seven previously proposed ground floor grotto rooms have been eliminated from the design. The overall guest room count remains the same as previously proposed by reconfiguration of certain rooms within the mansion and hotel wing; (3) an elevator and exterior walk-in cooler/freezer was added to the mansion; (4) two of the four proposed Monet garden ponds were eliminated from the design; (5) employee parking lots are proposed to be surfaced with gravel instead of paving; (6) the pavement for the main drive

is proposed to be replaced with chip seal; (7) various proposed Redi Rock walls have been replaced with large diameter landscape boulders; (8) the curb in front of the Redi Rock walls along the eastern edge of the Chateau has been replaced with curb stops; (9) the walking path from the circular drive to the spa entrance has been eliminated; (10) Bioretention Area B was changed to an Infiltration Basin; (11) a second dumpster is proposed at the south end of the hotel adjacent to the laundry entrance; (12) pavement on Mirbeau Lane is proposed to be deferred until the future development of the new 6.5-acre parcel created as part of the original approval; (13) the proposed sanitary sewer line from Grandview Avenue is proposed to be shifted to the north and west to be located closer to the internal property line separating the new 6.5 acre parcel from the remaining portion of the parent parcel; and (14) adjustments to the location of proposed water service lines; and

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

WHEREAS, the Planning Board is the approval authority for the Amended Certificate of Appropriateness pursuant to City of Beacon Code Chapter 134; and

WHEREAS, the application consists of application forms, correspondence, the Full Environmental Assessment Form ("Full EAF") and professional studies and reports submitted to the Planning Board; and

WHEREAS, the Amended Site Plan is shown on the drawings, entitled "Application for Amended Site Plan, Mirbeau Beacon Inn & Spa Beacon" Sheets 1-29, last revised April 15, 2024, as prepared by Hudson Land Design Professional Engineering, P.C., with Architectural Drawings, Viewshed Renderings and Elevations, Sheets A0.01, A0.02, A0.03, A0.04, A3.00A, A3.00B and A3.00C, dated March 26, 2024, prepared by Arrowstreet Architecture and a Roadway Improvement Plan, prepared by Colliers Engineering & Design, dated November 29, 2022; and

WHEREAS, the Planning Board reviewed the application at meetings held on March 12, 2024, April 9, 2024 and May 14, 2024; and

WHEREAS, on April 9, 2024 the Planning Board opened a duly noticed public hearing, at which time all those interested were given an opportunity to be heard and the public hearing was closed on April 9, 2024; and

WHEREAS, the Planning Board has reviewed the application for Amended Site Plan approval against the standards set forth in the City of Beacon Zoning Code §223-25; and

WHEREAS, the Planning Board has reviewed the application for an amended certificate of appropriateness against the standards set forth in the City of Beacon Code §134-6 and applied the design standards in City of Beacon Code §134-7; and

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

NOW, THEREFORE, BE IT RESOLVED, that the Planning Board hereby grants a Certificate of Appropriateness for the Project located at 11 Mirbeau Lane (formerly 7 Craig House Lane), as shown on the application materials enumerated above.

BE IT FURTHER RESOLVED, that the Planning Board hereby grants Amended Site Plan Approval for the Project, as shown on the application materials enumerated above, subject to the following conditions:

A. Prior to the signing of the Amended Site Plan Drawings by the Planning Board Chairman, the following conditions shall be fulfilled:

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

2. The Applicant shall seek and obtain all required permits and/or approvals from the appropriate agencies for the Project, including but not necessarily limited to approval from the Dutchess County Department of Health, and shall meet all conditions contained in such approvals, as required therein.

3. The comments contained in the City Engineer's letter to the Planning Board dated May 8, 2024, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Engineer.

4. Consistent with the City Engineer's letter dated May 8, 2024, Note 5 on the Amended Site Plan shall be amended to state that three (3) years from the issuance of a Certificate of Occupancy the Building Department and/or the Planning Board may determine whether the surface of the western employee parking lots may remain as approved, or shall be resurfaced to be consistent with the remainder of the on-site parking areas. In the event a determination is made by the Building Department or Planning Board that the parking lot shall be resurfaced, the Applicant shall secure all required permits and perform such work in a commercially reasonable timeframe after notification of such determination.

5. The Applicant shall post a performance guaranty with the City of Beacon for any and all public improvements. Prior to the signing of the Site Plan by the Planning Board Chairperson, the Applicant shall submit a performance guaranty in the amount of $145,326, subject to confirmation of such amount from the City Engineer upon review of a cost estimate submitted by the Applicant's engineer, for all relevant improvements with the exception of the work on Route 9D which was the subject of a cost estimate previously submitted to the Building Department prepared by Colliers. On or before April 1, 2025 the Applicant shall submit to the Building Department a

performance guaranty in the amount of $623,317.25, subject to confirmation of such amount from the City Engineer upon review of a cost estimate submitted by the Applicant's engineer, in advance of the work to be performed for the Route 9D improvements. All performance guaranties shall be in form acceptable to the City Attorney.

6. All required easement agreements, declarations of restrictive covenants or other such documents, including but not limited to those set forth below, shall be prepared and submitted to the City Attorney for review and shall be recorded in the Dutchess County Clerk's Office by the Applicant, unless otherwise agreed by the City Attorney, with a copy of the recorded documents submitted to the Building Department and to the City Clerk for filing:

    i. Declaration of Amended Utility Easement (sanitary sewer)

    ii. Offer of Dedication and Cession (utilities in Grandview Avenue)

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

1. The Applicant shall establish an escrow with the City of Beacon for the inspection of the water and sewer main installation, if not already established.

2. The Applicant shall establish an escrow for stormwater inspections by the City Engineer on behalf of the City of Beacon, if not already established.

3. Per Sheet 16 of the above-referenced plan set, the fire access road shall consist of 3 inches of asphalt millings over 9 inches of NYSDOT Item 4, unless otherwise determined by the City of Beacon Fire Chief. Every spring, the Applicant shall inspect the fire access road and make any necessary repairs to ensure the fire access road remains at the required thickness.

4. All conditions and/or requirements of approval in previous approvals granted by the Planning Board, the City Council, other City Land Use Boards, and City Departments are hereby reaffirmed and shall remain in full force and effect and are otherwise deemed to be inserted as conditions/requirements of this Resolution as if fully stated herein.

5. Pursuant to NYSDEC recommendations, removal of trees greater than four (4) inches in diameter at the Project Site will take place between October 1 and April 1 during the bat hibernation period to avoid the removal of trees which may be utilized by Indiana Bats as roosting trees.

6. The Building Inspector and the City Engineer shall have the right to direct the Applicant to cause the placement, cleaning and/or repair of sedimentation and erosion control devices wherever and whenever deemed necessary during construction.

7. This approval is conditioned upon compliance with all of the mitigation measures specified in the Applicant's Full EAF and related application documents, including the SEQRA Negative Declaration and SEQRA Amended Negative Declaration. The Applicant shall be responsible for the funding and/or implementation of all such identified mitigation measures. Where the terms of this resolution may be inconsistent with the Full EAF, the terms of this resolution shall be controlling.

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

9. As used herein, the term "Applicant" shall include Mirbeau of Beacon LLC, and its successors and assigns.

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

11. The approvals granted by this resolution do not supersede the authority of any other entity.

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

13. Pursuant to the City of Beacon Code § 223-25.J , the Site Plan approval granted herein shall expire unless a bona fide building permit application shall be submitted within one year of the date of this approval, and all improvements shall be completed within two years from the date of the building permit issuance. The Planning Board may grant extensions of this deadline upon written request from the Applicant.

Resolution Adopted: May 14, 2024
Beacon, New York

_____ _____, 2024
John Gunn, Chairperson Dated
City of Beacon Planning Board

Motion by _____, seconded by _____:

Kevin Byrne	Voting ____	Leonard Warner	Voting ____
Donna Francis	Voting ____	J. Randall Williams	Voting ____
David Jensen	Voting ____	John Gunn, Chairman	Voting ____
Karen Quiana	Voting ____		

Resolution: Approved
Denied

City of Beacon Planning Board Agenda
05/14/2024

Title:

Continue review of application for Amended Site Plan Approval, 248 Tioronda Avenue, submitted by Beacon 248 Holdings LLC (Bernard Kohn).

ATTACHMENTS

248 Tioronda PB 5.14.24 Response To Comments_81750-00.pdf

248 Tioronda PB 5.14.24 SEAF.pdf

248 Tioronda PB 5.14.24 Amended-Site-Plans_81750-00.pdf

248 Tioronda PB lead agency response NYSDOT_LAD_CONSENT_SEQR_19-012.pdf

Lanc & Tully 248 Tioronda 05-08-24 review.pdf

248 Tioronda lead agency response DCDBCH 5.7.24.pdf

248 Tioronda Ave - SEAF Parts 2 and 3.pdf

248 Tioronda Ave - Second Amended SEQRA Negative Declaration.pdf

248 Tioronda Ave - Second Amended Site Plan Resolution.pdf

April 30, 2024

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

Re: Beacon 248 Development – Amended Site Plan
248 Tioronda Avenue, Beacon, New York 12508
Tax Map No. 6054-45-012574
CZ81750.00

Dear Mr. Gunn,

The above-referenced project was presented to the City of Beacon Planning Board at the April 9, 2024 Planning Board meeting. We are in receipt of plan review comments from the City-designated engineer. The amended site plans have been revised in response to the comments received. A point-by-point response corresponding to each of the comments received are listed below.

Lanc and Tully comments, dated April 3, 2024:

General Comments

1. *As this project previously received approval from the Dutchess County Department of Health (DCDOH) in November of 2020 for the water main extension and sewage collection system, the applicant will need to resubmit for the proposed changes to the sewer collection system.* ***Applicant has stated that submission has been made to the DCDOH under separate cover.*** *All correspondence to, and received from outside agencies, shall be submitted to the Planning Board and City Engineer.*

   Response: A copy of the DCDBCH submission has been provided to the City engineer for reference.

2. *As previously stated, based upon the re-alignment of the Greenway Trail in several areas, new easement agreements and descriptions will be required.* ***The Applicant is requesting this be made a condition of approval.***

   Response: Comment noted.

3. *The easement limits of the Greenway Trail shall be properly shown on the plans, as it is not correctly shown on the north side of Building 100. The plans should be revised at this time to show the proper easement location. We would further recommend that the stormwater planters located on the east side (rear side) of Building 100 be re-configured so that they are not located within the Greenway Trail easement.*

   Response: The easement limits and stormwater planters have been updated accordingly.

4. *Sheet C130 shall be revised to show the required signage for the ADA accessible parking stalls located across from Building 200.*

   Response: The referenced ADA signage has been added to the plan.

5. *Sheet C140 shall be completely revised to show the proper proposed grading across the site.*

   Response: As discussed at the Planning Board meeting, a Civil 3D surface used to update the utility profiles was inadvertently displayed and has since been turned off.

6. *As Sheet C160 now defines the two rectangular structures located behind Building 100 as stormwater planters, this labeling shall also be provided on the site plan, Sheets C130.*

   Response: The referenced label has been added to the Site Plan.

7. *The "Limit-of-Disturbance" line provided on Sheet C150 shall be revised to capture all work. As currently depicted, there is work occurring outside of this line. A note shall also be added to this plan stating the total amount of disturbance as defined by the Limit-of-Disturbance line.*

   Response: The limit of disturbance line has been updated to include the additional slope grading and erosion and sediment control measures.

8. *Based upon the sewer profile provided on C161, there will be approximately slightly more than 1-foot of coverage over the sewer line around Sta. 3+50. It is recommended that additional grading occur in this area to provide additional coverage over the sewer main to better protect the sewer main. It should be further noted that the Ten State Standards – Recommended Standards for Wastewater Facilities states "Insulation shall be provided for sewers that cannot be placed at a depth sufficient to prevent freezing" as per Chapter 30, Paragraph 33.2.*

   Response: The grading at the referenced location has been revised to provide additional cover over the sewer line.

9. *The numbering of the sewer manholes as presented on Sheet C160 should be in numerical order. At present, the sewer line runs from manhole 4 to manhole 7, and from there to manhole 5. This should also be corrected on the profile.*

   Response: The sewer manholes have been renumbered accordingly.

10. *Storm profiles 12 and 13 on Sheet C165 show 8" pipe connecting to 12" pipe. How is this connection being made? The profile shall note whether a tee connection, or other type of fitting is to be used at the point of connection between the two different size pipes.*

    Response: Additional callouts have been added to the profile to indicate the change in pipe size at the referenced locations.

SWPPP Comments:

1. *At this time our office finds the submitted amended Stormwater Pollution Prevention Plan (SWPPP) to be acceptable.*

   Response: Comment noted.

Should you have any questions or need anything further, please do not hesitate to contact me at (845) 486-1574 or via email at kahearn@labellapc.com.

Respectfully submitted,

Kyle Ahearn, PE
Senior Civil Engineer

Encl: Amended Site Plans, last revised 4/30/24 (5 copies)
Environmental Assessment Form, dated 4/30/24 (5 copies)

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:

248 Tioronda Ave Proposed Multifamily Development and Office Building

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

248 Tioronda Avenue (along Fishkill Creek), City of Beacon, Dutchess County, NY; Tax Parcel 6054-45-012574

Brief Description of Proposed Action:

The Applicant, Beacon 248 Holdings LLC, received site plan approval for the construction of a 64-unit multifamily development and 23,124 SF office building in November 2021. The site is currently under construction and due to field changes, the Applicant is seeking amended site plan approval for the following: 1) Greenway Trail. Proposed revisions to remove stairs and relocation of portion of trail within floodplain limits. 2) Stormwater. Two new stormwater planter areas to treat stormwater from Building 100 with accompanying decrease in Bioretention Area 1 resulting from trail relocation. 3) Erosion and Sediment Control. Improved vegetated stabilization (live cuttings and stakes) along Fishkill Creek. 4) Landscaping. Native landscaping replaces non-natives. Revised landscaping to accomodate revised Greenway Trail and stormwater practices. 5) Light poles: Lightpoles replaced with bollards along frontage of Buildings 100 - 300 to reduce glare. 6) Refuse. Relocation of refuse enclosure closer to Building 100 for convenience. 7) EV Chargers. 10 EV charging stations at Building 100; additional stations proposed within Buildings 200 - 300 garage. 7) Sewer Collection. The collection system alignment has been revised to accomodate improvements to interior plumbing of Buildings 200 and 300 and to accomodate same at Building 100.

Name of Applicant or Sponsor:	Telephone: 917-696-4402
Beacon 248 Holdings LLC (Bernard Kohn)	E-Mail: berry@chaibuilders.com

Address:

147 Union Street, Suite 101

City/PO:	State:	Zip Code:
Poughkeepsie	NY	12601

	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 DBCH - Sewer Design	☐	☑

3. a. Total acreage of the site of the proposed action? 9.18 acres
   b. Total acreage to be physically disturbed? 6.75 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 9.18 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): MTA Railroad; Institutional (public school)
   ☐ Parkland

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

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?	NO	YES
If Yes, identify: _____	☑	☐
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES
	☑	☐
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?	☐	☑
9. Does the proposed action meet or exceed the state energy code requirements?	NO	YES
If the proposed action will exceed requirements, describe design features and technologies: _____ _____	☐	☑
10. Will the proposed action connect to an existing public/private water supply?	NO	YES
If No, describe method for providing potable water: _____ _____	☐	☑
11. Will the proposed action connect to existing wastewater utilities?	NO	YES
If No, describe method for providing wastewater treatment: _____ _____	☐	☑
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?	NO	YES
	☐	☑
Eligible property:Delahay-Ormsbee Residence, Eligible property:BIN 1006340 COOPERATION BRIDGE 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?	☐	☑
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?	NO	YES
	☐	☑
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?	☑	☐
16. Is the project site located in the 100-year flood plan? No additional grading/fill proposed within the floodplain to accomodate the rail trail re-alignment. No disturbance within the floodway.	☐	☑
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☐	☑
If Yes, a. Will storm water discharges flow to adjacent properties?	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☑
If Yes, briefly describe: Stormwater will be directed to stormwater management practices on site.		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: Offsite: Beacon Terminal, (C314044, C314117 Hudson River PCB Contamination (546031), Churchill Mills (C314118)	☐	☑

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

Applicant/sponsor/name: Beacon 248 Holdings LLC (Bernard Kohn) Date: 4/30/2024

Signature: Caren LoBrutto, Agent for Applicant Title: Senior Planner, LaBella Associates

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]	Yes
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	Yes
Part 1 / Question 20 [Remediation Site]	Yes

AMENDED SITE PLAN

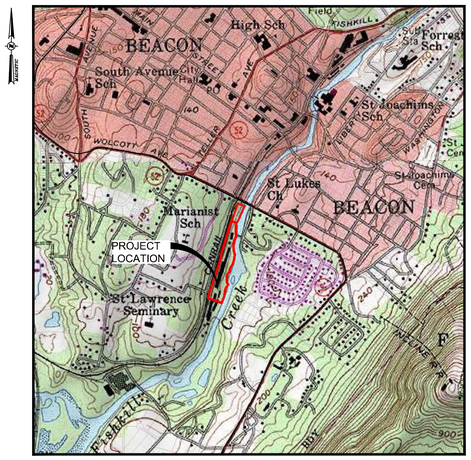
248 TIORONDA AVE, BEACON NY

PREPARED FOR

CHAI DEVELOPERS

CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

FEBRUARY 14, 2024
LAST REVISED: APRIL 30, 2024



LOCATION MAP
SCALE: 1"=1000'
SOURCE: USGS CATSKILL, NY QUADRANGLE
(USGS REF. CODE: WEST POINT-41073-D8-TF-024)

BEST MANAGEMENT PRACTICES FOR INDIANA BATS

1. THE PROJECT WILL AVOID CUTTING TREES TO THE MAXIMUM EXTENT PRACTICABLE.
2. LARGER TREES WILL BE RETAINED.
3. TREE CLEARING LIMITS WILL BE MARKED IN THE FIELD PRIOR TO ANY CLEARING, AND CONTRACTORS WILL BE INFORMED ABOUT CLEARING LIMITS PRIOR TO THE INITIATION OF WORK.
4. TREES WILL BE REMOVED BETWEEN OCTOBER 1 AND MARCH 31 IN ORDER TO AVOID ANY INCIDENTAL TAKE TO INDIANA BATS, OR OTHER BATS THAT MAY USE TREES FOR ROOSTING.
5. ALL SITE LIGHTING ON THE SITE WILL BE FULL CUT-OFF.
6. THERE WILL BE NO USE OF HERBICIDES OR PESTICIDES IN ANY STORMWATER MANAGEMENT BASINS.

CITY OF BEACON
PLANNING BOARD APPROVAL
CITY OF BEACON, NEW YORK

APPROVED BY RESOLUTION NUMBER _____
OF THE PLANNING BOARD OF BEACON, NEW YORK ON THE
_____ DAY OF _____, 2015, 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 _____ 2015.

_____
CHAIRMAN

CITY OF BEACON PLANNING BOARD APPROVAL
OWNER / APPLICANT SIGNATURE

THE UNDERSIGNED APPLICANT FOR THE PROPERTY AND THE UNDERSIGNED OWNER OF THE PROPERTY SHOWN HEREON, STATE THAT THEY ARE FAMILIAR WITH THIS MAP, ITS NOTES AND ITS CONTENTS, AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

THE APPLICANT AND OWNER UNDERSTAND THEIR OBLIGATION TO THE CITY TO KEEP THIS SITE AS PER SITE PLAN APPROVAL BY THE CITY PLANNING BOARD UNTIL A NEW OR REVISED SITE PLAN IS APPROVED FOR THE SITE. THE APPLICANT AND OWNER UNDERSTAND THEIR OBLIGATION TO THE TOWN NOT TO OCCUPY THE PREMISES BEFORE A CO IS ISSUED BY THE TOWN CODE ENFORCEMENT OFFICER.

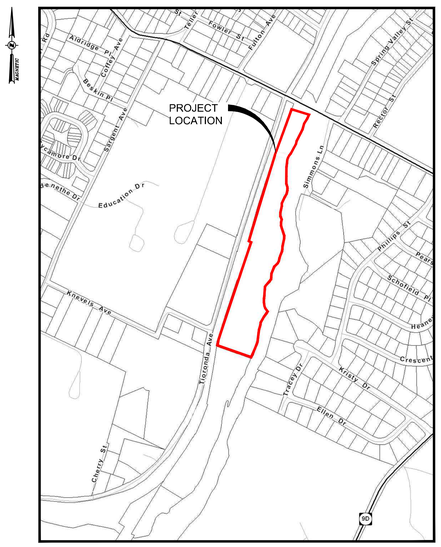
_____ _____
APPLICANT DATE

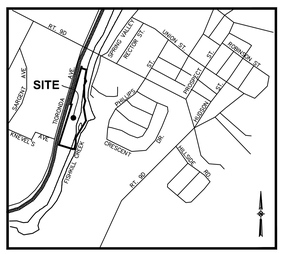
_____ _____
OWNER DATE

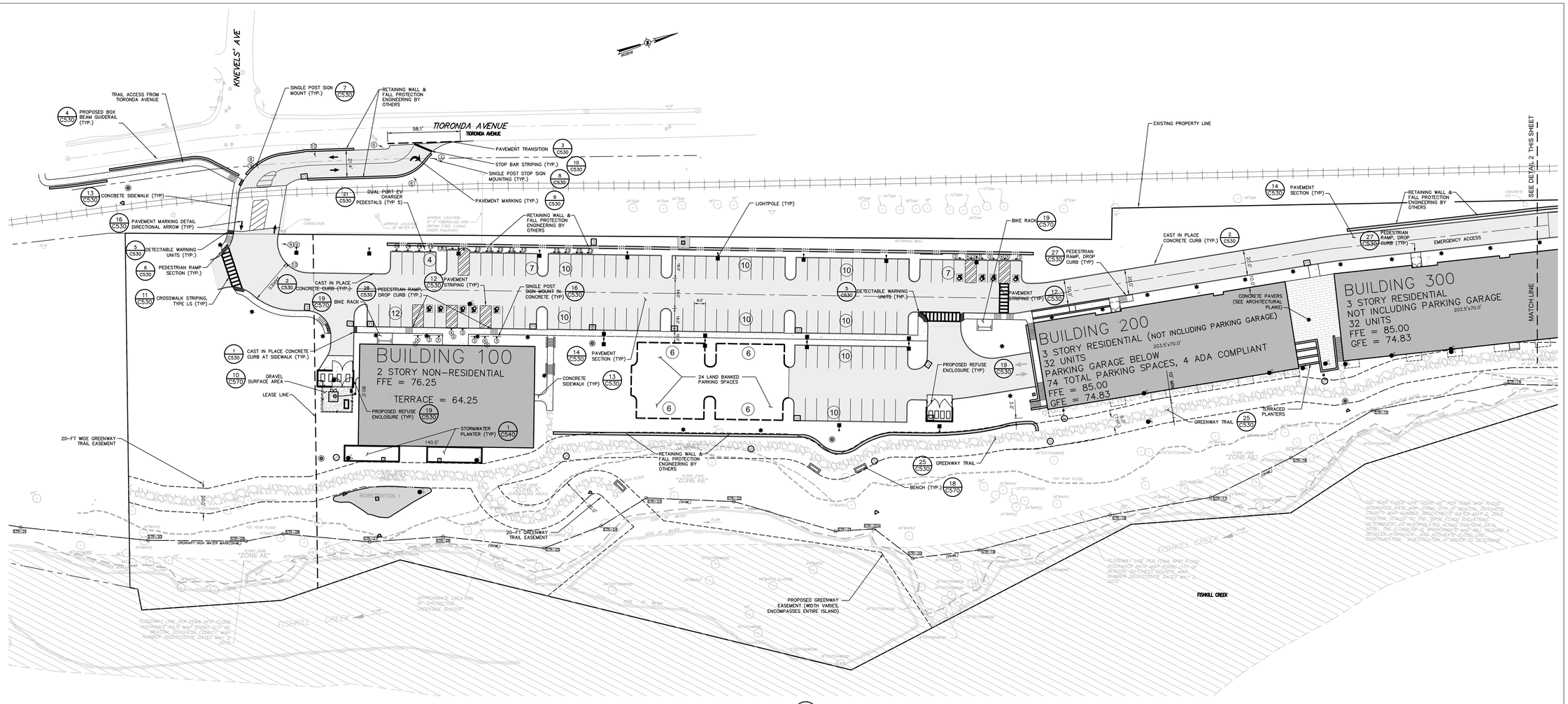
INDEX OF DRAWINGS

PAGE NO.	SHEET NO.	DATE	DESCRIPTION
1	G001	04/30/24	TITLE SHEET
2	C101	04/30/19	EXISTING CONDITIONS PLAN
3	C130	04/30/24	SITE PLAN
4	C140	04/30/24	GRADING PLAN
5	C150	04/30/24	EROSION & SEDIMENT CONTROL PLAN
6	C160	04/30/24	UTILITY PLAN
7	C161	04/30/24	UTILITY PROFILES
8	C162	04/30/24	UTILITY PROFILES
9	C180	04/30/24	LANDSCAPE PLAN
10	C190	04/30/24	PHOTOMETRIC LIGHTING PLAN
11	C200	08/31/21	VEHICLE MANEUVERING PLAN
12	C530	04/30/24	SITE DETAILS
13	C540	04/30/24	STORM SEWER DETAILS
14	C550	04/30/24	EROSION & SEDIMENT CONTROL DETAILS & NOTES
15	C560	08/07/20	WATER SYSTEM DETAILS & NOTES
16	C570	08/07/20	SANITARY SEWER DETAILS & NOTES
17	C580	08/07/20	LANDSCAPE DETAILS & NOTES

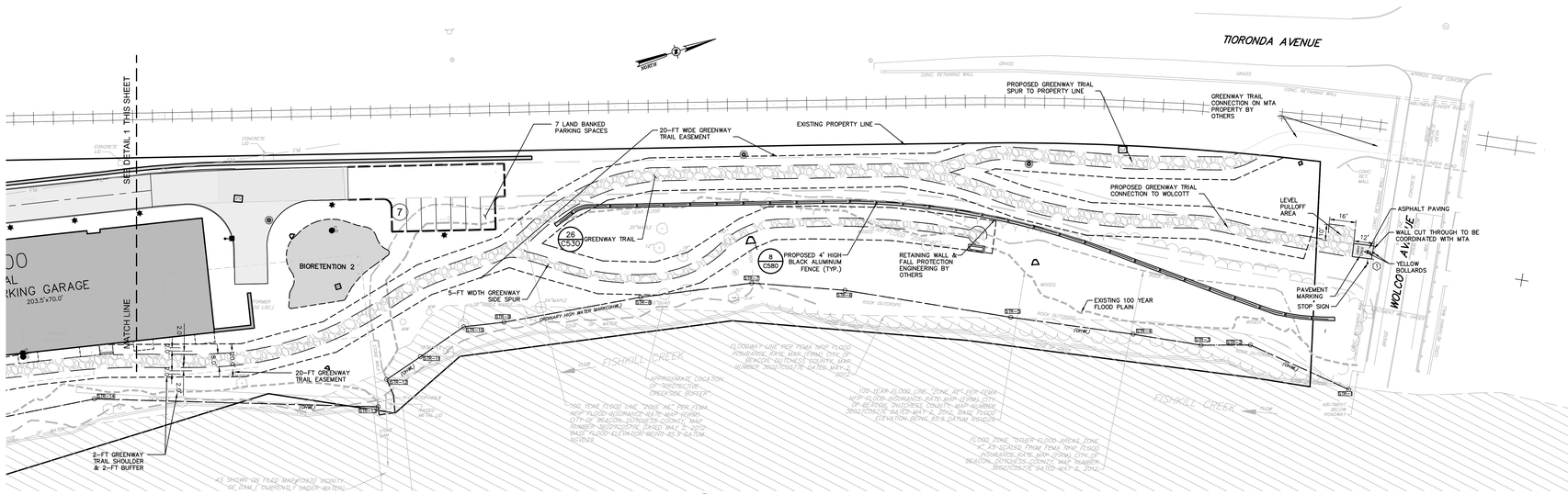
*PLANS IN GRAY ARE NOT INCLUDED IN THE AMENDED SITE PLAN.


PROJECT LOCATION
Alpine Pl
Cottage Pl
Beekman Ave
Elmwood Dr
Glenellen Dr
Education Dr
Kinsley Ave
Tioronda Ave
Simmons Ln
Phillips St
Schofield St
Crescent
Turkey Dr
Kristy Dr
Ellen Dr
Cheryl St
Fishkill Ave
Teller Ave
Liberty St
Mountain View Ave
Forrest Sch
Field
Spring Valley St
Nelson St
Reade St
Helen
Fishkill
Wolcott Ave
Teller Ave
Main St
Verplanck Ave
South Ave
Liberty St
Mountain View Ave
Forrest Sch
Field
Spring Valley St
Nelson St
Reade St
Helen
Crescent


SITE
MAIDEN LANE
TIORONDA AVE
ROUTE 9D
UNION ST
DENNIS HALEY
ROUTE 9D
ROUTE 9D
ROUTE 9D



1 C130 **SITE PLAN**
SCALE: 1"=30'



2 C130 **SITE PLAN**
SCALE: 1"=30'

SITE PLAN NOTES:

LAND BANKED PARKING SHALL BE CONSTRUCTED IF REQUIRED BY THE LANDBANKED PARKING AGREEMENT, PER SECTION 223-26E OF CITY CODE..

THE BEACON GREENWAY TRAIL COMMITTEE WILL BE ASKED TO REVIEW LAYOUT OF TRAIL PRIOR TO CONSTRUCTION.
ADDITIONALLY, THE COMMITTEE WILL DETERMINE THE FINAL LOCATION OF THE BENCHES ON THE GREENWAY TRAIL DURING FINAL REVIEW PRIOR TO CONSTRUCTION.

LEGEND:

- EXISTING 100-YEAR FLOOD PLAIN
- EXISTING PROPERTY LINE
- EASEMENT LINE
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- 25 PROPOSED PARKING COUNT
- PROPOSED SIDE WALK
- EXISTING METRO-NORTH RAILROAD TRACKS (INACTIVE)
- PROPOSED CURB
- PROPOSED LIGHT POLE
- PROPOSED RETAINING WALL
- GREENWAY TRAIL

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(845) 454-3980

labellapc.com

NOT FOR CONSTRUCTION
EXP: ##/##/20## EXP: ##/##/20##

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018381
LAND SURVEYING: 017976
GEOLOGICAL: 018750

It is a violation of New York Education Law Art. 145 Sec. 7209 & Art. 147 Sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

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NO:	DATE:	DESCRIPTION:
2	04/30/24	REVISED PER CITY COMMENTS
1	3/26/24	REVISED PER CITY COMMENTS
Revisions		

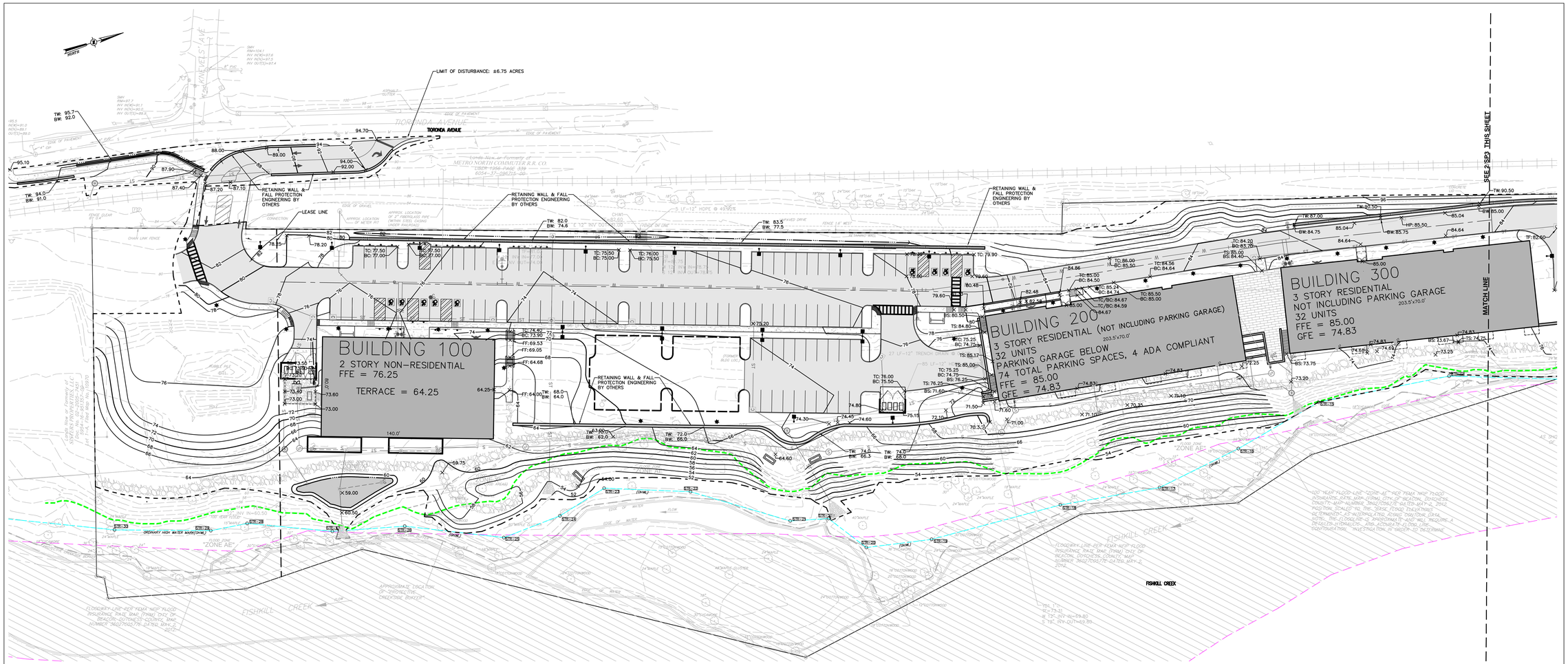
PROJECT NUMBER: CZ81750.00
DRAWN BY: CJL
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD APPROVAL
DATE: 02/14/24
DRAWING NAME:

SITE PLAN

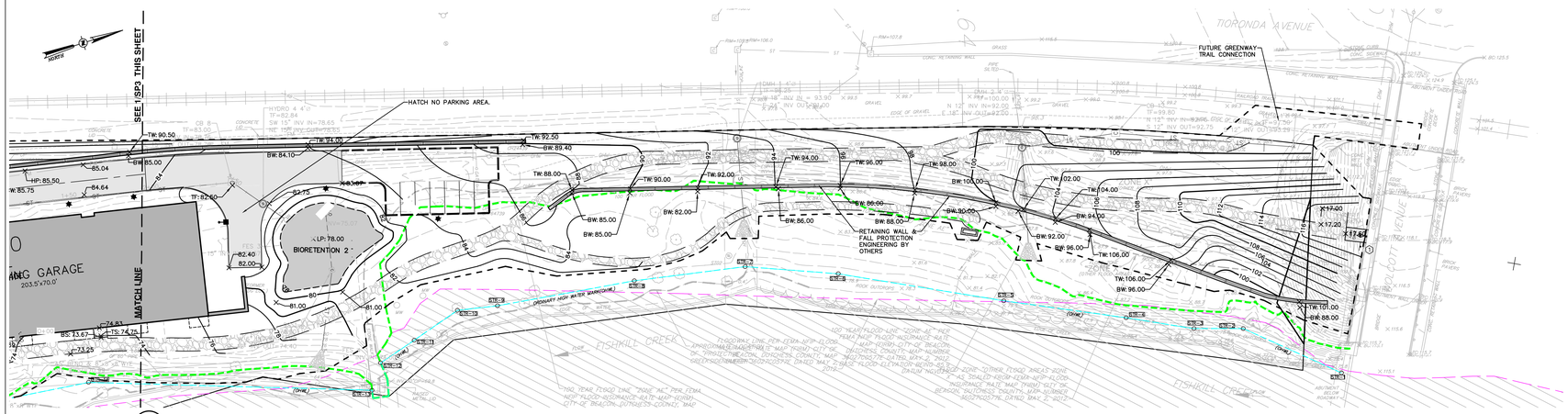
DRAWING NUMBER:

C130

4/29/2024 3:09:23 PM
\\cas.labella.org\dfs\Chazen Projects\81700-81799\81750.00 CHAI Builders 9-248 (WMV)\01_CIVIL\81750-A0_SITE.dwg



1 C140 **GRADING PLAN**
SCALE: 1"=30'



2 C140 **GRADING PLAN**
SCALE: 1"=30'

GRADING & DRAINAGE LEGEND:

- PROPOSED PROPERTY LINE
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- XXX PROPOSED 10 FT CONTOUR
- XXX PROPOSED 2 FT CONTOUR
- XXX.X PROPOSED SPOT GRADE
- PROPOSED TREE LINE
- PROPOSED SHRUB LINE
- PROPOSED DRAINAGE SWALE
- PROPOSED WORK LIMIT LINE
- S PROPOSED SANITARY SEWER LINE
- FM PROPOSED FORCE MAIN
- W PROPOSED WATER LINE
- ST PROPOSED STORM DRAIN LINE
- PROPOSED HYDRANT
- PROPOSED SANITARY MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED DRAINAGE MANHOLE

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NOT FOR CONSTRUCTION
EXP: ##/##/20##
EXP: ##/##/20##

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018381
LAND SURVEYING: 017976
GEOLOGICAL: 018750

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Beacon, New York 12508

NO:	DATE:	DESCRIPTION:
2	04/30/24	REVISED PER CITY COMMENTS
1	3/26/24	REVISED PER CITY COMMENTS

Revisions

PROJECT NUMBER: CZ81750.00
DRAWN BY: CJL
REVIEWED BY: --
ISSUED FOR: ISSUED FOR PLANNING BOARD APPROVAL
DATE: 02/14/24
DRAWING NAME:

GRADING PLAN

DRAWING NUMBER:

C140

4/29/2024 3:09:33 PM
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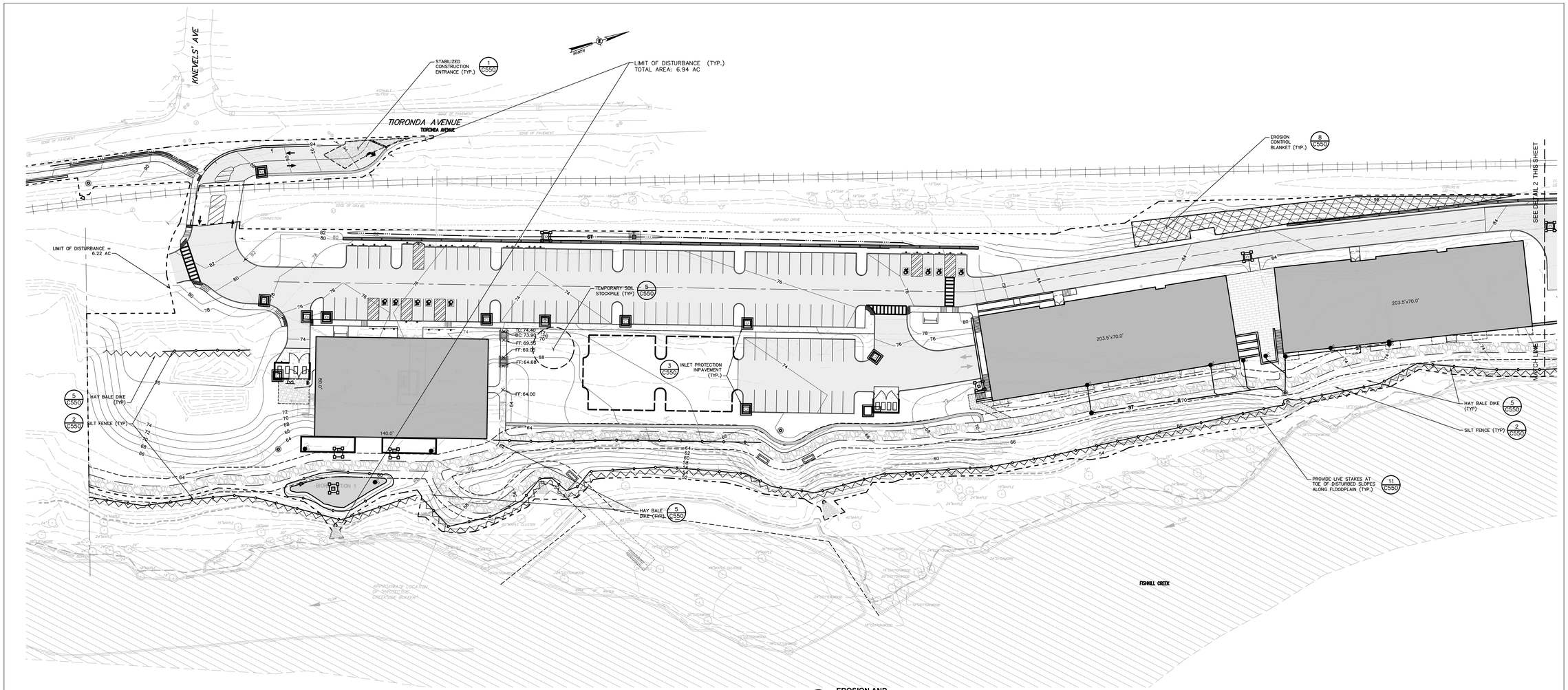
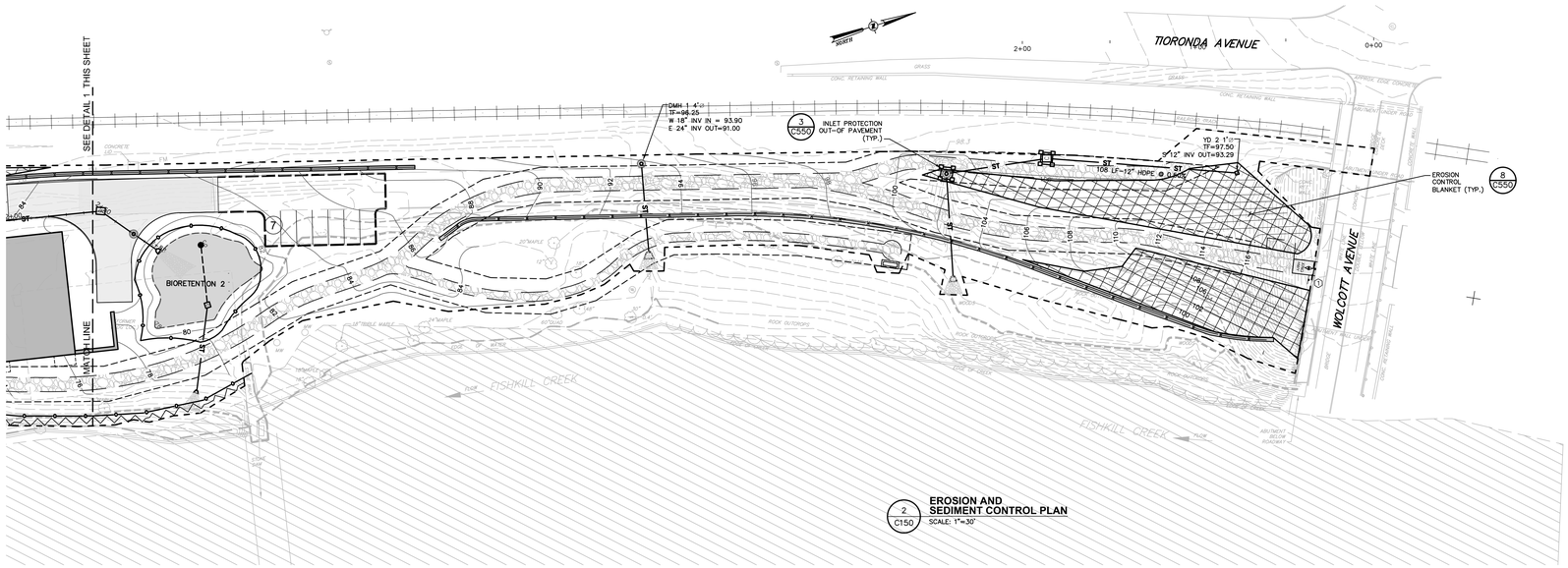


1 C150 **EROSION AND SEDIMENT CONTROL PLAN**
SCALE: 1"=30'



2 C150 **EROSION AND SEDIMENT CONTROL PLAN**
SCALE: 1"=30'

LEGEND:

- EXISTING 100-YEAR FLOOD PLAIN
- EXISTING PROPERTY LINE
- EASEMENT LINE
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED PARKING COUNT (25)
- PROPOSED SIDE WALK
- EXISTING METRO-NORTH RAILROAD TRACKS (INACTIVE)
- PROPOSED CURB
- PROPOSED RETAINING WALL
- PROPOSED EROSION BLANKET
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED OUT-OF PAVEMENT INLET PROTECTION
- PROPOSED IN-PAVEMENT INLET PROTECTION
- PROPOSED SILT FENCE
- LIMIT OF DISTURBANCE
- PROPOSED STRAW BALE DIKE
- PROPOSED TEMPORARY SOIL STOCKPILE

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NOT FOR CONSTRUCTION
EXP: ##/##/20##
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CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018381
LAND SURVEYING: 017976
GEOLOGICAL: 018750

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248 Tioronda Avenue
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NO.	DATE:	DESCRIPTION:
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Revisions		

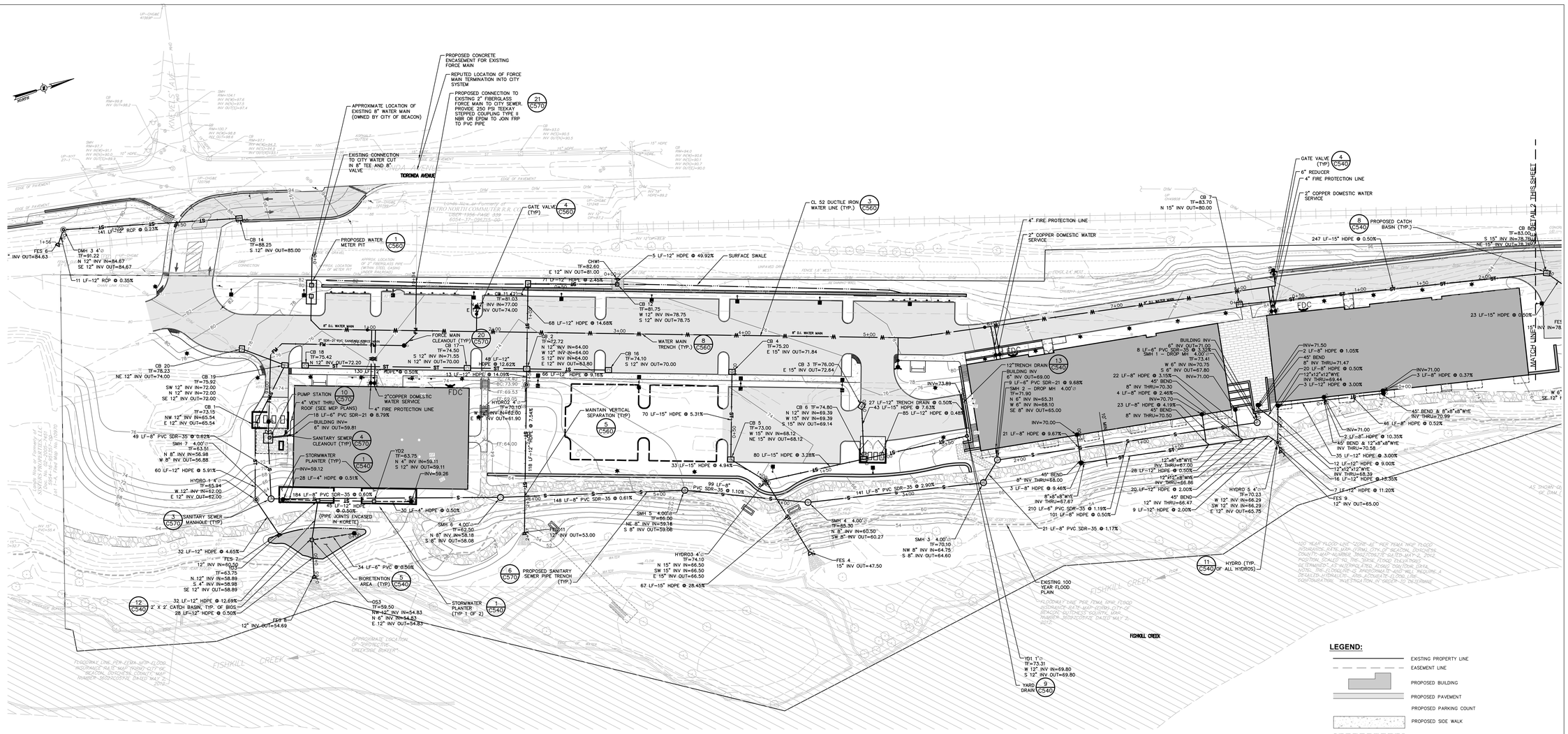
PROJECT NUMBER: CZ81750.00
DRAWN BY: CJL
REVIEWED BY: --
ISSUED FOR: ISSUED FOR PLANNING BOARD APPROVAL
DATE: 02/14/24
DRAWING NAME:

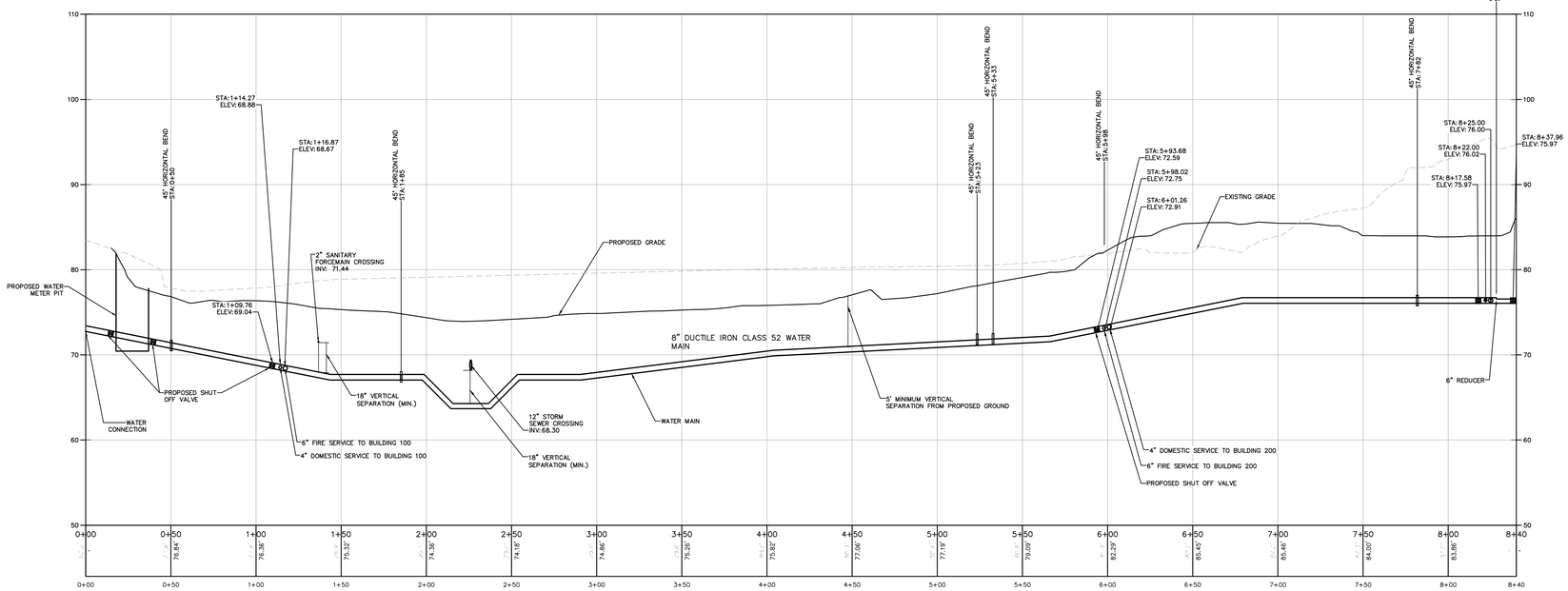
EROSION AND SEDIMENT CONTROL PLAN

DRAWING NUMBER:

C150

4/29/2024 3:10:32 PM
\\cas.labella.org\ky\Chazen Projects\81700-81799\81750.00 Chai Builders 8-248 Wtbry\01_CIVIL\81750-A0_SHEETS.dwg


PROPOSED CONCRETE ENCASEMENT FOR EXISTING FORCE MAIN
REPUTED LOCATION OF FORCE MAIN TERMINATION INTO CITY SYSTEM
PROPOSED CONNECTION TO EXISTING 2" FIBERGLASS FORCE MAIN TO CITY SEWER. PROVIDE 250 PSI TEKKAY STEPPED COUPLING TYPE II NBR OR EPDM TO JOIN FRP TO PVC PIPE
APPROXIMATE LOCATION OF EXISTING 8" WATER MAIN (OWNED BY CITY OF BEACON)
EXISTING CONNECTION TO CITY WATER CUT IN 8" TEE AND 8" VALVE
TIORONDA AVENUE
PROPOSED WATER METER PIT
GATE VALVE (TYP.)
CL 52 DUCTILE IRON WATER LINE (TYP.)
4" FIRE PROTECTION LINE
2" COPPER DOMESTIC WATER SERVICE
GATE VALVE (TYP)
6" REDUCER
4" FIRE PROTECTION LINE
2" COPPER DOMESTIC WATER SERVICE
PROPOSED CATCH BASIN (TYP.)
CHW1
5 LF–12" HDPE @ 49.92%
SURFACE SWALE
FORCE MAIN CLEANOUT (TYP)
WATER MAIN TRENCH (TYP.)
MAINTAIN VERTICAL SEPARATION (TYP)
PUMP STATION
4" VENT THRU ROOF (SEE MEP PLANS)
2"COPPER DOMESTIC WATER SERVICE
4" FIRE PROTECTION LINE
BUILDING INV=
SANITARY SEWER CLEANOUT (TYP)
STORMWATER PLANTER (TYP)
SANITARY SEWER MANHOLE (TYP)
PROPOSED SANITARY SEWER PIPE TRENCH (TYP.)
BIORETENTION AREA (TYP)
STORMWATER PLANTER (TYP 1 OF 2)
12"TRENCH DRAIN
BUILDING INV
6" INV OUT=71.00
0 LF–6" PVC SDR–21 @ 9.68%
SMH 2 – DROP MH 4.00'
TF=71.90
N 6" INV IN=65.31
W 6" INV IN=68.10
SE 8" INV OUT=65.00
21 LF–8" PVC SDR–21 @ 9.67%
27 LF–12" TRENCH DRAIN @ 0.50%
43 LF–15" HDPE @ 7.63%
85 LF–15" HDPE @ 0.48%
80 LF–15" HDPE @ 3.28%
99 LF–8" PVC SDR–35 @ 1.10%
148 LF–8" PVC SDR–35 @ 0.61%
141 LF–8" PVC SDR–35 @ 2.90%
21 LF–8" PVC SDR–35 @ 1.17%
EXISTING 100 YEAR FLOOD PLAIN
FISHKILL CREEK
HYDRO (TYP. OF ALL HYDROS)
BUILDING INV
6" INV OUT=71.00
8 LF–6" PVC SDR–35 @ 3.32%
SMH 1 – DROP MH 4.00'
TF=73.41
W 6" INV IN=70.75
S 6" INV OUT=67.80
22 LF–8" HDPE @ 3.15%
45° BEND
8" INV THRU=70.30
4 LF–8" HDPE @ 2.46%
INV=70.70
23 LF–8" HDPE @ 4.19%
45° BEND
8" INV THRU=70.50
INV=70.00
INV=71.50
2 LF–8" HDPE @ 1.05%
45° BEND
8" INV THRU=71.47
20 LF–8" HDPE @ 0.50%
12"x12"x12"WYE
INV THRU=69.44
3 LF–12" HDPE @ 3.00%
INV=71.00
3 LF–8" HDPE @ 0.37%
45° BEND & 8"x8"x8"WYE
INV THRU=70.99
46 LF–8" HDPE @ 0.52%
INV=71.00
2 LF–8" HDPE @ 10.35%
45° BEND & 12"x8"x8"WYE
INV THRU=70.58
35 LF–12" HDPE @ 3.00%
12"x12"x12"WYE
INV THRU=68.39
16 LF–12" HDPE @ 13.35%
7 LF–12" HDPE @ 11.20%
FES 9
12" INV OUT=65.00
12"x8"x8"WYE
INV THRU=67.00
28 LF–12" HDPE @ 0.50%
12"x12"x8"WYE
INV THRU=66.86
20 LF–12" HDPE @ 2.00%
45° BEND
12" INV THRU=66.47
9 LF–12" HDPE @ 2.00%
8"x8"x8"WYE
INV THRU=67.67
210 LF–8" PVC SDR–35 @ 1.19%
101 LF–8" PVC SDR–35 @ 0.50%
HYDRO 5 4'
TF=70.23
W 12" INV IN=66.29
SW 12" INV IN=66.29
E 12" INV OUT=65.75
HYDRO 4 4'
TF=82.84
SW 15" INV IN=78.65
NE 15" INV OUT=78.65
CB 8
TF=83.00
S 15" INV IN=78.76
NE–15" INV OUT=78.76
16 LF–15" HDPE @ 0.50%
CB 20
TF=78.23
NE 12" INV OUT=74.00
CB 19
TF=75.92
SW 12" INV IN=72.00
N 12" INV IN=72.00
SE 12" INV OUT=72.00
CB 1
TF=73.15
NW 12" INV IN=65.54
E 12" INV OUT=65.54
49 LF–8" PVC SDR–35 @ 0.62%
SMH 7 4.00'
TF=63.51
N 8" INV IN=56.98
W 8" INV OUT=56.88
60 LF–12" HDPE @ 5.91%
HYDRO 1 4'
TF=65.94
W 12" INV IN=62.00
E 12" INV OUT=62.00
CB 18
TF=75.42
N 12" INV OUT=72.20
100 LF–12" HDPE @ 0.50%
CB 17
TF=74.50
S 12" INV IN=71.55
N 12" INV OUT=70.00
48 LF–12" HDPE @ 12.62%
CB 2
TF=72.72
N 12" INV IN=64.00
W 12" INV IN=64.00
S 12" INV IN=64.00
E 12" INV OUT=63.80
CB 16
TF=74.10
S 12" INV OUT=70.00
CB 4
TF=75.20
E 15" INV OUT=71.84
CB 3 TF=76.00
E 15" INV OUT=72.64
CB 6 TF=74.80
N 12" INV IN=69.39
W 15" INV IN=69.39
S 15" INV OUT=69.14
CB 5
TF=73.00
W 15" INV IN=68.12
NE 15" INV OUT=68.12
CB 7
TF=83.70
N 15" INV OUT=80.00
CB 21
TF=83.00
S 15" INV IN=78.78
NE–15" INV OUT=78.78
23 LF–15" HDPE @ 0.50%
FES
15" INV IN=78.
MATCH LINE
SEE DETAIL 2, THIS SHEET
13 LF–12" HDPE @ 14.09%
66 LF–12" HDPE @ 9.16%
116 LF–12" HDPE @ 7.54%
70 LF–15" HDPE @ 5.31%
33 LF–15" HDPE @ 4.94%
184 LF–8" PVC SDR–35 @ 0.60%
45 LF–12" HDPE @ 0.50%
(PIPE JOINTS ENCASED IN CONCRETE)
30 LF–4" HDPE @ 0.50%
32 LF–12" HDPE @ 4.65%
FES 3
12" INV. IN=65.65
TF=63.75
N 12" INV IN=58.89
S 4" INV IN=58.98
SE 12" INV OUT=58.89
32 LF–12" HDPE @ 12.69%
28 LF–12" HDPE @ 0.50%
34 LF–6" PVC @ 0.50%
OS3
TF=59.50
NW–12" INV IN=54.83
N 6" INV IN=54.83
E 12" INV OUT=54.83
FES 8
12" INV. OUT=54.69
SMH 6 4.00'
TF=62.50
N 8" INV IN=58.18
S 8" INV OUT=58.08
CB11
12" INV OUT=53.00
SMH 5 4.00'
TF=66.00
NE–8" INV IN=59.18
S 8" INV OUT=59.08
HYDRO3 4'
TF=74.10
N 15" INV IN=66.50
SW 15" INV IN=66.50
E 15" INV OUT=66.50
67 LF–15" HDPE @ 28.45%
SMH 4 4.00'
TF=65.50
N 8" INV IN=60.50
SW 8" INV OUT=60.27
SMH 3 4.00'
TF=70.10
NW 8" INV IN=64.75
S 8" INV OUT=64.60
FES 4
15" INV OUT=47.50
YD1 1'
TF=73.31
W 12" INV IN=69.80
S 12" INV OUT=69.80
YARD DRAIN
DMH 3 4'
TF=91.22
N 12" INV IN=84.67
SE 12" INV OUT=84.67
FES 6
" INV OUT=84.63
11 LF–12" RCP @ 0.35%
141 LF–12" RCP @ 0.23%
CB 14
TF=88.25
S 12" INV OUT=85.00
1+56
CHAIN LINK FENCE
RAILROAD TRACK
CONC. RETAINING WALL
CONC. SIDEWALK
BRICK PAVERS
ROCK OUTCROPS
FISHKILL CREEK
100 YEAR FLOOD LINE "ZONE AE" PER FEMA NFIP FLOOD INSURANCE RATE MAP (FIRM), CITY OF BEACON, DUTCHESS COUNTY, NEW YORK, MAP NUMBER 36027C0527E DATED MAY 2, 2019
FLOODWAY LINE PER FEMA NFIP FLOOD INSURANCE RATE MAP (FIRM), CITY OF BEACON, DUTCHESS COUNTY, NEW YORK, MAP NUMBER 36027C0527E DATED MAY 2, 2019
NOTE: THE FLOODLINE IS APPROXIMATE AND WILL REQUIRE A DETAILED HYDRAULIC ANALYSIS TO FLOOD LINE CONFIRMATION. VALIDATION IN ORDER TO DETERMINE
APPROXIMATE LOCATION OF CREEKSIDE BUFFER
NORTH FORK OF FISHKILL LLC (ref. Tax Map No. 6054-37-108215-00)
METRO NORTH COMMUTER R.R. CO. (ref. Tax Map No. 6054-37-108215-00)
(formerly the N.Y.C. & H.R.R.R. Co.)
(now or formerly)
(formerly



1 **WATERMAIN PROFILE**
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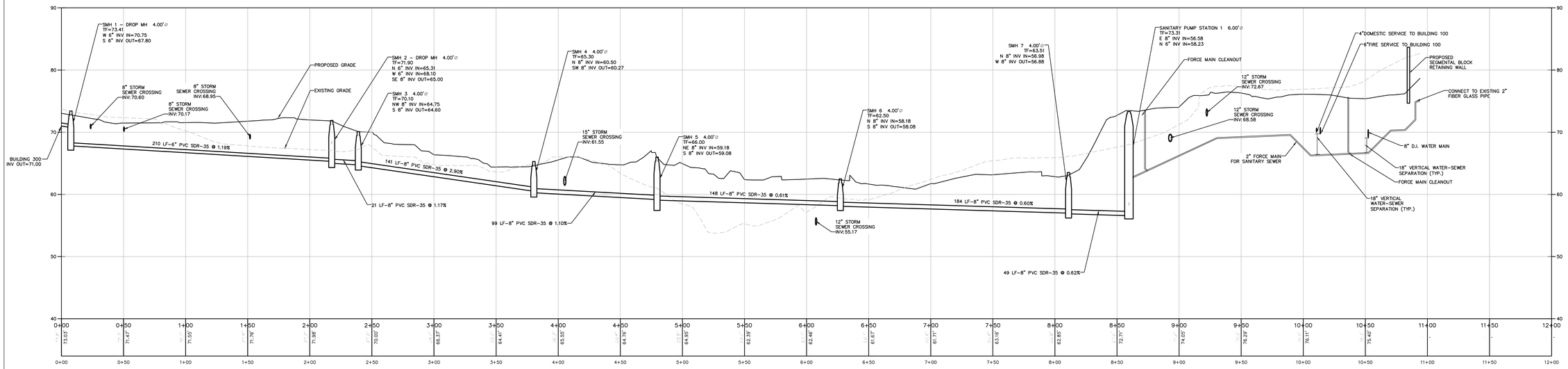

2 **SANITARY PROFILE**
SCALE: SCALE-H=1"=30'
SCALE-V=1"=6'

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CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

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Beacon, New York 12508

NO:	DATE:	DESCRIPTION:
2	04/30/24	REVISED PER CITY COMMENTS
1	3/26/24	REVISED PER CITY COMMENTS
Revisions		

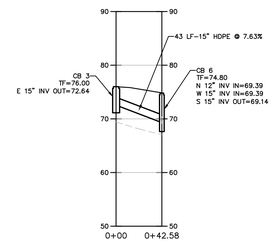
PROJECT NUMBER: CZ81750.00
DRAWN BY: CJL
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD APPROVAL
DATE: 02/14/24
DRAWING NAME:

UTILITY PROFILES

DRAWING NUMBER:

C161

4/29/2024 3:11:19 PM
C:\Users\MEnd\Labella Dropbox\Projects\81700\4-81799\81750\00 CHAI Builders B-2-R4B\DWG\01_C161_81750-00_UTIL_PROFILES.dwg



1 **STORM PROFILE 1**
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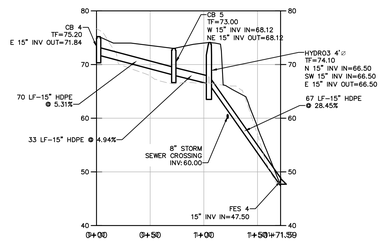
SCALE-V=1"=10'



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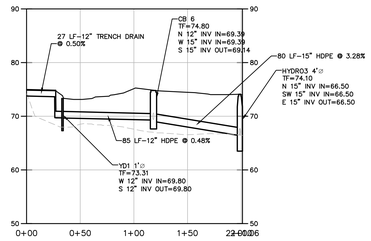
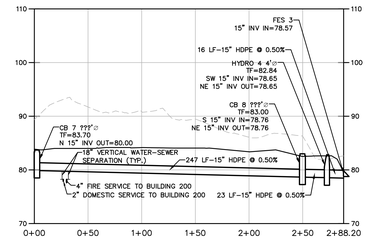


3 **STORM PROFILE 3**
SCALE: SCALE-H=1"=50'
SCALE-V=1"=10'



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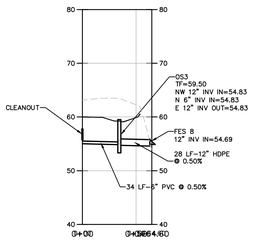
SCALE-V=1"=10'



7 **STORM PROFILE 7**
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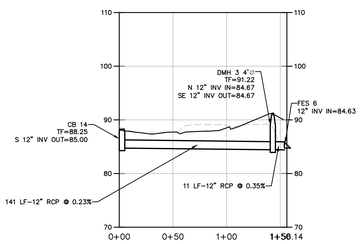
SCALE-V=1"=10'



8 **STORM PROFILE 8**
SCALE: SCALE-H=1"=50'
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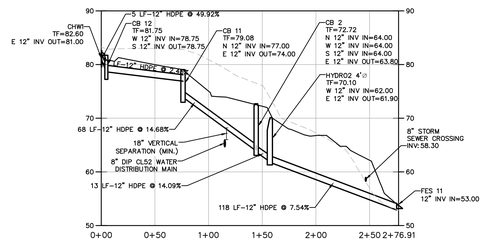
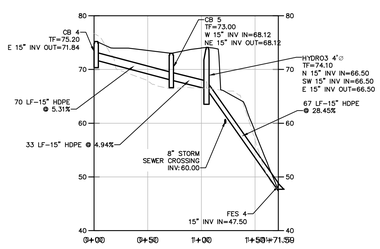
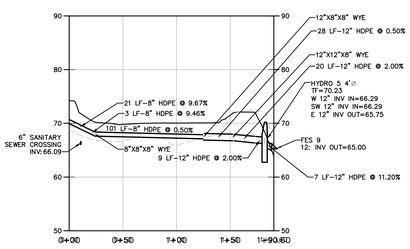


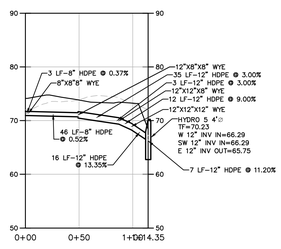
9 **STORM PROFILE 9**
SCALE: SCALE-H=1"=50'
SCALE-V=1"=10'



11 **STORM PROFILE 11**
SCALE: SCALE-H=1"=50'
SCALE-V=1"=10'



12 **STORM PROFILE 12**
SCALE: SCALE-H=1"=50'
SCALE-V=1"=10'



13 **STORM PROFILE 13**
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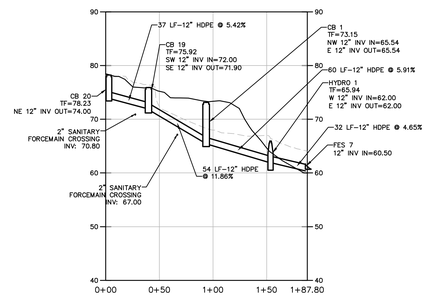

14 **STORM PROFILE 14**
SCALE: SCALE-H=1"=50'
SCALE-V=1"=10'

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248 Tioronda Avenue
248 Tioronda Avenue
Beacon, New York 12508

UTILITY PROFILES

DRAWING NUMBER:

C162

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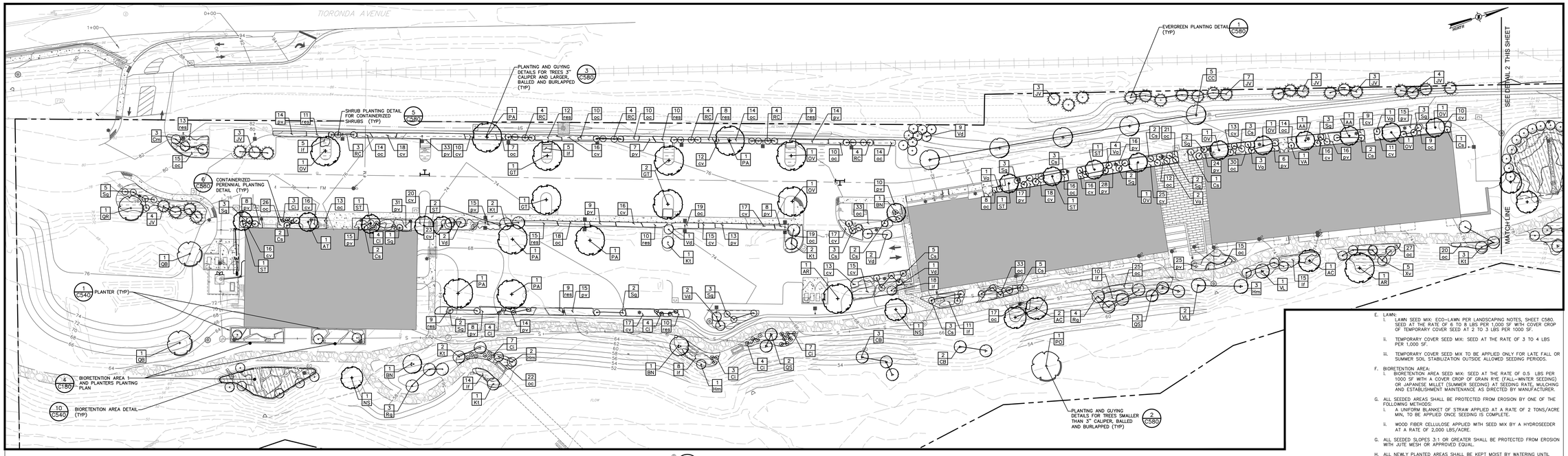
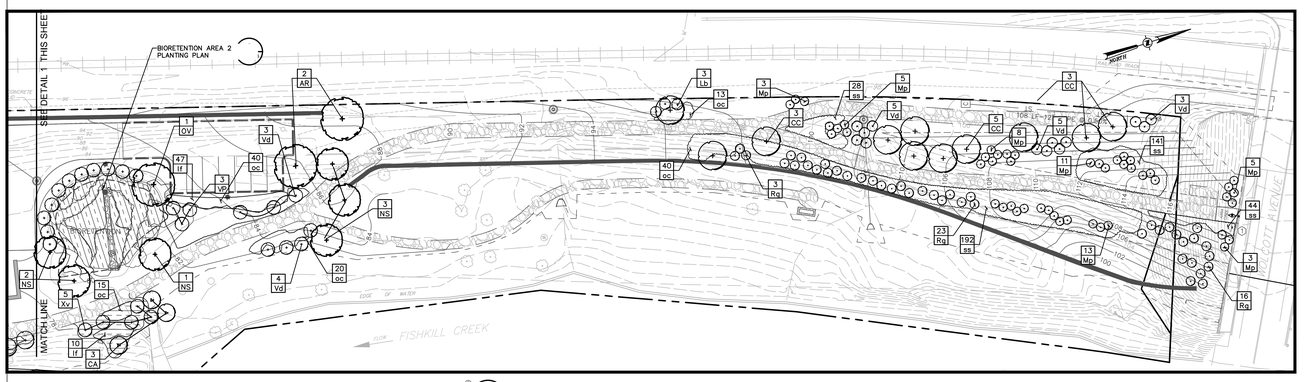


1 **LANDSCAPE PLAN**
SCALE: 1"=30'

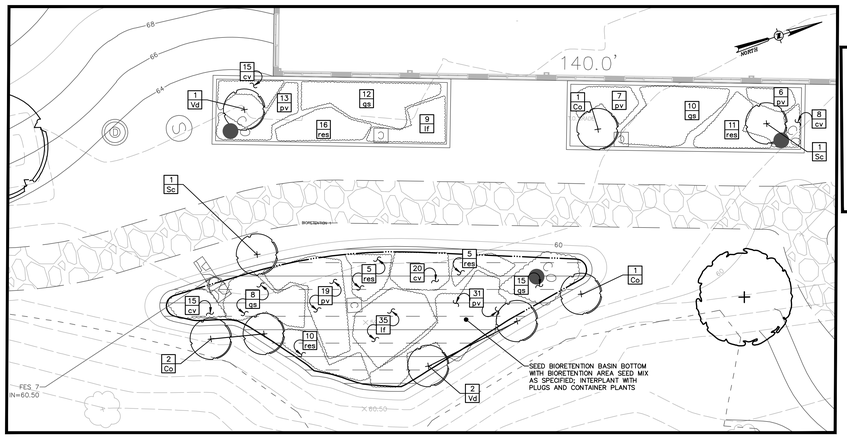


2 **LANDSCAPE PLAN-EMERGENCY ACCESS DRIVE**
SCALE: 1"=30'

PLANT LIST

QTY	ABRV	BOTANICAL NAME	COMMON NAME	SIZE	COND	SPACING	REMARKS
TREES							
4	AR	ACER RUBRUM	RED MAPLE	3" Cal.	B&B	As Shown	
2	AA	AMELANCHIER ARBOREA	DOWNY SERVICEBERRY	4'–5' HT	B&B	As Shown	MULTISTEM CLUMP
3	AC	AMELANCHIER CANADENSIS	SERVICEBERRY	6'–8' HT	B&B	As Shown	MULTISTEM CLUMP
3	BN	Betula nigra	River Birch	8'–10' Clump	B&B	As Shown	Multi-Stemp Clump
16	CC	Crataegus crusgalli 'Inermis'	Thornless Hawthorn	10–12' Clump	B&B	As Shown	Multi-Stemp Clump
0	LT	Liriodendron tulipifera	Tuliptree	3" Cal.	B&B	As Shown	
27	JV	Juniperus virginiana	Eastern Red Cedar	8'–10'	B&B	As Shown	
4	GT	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2" CAL.	B&B	As Shown	
9	OV	OSTRYA VIRGINIANA	EASTERN HOPHORNBEAM	2" CAL.	B&B	As Shown	
11	NS	Nyssa sylvatica	Sour Gum	3" Cal.	B&B	As Shown	Fall Digging Hazard
6	PA	CHIONANTHUS VIRGINICUS	FRINGETREE	8' HT	B&B	As Shown	MULTISTEM TREE; 5 BOLES MAX.
1	PO	Plantanus occidentalis	American Sycamore	2.5" Cal.	B&B	As Shown	
0	PT	Populus tremuloides	Quaking Aspen	10–12'	B&B	As Shown	Multi-Stem
0	PY	Prunus yeodensis	Yoshino Cherry	2" Cal.	B&B	As Shown	
1	QR	Quercus rubra	Northern Red Oak	3" Cal.	B&B	As Shown	Fall Digging Hazard
2	QB	Quercus bicolor	Swamp White Oak	3" Cal.	B&B	As Shown	Fall Digging Hazard
5	QS	QUERCUS ILICIFOLIA	SCRUB OAK	4'–5' HT	CONT	AS SHOWN	
8	ST	STAPHYLEA TRIFOLIA	AMERICAN BLADDERNUT	2" CAL.	B&B	AS SHOWN	SINGLE STEM TREE FORM
0	UA	Ulmus americana 'Princeton'	Princeton Elm	3" Cal.	B&B	As Shown	
SHRUBS							
41	Cl	Comptonia peregrina	Sweet Fern	#3 Cont.		As Shown	
3	Cm	Cornus amomum	Silky Dogwood	24"–30"	Cont	As Shown	
0	Co	Cornus sericea	Red–Osier Dogwood	30"–36"	Cont.	As Shown	
35	Cs	CORNUS SERICEA 'FLAVAMIRA'	YELLOW–TWIGGED DOGWOOD	18"–24"	Cont	As Shown	
5	CB	CORYLUS CORNUTA	BEAKED HAZELNUT	30"–36" HT	CONT	AS SHOWN	
3	CA	CORYLUS AMERICANA	AMERICAN HAZELNUT	30"–36" HT	CONT	AS SHOWN	
6	Hm	Hamamelis virginiana	Witchhazel	3' – 4'	Cont.	As Shown	
11	Kt	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	30"–36"	Cont.	As Shown	
3	Lb	Lindera benzoin	Spicebush	36"	Cont.	As Shown	
48	Mp	Myrica pennsylvanica	NORTHERN BAYBERRY	#5	Cont.	As Shown	
47	Rg	Rhus typhina 'Laciniata'	Cutleaf Staghorn Sumac	36"	Cont.	As Shown	
23	RC	ROSA CAROLINIANA	CAROLINA ROSE	18"–24"	CONT.	As Shown	
31	Sg	SYMPHORICARPUS ALBUS	SNOWBERRY	24"–30"	CONT.	As Shown	
12	Va	Viburnum acerifolium	Mapleleaf Viburnum	24"–30"	Cont.	As Shown	
37	Vd	Viburnum dentatum	Doubleflle Viburnum	30"–36"	Cont.	As Shown	
3	VL	VIBURNUM LENTAGO	NANNYBERRY VIBURNUM	5'–6' HT	CONT	As Shown	
3	VP	VIBURNUM PRUNIFOLIUM	BLACKHAW VIBURNUM	30"–36" HT	CONT	As Shown	
10	Xv	Ilex verticillata 'Winter Red'	Winter Red Winterberry	18"–24"	Cont	As Shown	
PERENNIALS/ GRASSES							
359	cv	Carex Vulpinoidea	Fox Sedge		#1 Cont.	8" O.C.	
143	lf	PANICUM CLANDESTINUM	DEERTONGUE		#1 CONT	16–18" O.C.	
598	oc	Osmunda cinnamomea	Cinnamon Fern		#2 Cont.	2–3' O.C.	
347	pv	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass		#2 Cont.	2–3' O.C.	
116	res	Rudbeckia laciniata	Cutleaf Coneflower		#1 Cont	18" O.C.	
429	ss	Schizachyrium scoparium	Little Bluestem		#1 Cont	18" O.C.	

3 **OVERALL PLANT LIST**
SCALE: NTS

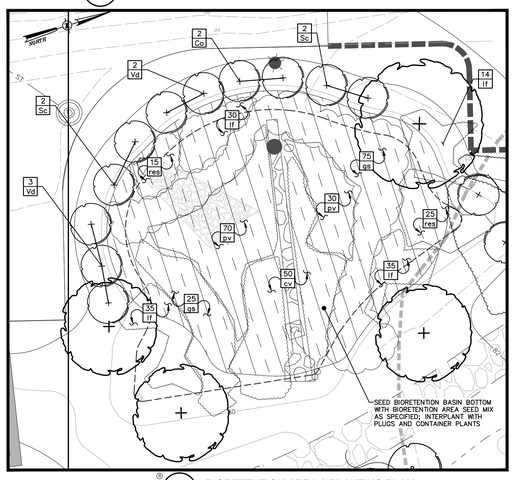


4 **BIORETENTION AREA 1 & PLANTERS PLANTING PLAN**
SCALE: 1"=10'

PLANT LIST

QTY	ABRV	BOTANICAL NAME	COMMON NAME	SIZE	COND	SPACING	REMARKS
SHRUBS							
4	Co	Cornus sericea	Red–Osier Dogwood	30"–36"	Cont.	As Shown	
2	Sc	Sambucus canadensis	Black Elderberry	12" – 18"	Cont.	As Shown	
3	Vd	Viburnum dentatum	Arrowwood Viburnum	30" – 36"	Cont.	As Shown	
PERENNIALS/ GRASSES							
60	cv	Carex vulpinoidea	Fox Sedge	LP50/50	2" PLUG	8" O.C.	
45	gs	Glyceria striata	Fowl Manna Grass	LP50/50	2" PLUG	16" O.C.	
45	lf	PANICUM CLANDESTINUM	DEERTONGUE	LP50/50	2" PLUG	18" O.C.	
80	pv	Panicum virgatum	Shenandoah Switch Grass	LP50/50	2" PLUG	24" O.C.	
50	res	Rudbeckia laciniata	Cutleaf Coneflower	LP50/50	2" PLUG	12" O.C.	

5 **BIORETENTION AREA 1 & PLANTERS PLANT LIST**
SCALE: NTS



6 **BIORETENTION AREA 2 PLANTING PLAN**
SCALE: 1"=10'

PLANT LIST

QTY	ABRV	BOTANICAL NAME	COMMON NAME	SIZE	COND	SPACING	REMARKS
SHRUBS							
2	Co	Cornus sericea	Red–Osier Dogwood	30"–36"	Cont.	As Shown	
4	Sc	Sambucus canadensis	Black Elderberry	12" – 18"	Cont.	As Shown	
5	Vd	Viburnum dentatum	Arrowwood Viburnum	30" – 36"	Cont.	As Shown	
PERENNIALS/ GRASSES							
50	cv	Carex vulpinoidea	Fox Sedge	LP50/50	2" PLUG	8" O.C.	
100	gs	Glyceria striata	Fowl Manna Grass	LP50/50	2" PLUG	16" O.C.	
100	lf	Panicum clandestinum	Deertongue	LP50/50	2" PLUG	18" O.C.	
100	pv	Panicum virgatum	Shenandoah Switch Grass	LP50/50	2" PLUG	24" O.C.	
50	res	Rudbeckia laciniata	Cutleaf Coneflower	LP50/50	2" PLUG	12" O.C.	

7 **BIORETENTION AREA 2 PLANT LIST**
SCALE: NTS

E. LAWN:
- I. LAWN SEED MIX: ECO–LAWN PER LANDSCAPING NOTES, SHEET C580. SEED AT THE RATE OF 6 TO 8 LBS PER 1,000 SF WITH COVER CROP OF TEMPORARY COVER SEED AT 2 TO 3 LBS PER 1000 SF.
- II. TEMPORARY COVER SEED MIX: SEED AT THE RATE OF 3 TO 4 LBS PER 1,000 SF.
- III. TEMPORARY COVER SEED MIX TO BE APPLIED ONLY FOR LATE FALL OR SUMMER SOIL STABILIZATION OUTSIDE ALLOWED SEEDING PERIODS.

F. BIORETENTION AREA:
- I. BIORETENTION AREA SEED MIX: SEED AT THE RATE OF 0.5 LBS PER 1000 SF WITH A COVER CROP OF GRAIN RYE (FALL–WINTER SEEDING) OR JAPANESE MILLET (SUMMER SEEDING) AT SEEDING RATE. MULCHING AND ESTABLISHMENT MAINTENANCE AS DIRECTED BY MANUFACTURER.

G. ALL SEEDED AREAS SHALL BE PROTECTED FROM EROSION BY ONE OF THE FOLLOWING METHODS:
- I. A UNIFORM BLANKET OF STRAW APPLIED AT A RATE OF 2 TONS/ACRE MIN, TO BE APPLIED ONCE SEEDING IS COMPLETE.
- II. WOOD FIBER CELLULOSE APPLIED WITH SEED MIX BY A HYDROSEEDER AT A RATE OF 2,000 LBS/ACRE.

G. ALL SEEDED SLOPES 3:1 OR GREATER SHALL BE PROTECTED FROM EROSION WITH JUTE MESH OR APPROVED EQUAL.

H. ALL NEWLY PLANTED AREAS SHALL BE KEPT MOIST BY WATERING UNTIL GRASSES AND GROUND COVERS ARE WELL ESTABLISHED. THE LANDSCAPE CONTRACTOR MUST WATER PLANT MATERIAL WHEN NECESSARY FOR 60 DAYS AFTER INSTALLATION.

I. LAWNS ARE TO BE WARRANTED UNTIL THEY BECOME ESTABLISHED, UNTIL FINAL ACCEPTANCE, AND NOT LESS THAN 60 DAYS AFTER COMPLETION OF ALL WORK. TREES, SHRUBS, GROUND COVERS, AND PERENNIALS SHALL BE WARRANTED AGAINST DEFECTS INCLUDING POOR GROWTH AND DEATH, EXCEPT WHEN RESULTING FROM OWNER NEGLECT, INCIDENTS THAT ARE BEYOND THE CONTROL OF THE LANDSCAPE INSTALLER AND DAMAGE OR ABUSE BY OTHERS, FOR AT LEAST ONE FULL YEAR AFTER PROJECT COMPLETION.

. ALL LANDSCAPING SHOWN ON THESE PLANS SHALL BE MAINTAINED IN A HEALTHY AND VIGOROUS GROWING CONDITION THROUGHOUT THE DURATION OF THE PROPOSED USE OF THE SITE. ALL VEGETATION NOT SO MAINTAINED SHALL BE REPLACED WITH NEW COMPARABLE VEGETATION AT THE BEGINNING OF THE NEXT GROWING SEASON.

SITE LEGEND:

- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED CURB
- 80 — PROPOSED 10 FT CONTOUR
- 79 — PROPOSED 2 FT CONTOUR
- 79.2 x — PROPOSED SPOT GRADE
- PROPOSED PERMEABLE ASPHALT PAVEMENT
- 25 — PROPOSED PARKING COUNT
- PROPOSED TREES
- PROPOSED SHRUBS
- PROPOSED HERBACEOUS PLANTS
- MULCH BED
- RIVERSTONE BED
- 43 / CO — PLANT QUANTITY / PLANT NAME

SOIL RESTORATION NOTES:

SOIL SHALL BE RESTORED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND THE LATEST EDITION OF THE NYSDEC DEEP–RIPPING AND COMPACTION GUIDELINES.

IN AREAS WHERE SOIL DISTURBANCE HAS OCCURRED OUTSIDE OF BUILDINGS AND PAVEMENT AREAS, THE DISTURBED SUB–SOILS SHALL BE RETURNED TO ROUGH GRADE AND THE FOLLOWING SOILS RESTORATION STEPS APPLIED:

1) APPLY THREE INCHES OF COMPOST OVER SOIL. COMPOST SHALL BE AGED, FROM PLANT DERIVED MATERIALS, FREE OF VIABLE WEED SEEDS, HAVE NO VISIBLE FREE WATER OR DUST PRODUCED WHEN HANDLING, PASS THROUGH A HALF INCH SCREEN AND HAVE A PH SUITABLE TO GROW DESIRED PLANTS.

2) TILL COMPOST INTO THE SUBSOIL TO A DEPTH OF AT LEAST 12–INCHES USING A CAT–MOUNTED RIPPER, TRACTOR MOUNTED DISC, OR TILLER. MIXING AND CIRCULATING AIR AND COMPOST INTO SUB–SOILS.

3) ROCK–PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF FOUR INCHES AND LARGER SIZE ARE CLEANED OFF THE SITE.

4) APPLY TOPSOIL TO A DEPTH OF SIX INCHES.

NOTES:
1. BROADCAST DENSITY, MULCHING, AND FIRST & SECOND SEASON MAINTENANCE TO MATCH MANUFACTURER'S RECOMMENDATIONS TO ENSURE PROPER ESTABLISHMENT.
2. OWNER TO FOLLOW GROWING SEASON MAINTENANCE RECOMMENDATIONS AFTER 1 YEAR TO ACHIEVE PROPER ESTABLISHMENT. CONTRACTOR TO INSTALL A 3"–4" SPADE CUT EDGE AT ALL LAWN/MULCH INTERFACES (TYP); CONTRACTOR TO ROUGHLY STAKE OUT AREA FOR OWNER APPROVAL PRIOR TO EDGING AND MULCHING.
3. ALL AREAS DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES AND WHICH ARE NOT OTHERWISE CALLED OUT AS HARDSCAPE OR LANDSCAPE PLANTING AREAS SHALL BE SEEDED TO ESTABLISH LAWN PER LANDSCAPING NOTES.

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EXP: ##/##/20##
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CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 019281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

It is a violation of New York Education Law Art. 145 Sec. 7209 & Art. 147 Sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

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Beacon, New York 12508

NO.	DATE	DESCRIPTION
2	04/30/24	REVISED PER CITY COMMENTS
1	3/26/24	REVISED PER CITY COMMENTS
Revisions		

PROJECT NUMBER: C281750.00
DRAWN BY: DP
REVIEWED BY: KA
ISSUED FOR: ISSUED FOR PLANNING BOARD APPROVAL
DATE: 02/14/24
DRAWING NAME: LANDSCAPE PLAN
DRAWING NUMBER: C180

4/29/2024 3:12:25 PM
\\cadfs\dfs\Legacy\Clients\Projects\81700-81799\81750.00 CHAI Baldwin S-248\DWG\01_C180_81750-80_LAND.dwg

LIGHTING STATISTICS:

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Stat Zone # 1 Entire Site to PL	+	0.2 fc	5.0 fc	0.0 fc	N/A	N/A
Stat Zone # 2 Onsite Drive and Parking areas	+	0.8 fc	5.0 fc	0.0 fc	N/A	N/A

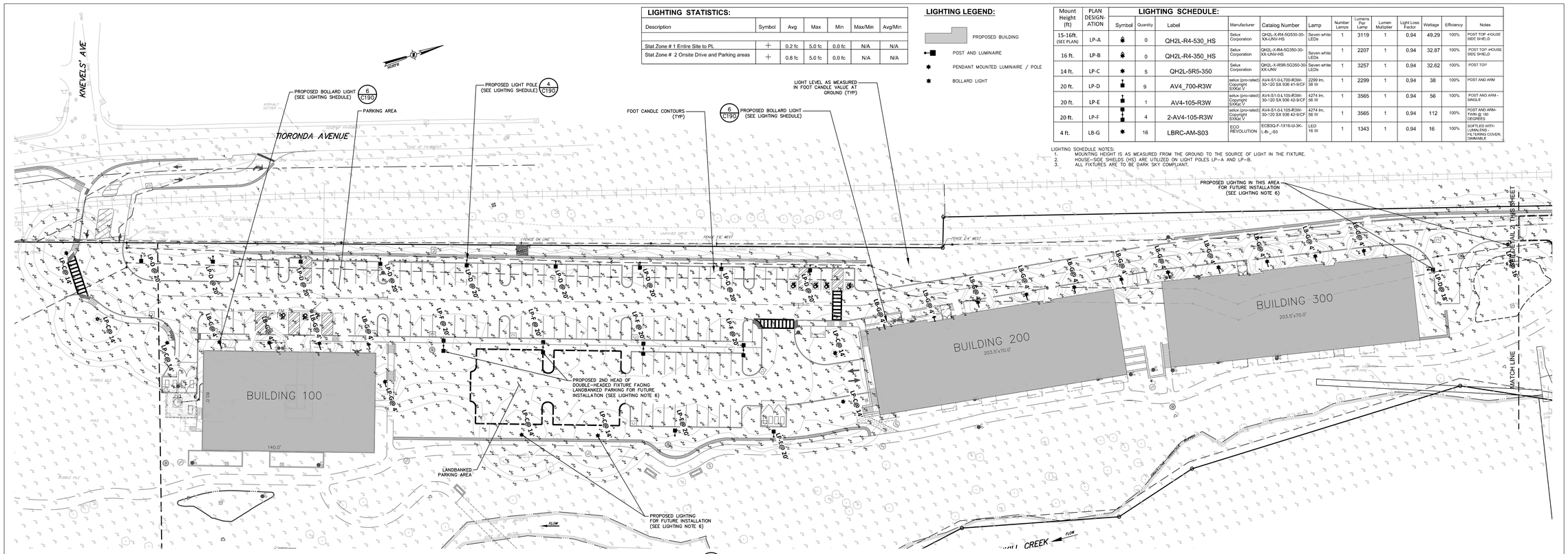
LIGHTING LEGEND:

- PROPOSED BUILDING
- POST AND LUMINAIRE
- PENDANT MOUNTED LUMINAIRE / POLE
- BOLLARD LIGHT

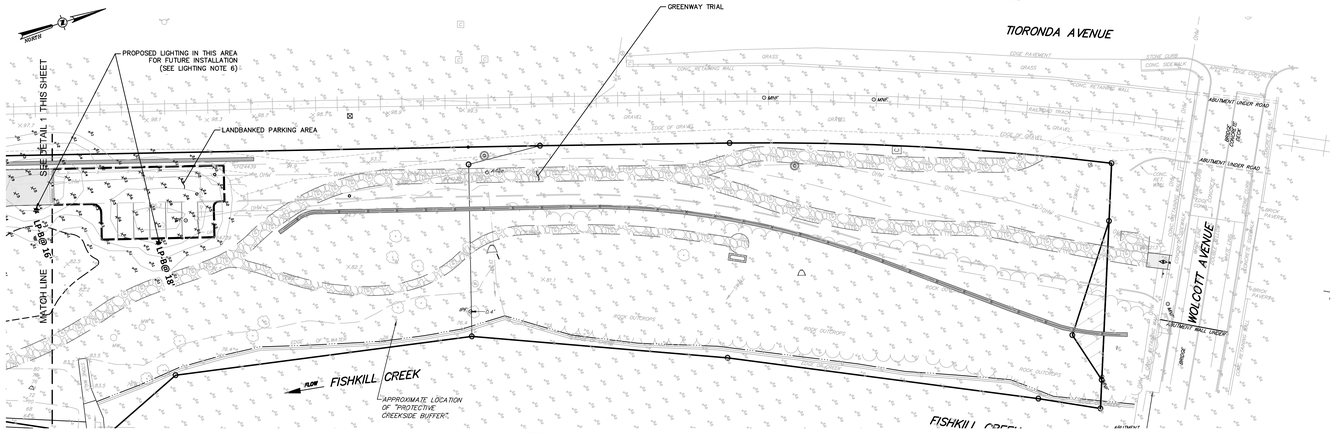
LIGHTING SCHEDULE:

Mount Height (ft)	PLAN DESIGNATION	Symbol	Quantity	Label	Manufacturer	Catalog Number	Lamp	Number Lamps	Lumens Per Lamp	Lumen Multiplier	Light Loss Factor	Wattage	Efficiency	Notes
15-16ft. (SEE PLAN)	LP-A		0	QH2L-R4-530_HS	Selux Corporation	QH2L-X-R4-5G530-30-XX-UNV-HS	Seven white LEDs	1	3119	1	0.94	49.29	100%	POST TOP-HOUSE SIDE SHIELD
16 ft.	LP-B		0	QH2L-R4-350_HS	Selux Corporation	QH2L-X-R4-5G350-30-XX-UNV-HS	Seven white LEDs	1	2207	1	0.94	32.87	100%	POST TOP-HOUSE SIDE SHIELD
14 ft.	LP-C		5	QH2L-5R5-350	Selux Corporation	QH2L-X-R5R-5G350-30-XX-UNV	Seven white LEDs	1	3257	1	0.94	32.62	100%	POST TOP
20 ft.	LP-D		9	AV4_700-R3W	selux (pro-rated) Copyright SIXKat V	AV4-S1-0-L700-R3W-30-120 SX 936 41-9/CF	2299 lm, 38 W	1	2299	1	0.94	38	100%	POST AND ARM
20 ft.	LP-E		1	AV4-105-R3W	selux (pro-rated) Copyright SIXKat V	AV4-S1-0-L105-R3W-30-120 SX 936 42-9/CF	4274 lm, 56 W	1	3565	1	0.94	56	100%	POST AND ARM - SINGLE
20 ft.	LP-F		4	2-AV4-105-R3W	selux (pro-rated) Copyright SIXKat V	AV4-S1-0-L105-R3W-30-120 SX 936 42-9/CF	4274 lm, 56 W	1	3565	1	0.94	112	100%	POST AND ARM-TWIN @ 180 DEGREES
4 ft.	LB-G		16	LBRC-AM-S03	ECO REVOLUTION	ECBQ-F-1X16-U-3K-L-B-_-SS	LED 16 W	1	1343	1	0.94	16	100%	SOFTLED WITH-FILTERING FILTERING COVER, DIMMABLE

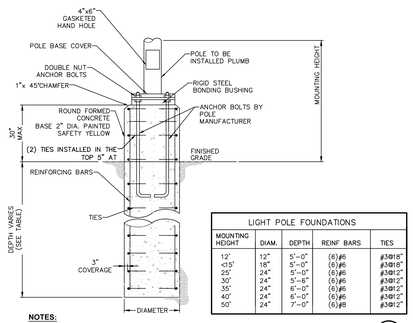
LIGHTING SCHEDULE NOTES:
1. MOUNTING HEIGHT IS AS MEASURED FROM THE GROUND TO THE SOURCE OF LIGHT IN THE FIXTURE.
2. HOUSE-SIDE SHIELDS (HS) ARE UTILIZED ON LIGHT POLES LP-A AND LP-B.
3. ALL FIXTURES ARE TO BE DARK SKY COMPLIANT.



1 C190 **PHOTOMETRIC LIGHTING PLAN**
SCALE: 1"=30'



2 C190 **PHOTOMETRIC LIGHTING PLAN**
SCALE: 1"=30'

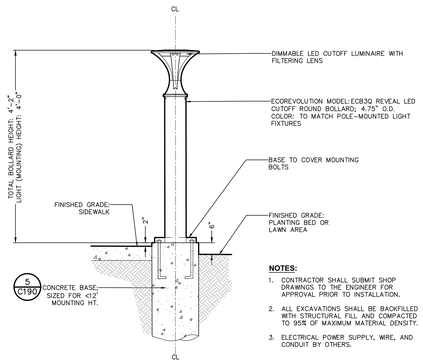


LIGHT POLE FOUNDATIONS				
MOUNTING HEIGHT	DIAM.	DEPTH	REINF BARS	TIES
12'	12"	5'-0"	(6)#6	#3@18"
<15'	18"	5'-0"	(6)#6	#3@18"
25'	24"	5'-0"	(6)#6	#3@12"
30'	24"	5'-6"	(6)#6	#3@12"
35'	24"	6'-0"	(6)#6	#3@12"
40'	24"	6'-0"	(6)#6	#3@12"
50'	24"	7'-0"	(6)#8	#3@12"

NOTES:
1. CONDUITS AND GROUNDING SHALL BE AS REQUIRED BY THE ELECTRICAL DESIGN.
2. ALL CONCRETE SHALL BE **4,500 PSI @** 28 DAYS.
3. ALL REINFORCING STEEL SHALL BE GRADE 60.
4. DESIGNED FOR **90 MPH** WIND WITH FIXTURE AREA OF **13 SF.**
5. FOUNDATION DIAMETER AND REINFORCING CIRCLE SHALL BE COORDINATED WITH ANCHOR BOLT LIMITS.
6. FOUNDATIONS SHALL BE AUGERED INTO UNDISTURBED NATURAL SOIL OR COMPACTED FILL PER SITE GRADING PLANS.

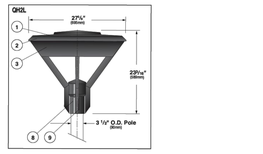
5 C190 **LOT LIGHTING CONCRETE BASE**
SCALE: N.T.S.

LIGHTING NOTES:
1. PROPOSED LIGHTING AS MANUFACTURED BY SELUX LIGHTING. PROPOSED POLE LENGTHS VARY, SEE LIGHTING CHART.
2. GRID NUMBERS SHOWN REPRESENT FOOT CANDLE VALUES AT GROUND PLANE.
3. THE LIGHTING FIXTURES, SURFACE LOCATIONS AND ASSOCIATED PHOTOMETRIC VALUES ARE IDENTIFIED BY THE CHAZEN COMPANIES. DETAILED DESIGN OF THE LIGHTING SPECIFICATIONS, FOUNDATION DESIGN, LIGHTING CONDUIT, WIRING, AND CONTROL CIRCUITRY SHALL BE BY OTHERS.
4. IF DISCREPANCIES EXIST BETWEEN THE LIGHTING SCHEDULE AND LIGHTING PLAN, THE PLAN SHALL DICTATE.
5. THE EXISTING STREET LIGHTS IN THE RIGHT-OF-WAYS HAVE NOT BEEN INCLUDED IN THIS PHOTOMETRIC ANALYSIS. THE LIGHT LEVELS SHOWN HEREON REFLECT THE PROPOSED LIGHTING ON SITE.
6. LIGHTING AND ELECTRICAL SERVICE WIRING SHALL ONLY BE INSTALLED IN THE EVENT OF BUILDOUT OF LANDBANKED PARKING. INSTALL ELECTRIC CONDUIT STUBS-UPS, COVER AND MARK LOCATIONS IN CURRENT WORK PHASE.

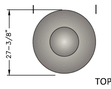


NOTES:
1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
2. ALL EXCAVATIONS SHALL BE BACKFILLED WITH STRUCTURAL FILL AND COMPACTED TO 95% OF MAXIMUM MATERIAL DENSITY.
3. ELECTRICAL POWER SUPPLY, WIRE, AND CONDUIT BY OTHERS.

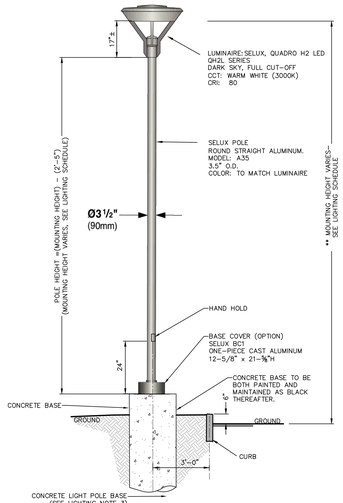
6 C190 **BOLLARD LIGHT FIXTURE DETAIL**
SCALE: N.T.S.



SECTION VIEW



TOP VIEW



NOTES:
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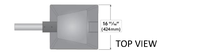
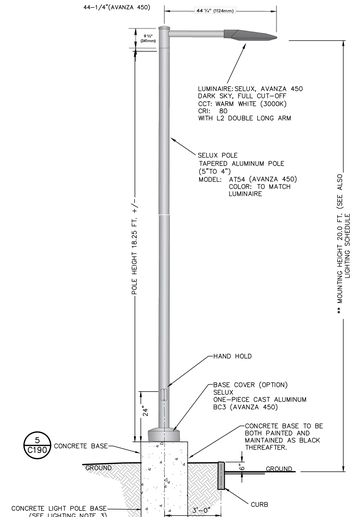
2. ALL EXCAVATIONS SHALL BE BACKFILLED WITH STRUCTURAL FILL AND COMPACTED TO 95% OF MAXIMUM MATERIAL DENSITY.
3. ELECTRICAL POWER SUPPLY, WIRE, AND CONDUIT BY OTHERS.

3 C190 **PEDESTRIAN SCALE LIGHTING FIXTURE DETAIL**
SCALE: N.T.S.





NOTES:
1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
2. ALL EXCAVATIONS SHALL BE BACKFILLED WITH STRUCTURAL FILL AND COMPACTED TO 95% OF MAXIMUM MATERIAL DENSITY.
3. ELECTRICAL POWER SUPPLY, WIRE, AND CONDUIT BY OTHERS.
4. WHEN LIGHT FIXTURE IS ADJACENT TO PARKING, BASE HEIGHT TO BE 30" HIGH.

4 C190 **PARKING AREA LIGHTING FIXTURE DETAIL**
SCALE: N.T.S.

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EXP: ##/##/20##
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CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 016281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

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2	04/30/24	REVISED PER CITY COMMENTS
1	3/26/24	REVISED PER CITY COMMENTS
Revisions		

PROJECT NUMBER: C281750.00
DRAWN BY: DC
REVIEWED BY: KA
ISSUED FOR: ISSUED FOR PLANNING BOARD APPROVAL
DATE: 02/14/24
DRAWING NAME:

248 Tioronda Avenue
248 Tioronda Avenue
Beacon, New York 12508

PHOTOMETRIC LIGHTING PLAN

DRAWING NUMBER:

C190

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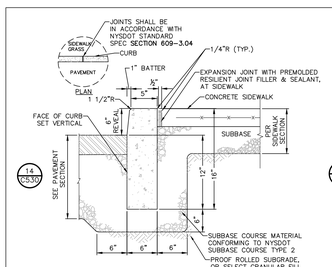
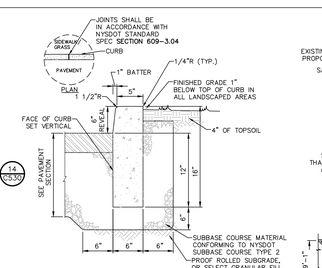


NOTES
1. CONCRETE CURB SHALL BE INSTALLED IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION **SECTION 609.**
2. PRECAST CONCRETE CURB MAY BE SUBSTITUTED, WHEN ALTERNATE CONSTRUCTION DETAILS ARE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. ALTERNATE CURB SHALL BE INSTALLED IN ACCORDANCE WITH NYSDOT SPEC **SECTION 609.**

1 CAST IN PLACE CONCRETE CURB AT SIDEWALK
SCALE: NOT TO SCALE



NOTES
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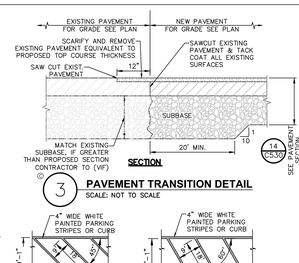
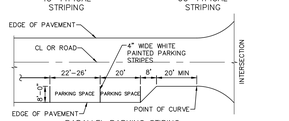
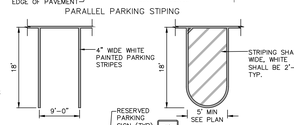
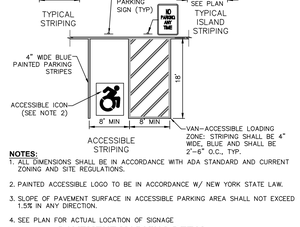
2 CAST IN PLACE CONCRETE CURB
SCALE: NOT TO SCALE



3 PAVEMENT TRANSITION DETAIL
SCALE: NOT TO SCALE

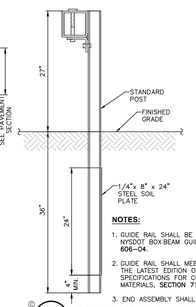






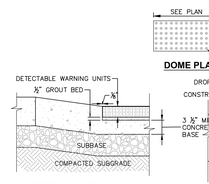
NOTES:
1. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH ADA STANDARD AND CURRENT ZONING AND SITE REGULATIONS.
2. PAINTED ACCESSIBLE LOGO TO BE IN ACCORDANCE W/ NEW YORK STATE LAW.
3. SLOPE OF PAVEMENT SURFACE IN ACCESSIBLE PARKING AREA SHALL NOT EXCEED 1.5% IN ANY DIRECTION.
4. SEE PLAN FOR ACTUAL LOCATION OF SIGNAGE

12 PAVEMENT MARKING DETAIL PARKING STRIPING
SCALE: NOT TO SCALE



NOTES:
1. GUIDE RAIL SHALL BE IN ACCORDANCE WITH NYSDOT BOX BEAM GUIDE RAIL **STANDARD SHEET 606-04.**
2. GUIDE RAIL SHALL MEET ALL REQUIREMENTS OF THE LATEST EDITION OF THE NYSDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, **SECTION 710-21.**
3. END ASSEMBLY SHALL BE TYPE

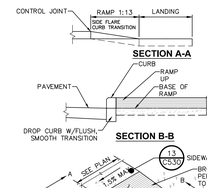
4 BOX BEAM GUIDERAIL DETAIL
SCALE: NOT TO SCALE



SECTION A-A THRU RAMP | **SECTION B-B THRU RAMP**

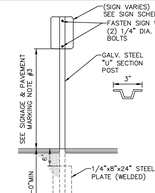
NOTES:
1. DETECTABLE WARNING UNIT SHALL BE ADA COMPLIANT, AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
2. CAST IRON 2" TERRA PAVING TYPE THREE ADA COMPLIANT WARNING PAVER.
3. COORDINATE W/ OWNER FOR COLOR.

5 DETECTABLE WARNING UNITS FOR RAMPS
SCALE: NOT TO SCALE

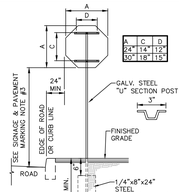


NOTES:
1. ALL WORK SHALL CONFORM WITH THE NYSDOT STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS DATED, **"CURRENT VERSION",** AND ALL ADDENDA THERE TO; SPECIFICALLY **SECTION 608-** SIDEWALKS, DRIVEWAYS, AND BICYCLE PATHS.
2. SLOPE RAMP AND SIDE FLARES AS INDICATED IN THE PLANS OR AS ORDERED BY THE ENGINEER.
3. DETECTABLE WARNING UNITS SHALL BE PROVIDED ON ALL RAMPS IN ACCORDANCE W/ ADA REQUIREMENTS.

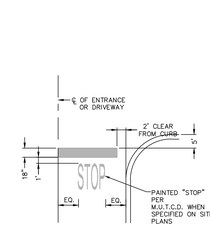
6 PEDESTRIAN RAMP SECTION - DROP CURB
SCALE: NOT TO SCALE



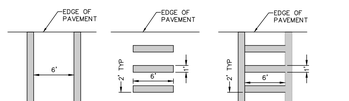
7 SINGLE POST SIGN MOUNTING DETAIL
SCALE: NOT TO SCALE



8 SINGLE POST STOP SIGN MOUNTING DETAIL
SCALE: NOT TO SCALE

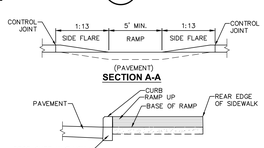


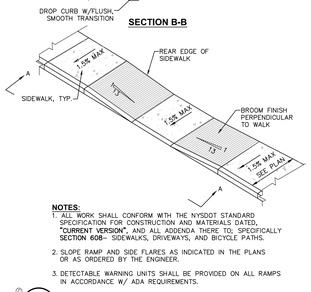
10 PAVEMENT MARKING DETAIL STOP BAR
SCALE: NOT TO SCALE



NOTES:
1. ALL CROSS WALK STRIPING SHALL BE WHITE
2. TYPE S CROSS WALK SHALL BE USED IN LOW TRAFFIC VOLUME STREET CROSSINGS.
3. TYPE L CROSS WALK SHALL BE USED IN MEDIUM TRAFFIC VOLUME STREET CROSSINGS.
4. TYPE LS CROSS WALK SHALL BE USED IN HIGH TRAFFIC VOLUME STREET CROSSINGS.

11 PAVEMENT MARKING DETAIL CROSS WALK STRIPING
SCALE: NOT TO SCALE





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2. SLOPE RAMP AND SIDE FLARES AS INDICATED IN THE PLANS OR AS ORDERED BY THE ENGINEER.
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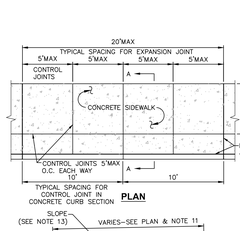
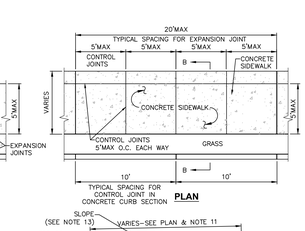
28 PEDESTRIAN RAMP SECTION - DROP CURB
SCALE: NOT TO SCALE

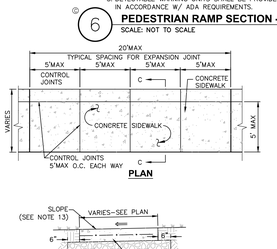
16 SINGLE POST IN CONCRETE SIGN MOUNTING DETAIL
SCALE: NOT TO SCALE

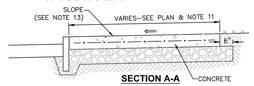
NOTES:
1. ALL WORK SHALL CONFORM WITH THE NYSDOT STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS DATED, **"CURRENT VERSION",** AND ALL ADDENDA THERE TO; SPECIFICALLY **SECTION 608-** SIDEWALKS, DRIVEWAYS, AND BICYCLE PATHS.
2. SLOPE RAMP AND SIDE FLARES AS INDICATED IN THE PLANS OR AS ORDERED BY THE ENGINEER.
3. DETECTABLE WARNING UNITS SHALL BE PROVIDED ON ALL RAMPS IN ACCORDANCE W/ ADA REQUIREMENTS.

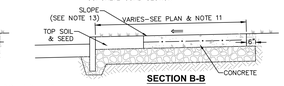
27 PEDESTRIAN RAMP SECTION - DROP CURB
SCALE: NOT TO SCALE

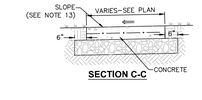




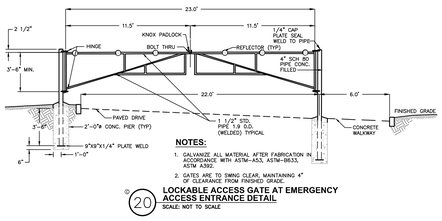






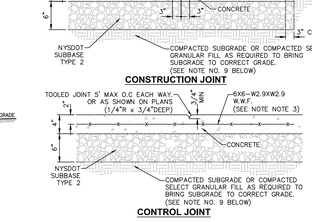


NOTES:
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED "CURRENT VERSION", AND ALL ADDENDA THERE TO.
2. ALL CONCRETE SHALL BE **4,500** CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH **SECTION 500** OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
3. 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.
4. ALL EXPOSED SURFACES SHALL HAVE A BROOM TEXTURED FINISH & TOOLED EDGES. TOOL SHALL PROVIDE MAX 1-1/2" WIDE SMOOTH TROWEL FINISH AT JOINT.
5. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
6. JOINTS SHALL NOT BE SAW CUT.
7. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH **"SURE&ONQ"/"SAFE&ONQ" 58-7000** IN TENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
8. SUBBASE MATERIAL SHALL CONFORM WITH **SECTION 304** OF THE ABOVE REFERENCED NYSDOT STANDARD.
9. 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 CONFORMANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
10. ALL WORK SHALL CONFORM WITH **SECTION 608-**SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11. ALL WORK SHALL CONFORM WITH AASHTO GEOMETRIC DESIGN OF HIGHWAYS AND STREET 2011, ICC A117.1 2009, OR LATEST EDITION.
12. SIDEWALK WIDTH SHOWN ON THE PLANS IS TO BE MEASURED FROM THE BACK OF THE CURB.
13. SIDEWALKS SHALL HAVE A CROSS SLOPE OF **1.5%** PER FT. UNLESS OTHERWISE NOTED ON PLAN.



NOTES:
1. GALVANIZE ALL MATERIAL AFTER FABRICATION IN ACCORDANCE WITH ASTM-A53, ASTM-1083, ASTM A392.
2. GATES ARE TO SWING CLEAR, MAINTAINING 4" OF CLEARANCE FROM FINISHED GRADE.

20 LOCKABLE ACCESS GATE AT EMERGENCY ACCESS ENTRANCE DETAIL
SCALE: NOT TO SCALE

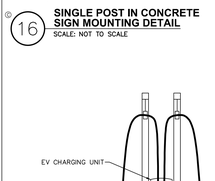


CONSTRUCTION JOINT

CONTROL JOINT

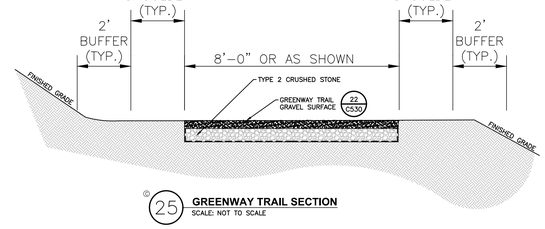
13 CONCRETE SIDEWALK DETAIL
SCALE: NOT TO SCALE

14 PAVEMENT SECTION DETAIL
SCALE: NOT TO SCALE

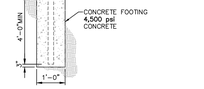


NOTES:
1. CONDUITS AND GROUNDING SHALL BE AS REQUIRED BY THE ELECTRICAL DESIGN.
2. ALL CONCRETE SHALL BE 4,500 PSI @ 28 DAYS.
3. ALL REINFORCING STEEL SHALL BE GRADE 60.
4. FOUNDATIONS SHALL BE AUGERED INTO UNDISTURBED NATURAL SOIL OR COMPACTED.

21 EV CHARGER MOUNTING & BASE DETAIL
SCALE: NOT TO SCALE



25 GREENWAY TRAIL SECTION
SCALE: NOT TO SCALE

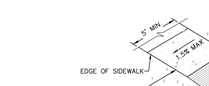


ADA TRAIL SECTION

NOTES:
1. COMPACT GRADES ADJACENT TO TRAIL TO MINIMIZE SETTLING AND EROSION.
2. DECOMPOSED GRANITE TO BE INSTALLED PER SUPPLIERS DIRECTIONS.
3. DECOMPOSED GRANITE COLOR TO BE SELECTED BY LANDSCAPE ARCHITECT.
4. REFER TO DETAIL 23/C530 FOR HAND RAIL.
5. TRAIL SURFACE SHOULD BE ADA-COMPLIANT.

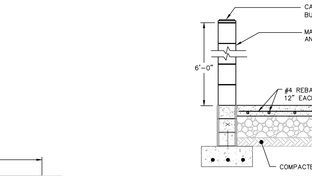
26 ADA TRAIL SURFACE
SCALE: NOT TO SCALE

NOTES:
1. ALL WORK SHALL CONFORM WITH THE NYSDOT STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS DATED, **"CURRENT VERSION",** AND ALL ADDENDA THERE TO; SPECIFICALLY **SECTION 608-** SIDEWALKS, DRIVEWAYS, AND BICYCLE PATHS.
2. SLOPE RAMP AND SIDE FLARES AS INDICATED IN THE PLANS OR AS ORDERED BY THE ENGINEER.
3. DETECTABLE WARNING UNITS SHALL BE PROVIDED ON ALL RAMPS IN ACCORDANCE W/ ADA REQUIREMENTS.



NOTES
1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS WITH A MINIMUM CEMENT CONTENT OF 600 POUNDS PER CUBIC YARD FOR ALL FOOTINGS.
2. ALL CONCRETE SHALL HAVE A SLUMP OF NO GREATER THAN 3"–5" TO WITHIN A TOLERANCE OF 0"–1".
3. ALL EXPOSED CONCRETE SHALL BE 5% AIR-ENTRAINED (WITHIN 1% TOLERANCES) CONFORMING TO ASTM C260.
4. ALL FORMWORK AND PLACEMENT OF CONCRETE SHALL COMPLY WITH GOOD CONSTRUCTION PRACTICES AND BE IN ACCORDANCE WITH GOVERNING CODES, AND REGULATIONS.

17 CONCRETE BOLLARD DETAIL
SCALE: NOT TO SCALE



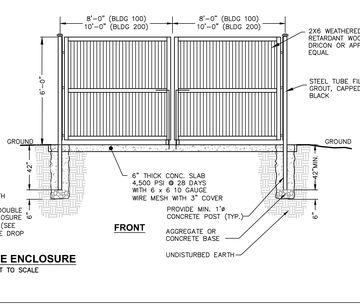
SECTION A-A

STRIPING NOTES:
1. ALL STRIPING SHALL CONFORM TO THE LATEST EDITION OF THE NYSDOT STANDARD SPECIFICATIONS, **SECTION 640** AND THE "NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" – **2009 EDITION** AND THE "NYS SUPPLEMENT."
2. STRIPE PAVEMENT AS INDICATED ON THE PLANS AND/OR IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS.
3. STRIPING WORK WILL BE REVIEWED AND ACCEPTED BY THE AUTHORITY HAVING JURISDICTION.
4. COLOR: DRIVE LANE DIVIDERS – WHITE OR AOBE
NO PARKING ZONE WARNINGS – WHITE OR AOBE
PARKING DIVIDERS – WHITE OR AOBE
WALKING LINES – WHITE OR AOBE
ACCESSIBLE PARKING LINES & SYMBOL – BLUE

SIGNAGE NOTES:
1. ALL SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE NYSDOT STANDARD SPECIFICATIONS, **SECTION 645** AND THE "NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" – **2009 EDITION** AND THE "NYS SUPPLEMENT."
2. SIGN MOUNTING HEIGHT SHALL BE A MINIMUM OF 7'. MINIMUM MOUNTING HEIGHT MAY BE ADJUSTED ONLY IN ACCORDANCE WITH PROVISIONS OUTLINED IN THE "NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" – **2009 EDITION** AND THE "NYS SUPPLEMENT."
3. SIGN POST SHALL BE IN ACCORDANCE W/ NYSDOT STANDARD SPECS **SECTION 730.**

SIGN NO.	SIGN FACE	MUTCD NUMBER	MIN. SIZE	COLORS BCK GRND	COLORS LEGEND	MOUNTING
1	STOP	R1-1	30"x30"	RED	WHITE	8 /C530
2		W11-2	24"x24"	YELLOW/ FYG	BLACK	— /C530
3	RESERVED PARKING	NY R7-8D	12"x18"	WHITE/ BLUE	GREEN/ WHITE	16 /C530
4	VAN ACCESSIBLE	R7-8P	12"x6"	WHITE	BLUE	16 /C530
5	NO PARKING ANY TIME	R7-1	12"x18"	WHITE	RED	16 /C530
6		R3-2	30"x30"	WHITE	BLACK/ RED	16 /C530
7		R3-2	30"x30"	WHITE	BLACK/ RED	16 /C530
8		R15-1	48"x9"	WHITE	BLACK	16 /C530
9	EXEMPT	R15-3P	24"x12"	WHITE	BLACK	16 /C530
10		W10-1	30"	YELLOW	BLACK	16 /C530
11		CUSTOM	18"x18"	WHITE	GREEN	16 /C530
12		CUSTOM	12"x18"	WHITE/ GREEN	GREEN/ WHITE/ BLUE	16 /C530
13	USE LAST	CUSTOM	12"x6"	BLUE	WHITE	16 /C530
14	TRAIL PARKING ONLY	CUSTOM DESIGN TO BE COORD. WITH GREENWAY COMMITTEE PRIOR TO CONSTRUCTION				16 /C530

15 SIGN SCHEDULE
SCALE: NOT TO SCALE



NOTE:
1. CONCRETE SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 4000 PSI @ 28 DAY AND SHALL BE PLACED IN ACCORDANCE WITH ACI SPECIFICATIONS AND ITS LATEST REVISION.

19 REFUSE ENCLOSURE
SCALE: NOT TO SCALE

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Poughkeepsie, NY 12601
(845) 454-3980
labellapc.com

NOT FOR CONSTRUCTION
EXP: ##/##/20##

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018381
LAND SURVEYING: 017976
GEOLOGICAL: 018750

It is a violation of New York Education Law Art. 145 Sec. 7209 & Art. 147 Sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

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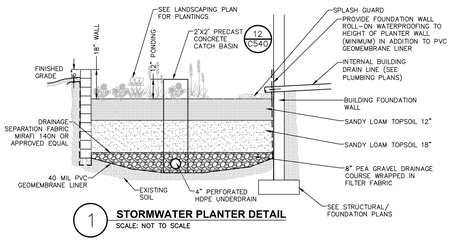
Beacon, New York 12508

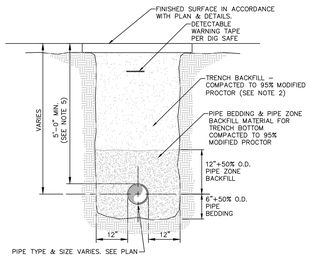
NO.	DATE	DESCRIPTION
2	04/30/24	REVISED PER CITY COMMENTS
1	3/26/24	REVISED PER CITY COMMENTS
Revisions		

PROJECT NUMBER: C281750.00
DRAWN BY: CJL
REVIEWED BY: --
ISSUED FOR: ISSUED FOR PLANNING BOARD APPROVAL
DATE: 02/14/24
DRAWING NAME: SITE DETAILS
DRAWING NUMBER: C530

4/29/2024 11:04:47 AM
S:\LABELLA\Legacy\Chazen\Projects\81700-81719\81750.00 Child Builders 8-24\81750.00_SITE3.dwg



1 **STORMWATER PLANTER DETAIL**
SCALE: NOT TO SCALE



PIPE TYPE & SIZE VARIES. SEE PLAN

NOTES:

1. PIPE BEDDING & PIPE ZONE BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) SAND OR A MIXTURE OF CRUSHED STONE AND GRAVEL, FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. BEDDING GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE DESIGNATION	% PASSING
3/4	100%
NO. 40	0–70%
NO. 200	0–10%

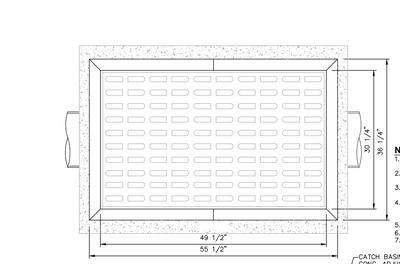
2. TRENCH BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) OR PROCESSED GRAVEL, OR EXCAVATED MATERIAL FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. TRENCH BACKFILL GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE DESIGNATION	% PASSING
4	100%
NO. 40	0–70%
NO. 200	0–10%

IN NON-TRAFFIC UNPAVED AREAS TRENCH BACKFILL CAN BE MATERIALS EXCAVATED FROM THE TRENCH AS APPROVED BY THE ENGINEER AND COMPACTED TO 90% MODIFIED PROCTOR.

3. INSTALL CONTINUOUS DETECTABLE MARKING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND PIPING. LOCATE TAPE 12" BELOW FINISHED GRADE, DIRECTLY OVER PIPING, EXCEPT 6" BELOW SUBGRADE UNDER PAVEMENTS & SLAB.
4. TRENCHING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS.
5. 5'–0" MIN COVER SHALL BE APPLIED TO WATER MAIN OR SANITARY SEWER FORCE MAINS ONLY.

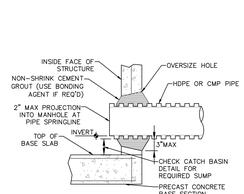
7 **PIPE TRENCH DETAIL (TYPICAL)**
SCALE: NOT TO SCALE



NOTES:

1. CATCH BASIN SHALL BE PRECAST CONCRETE. DESIGNED FOR HS20–44 VEHICULAR LOADING AND 25% IMPACT.
2. FRAME AND COVER SHALL BE DESIGNED FOR HS20–44 VEHICULAR LOADING & 25% IMPACT.
3. CONCRETE CATCH BASIN CASTING CLEAR OPENING DIMENSION MUST MATCH FRAME AND GRATE CLEAR OPENING DIMENSION.
4. CATCH BASINS HAVING A DEPTH GREATER THAN 48" FROM FINISHED SURFACE TO THE TOP OF THE CONCRETE BASE SHALL BE PROVIDED WITH STEPS.
5. BACKFILL USING TRENCH BACKFILL, COMPACTED IN 6" LIFTS.
6. SUMPS FOR CATCH BASINS SHALL BE 12".
7. EJ GROUP GRATE & FRAME P№0075853A01 OR EQUIVALENT.

8 **PRECAST CONCRETE RECTANGULAR CATCH BASIN DETAIL**
SCALE: NOT TO SCALE



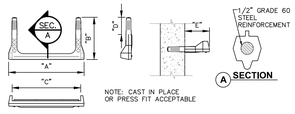
3 **PIPE CONNECTION TO DRAINAGE STRUCTURE- CMP OR HDPE CEMENT GROUT SEAL JOINT**
SCALE: NOT TO SCALE

ACCEPTABLE MANHOLE STEPS

MANUFACTURER	PATTERN NUMBER	A STEP WIDTH	B LEG LENGTH	C RUNG CLEAR	D EMBED-MENT	E RUNG CLEAR
M.A. INDUSTRIES INC*	PS2-PF	14 3/4	9 1/4	13 3/4	3 3/8	5 7/8
M.A. INDUSTRIES INC*	PS2-PFS	14 3/4	8 1/4	13 3/4	3 3/8	4 7/8

* OR EQUIVALENT

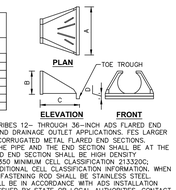
MH STEP DESIGN AND INSTALLATION SHALL COMPLY WITH ALL OSHA REGULATIONS



4 **COPOLYMER POLYPROPYLENE MH STEP**
SCALE: NOT TO SCALE

TYPICAL HDPE END SECTION

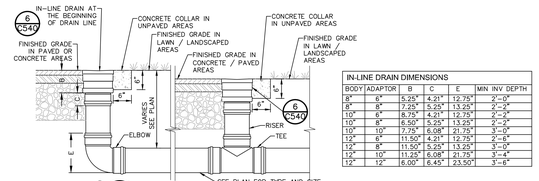
PIPE DIA.	END SECTION DIMENSIONS			
	A	B	C	D
12"	42"	14"	34"	6"
15"	42"	17"	34"	6"
18"	59"	21"	48"	6"
24"	59"	27"	48"	6"
30"	82"	34"	58"	6"
36"	82"	41"	58"	6"



NOTES:

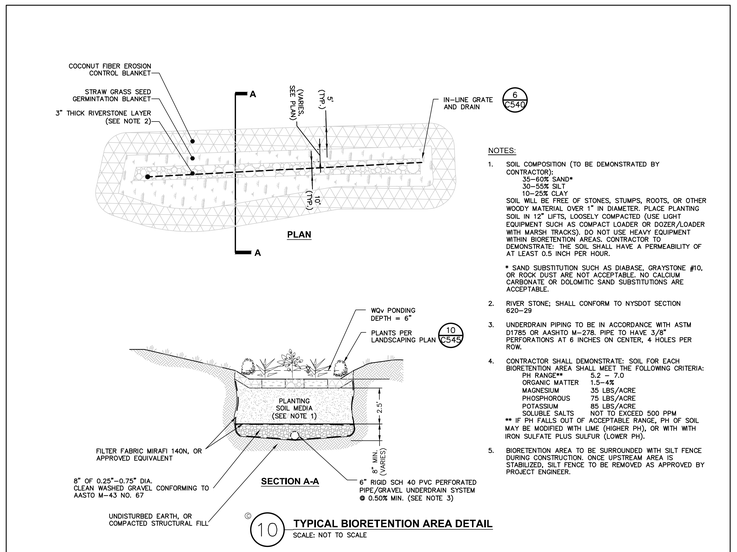
1. SCOPE: THIS SPECIFICATION DESCRIBES 12– THROUGH 36–INCH ADS FLARED END SECTIONS FOR USE IN CULVERT AND DRAINAGE OUTLET APPLICATIONS. FES LARGER THAN 36" SHALL USE CIRCULAR CORRUGATED METAL FLARED END SECTIONS.
2. REQUIREMENTS: THE INVERT OF THE PIPE AND THE END SECTION SHALL BE AT THE SAME ELEVATION. THE ADS FLARED END SECTION SHALL BE HIGH DENSITY POLYETHYLENE MEETING ASTM D3350 MINIMUM CELL CLASSIFICATION 213320C. CONTACT MANUFACTURER FOR ADDITIONAL CELL CLASSIFICATION INFORMATION. WHEN PROVIDED, THE METAL THREADED FASTENING ROD SHALL BE STAINLESS STEEL.
3. INSTALLATION: INSTALLATION SHALL BE IN ACCORDANCE WITH ADS INSTALLATION INSTRUCTIONS AND WITH THOSE ISSUED BY STATE OR LOCAL AUTHORITIES. CONTACT YOUR LOCAL ADS REPRESENTATIVE OR VISIT WWW.ADS-PIPE.COM FOR THE LATEST INSTALLATION INSTRUCTIONS.
4. PROVIDE TRASH RACK ONLY WHERE SPECIFIED ON SITE PLANS.

5 **TYPICAL END SECTION - HDPE**
SCALE: NOT TO SCALE



IN-LINE DRAIN DIMENSIONS					
BODY	ADAPTOR	B	C	E	MIN INV DEPTH
8"	6"	5.25"	4.21"	12.75"	2'–0"
8"	8"	7.25"	5.25"	13.25"	2'–2"
10"	6"	8.75"	4.21"	12.75"	2'–2"
10"	8"	8.50"	5.25"	13.25"	2'–2"
10"	10"	7.75"	6.08"	21.75"	3'–0"
12"	6"	11.50"	4.21"	12.75"	2'–6"
12"	8"	11.50"	5.25"	13.25"	3'–0"
12"	10"	11.25"	6.08"	21.75"	3'–4"
12"	12"	6.00"	6.45"	23.50"	3'–6"

9 **YARD IN-LINE DRAIN**
SCALE: NOT TO SCALE



NOTES:

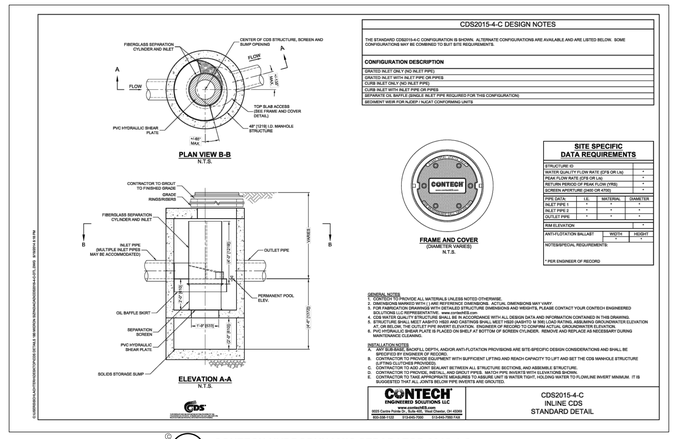
1. SOIL COMPOSITION (TO BE DEMONSTRATED BY CONTRACTOR):
   35–60% SAND*
   30–55% SILT
   10–25% CLAY
   SOIL WILL BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER. PLACE PLANTING SOIL IN 12" LIFTS, LOOSELY COMPACTED (USE LIGHT EQUIPMENT SUCH AS COMPACT LOADER OR DOZER/LOADER WITH MARSH TRACKS). DO NOT USE HEAVY EQUIPMENT WITHIN BIORETENTION AREAS. CONTRACTOR TO DEMONSTRATE: THE SOIL SHALL HAVE A PERMEABILITY OF AT LEAST 0.5 INCH PER HOUR.

   * SAND SUBSTITUTION SUCH AS DIABASE, GRAYSTONE #10, OR ROCK DUST ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE.
2. RIVER STONE; SHALL CONFORM TO NYSDOT SECTION 620–29
3. UNDERDRAIN PIPING TO BE IN ACCORDANCE WITH ASTM D1785 OR AASHTO M–278. PIPE TO HAVE 3/8" PERFORATIONS AT 6 INCHES ON CENTER, 4 HOLES PER ROW.
4. CONTRACTOR SHALL DEMONSTRATE: SOIL FOR EACH BIORETENTION AREA SHALL MEET THE FOLLOWING CRITERIA:

PH RANGE**	5.2 – 7.0
ORGANIC MATTER	1.5–4%
MAGNESIUM	35 LBS/ACRE
PHOSPHOROUS	75 LBS/ACRE
POTASSIUM	85 LBS/ACRE
SOLUBLE SALTS	NOT TO EXCEED 500 PPM

   ** IF PH FALLS OUT OF ACCEPTABLE RANGE, PH OF SOIL MAY BE MODIFIED WITH LIME (HIGHER PH), OR WITH WITH IRON SULFATE PLUS SULFUR (LOWER PH).
5. BIORETENTION AREA TO BE SURROUNDED WITH SILT FENCE DURING CONSTRUCTION. ONCE UPSTREAM AREA IS STABILIZED, SILT FENCE TO BE REMOVED AS APPROVED BY PROJECT ENGINEER.

10 **TYPICAL BIORETENTION AREA DETAIL**
SCALE: NOT TO SCALE



CDS2015-4-C DESIGN NOTES

THE STANDARD CDS2015-4-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION

DEFAULT INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
MOVEMENT WEIR FOR FLOATY / NUCAT CONFORMING UNITS

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (use 4 or 6)			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT	
	*	*	

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

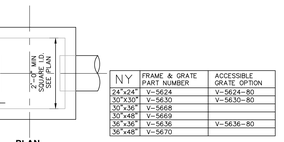
GENERAL NOTES
1. CONTRACTOR TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH * ARE SUBJECT TO MANUFACTURING. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.conteches.com
4. STRUCTURE SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET H20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. ALL REINFORCED CONCRETE SHALL BE PLACED ON SHELF AT BOTTOM OF BORDEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
A. ANTI-FLOTATION BALLAST DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE DETERMINED BY THE ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE LIFTING CLUTCHES PROVIDED.
C. CONTRACTOR TO PROVIDE FLEXIBLE SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO PROVIDE ADDITIONAL MEASURES TO ENSURE UNIT IS WATER TIGHT. HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED TO GROUT ALL PIPE INVERTS ARE GROUTED.

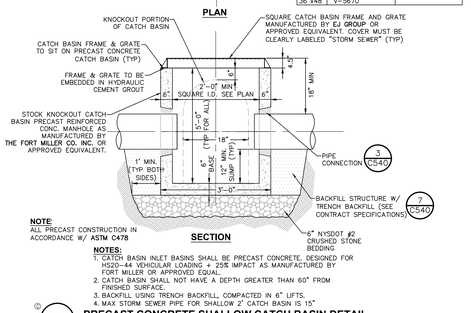
CONTECH ENGINEERED SOLUTIONS LLC
www.conteches.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS2015-4-C
INLINE CDS
STANDARD DETAIL

11 **CONTECH HYDRODYNAMIC SEPARATOR 2015-4-C**
SCALE: NOT TO SCALE



NY	FRAME & GRATE PART NUMBER	ACCESSIBLE GRATE OPTION
24"x24"	V–5624	V–5624–80
30"x30"	V–5630	V–5630–80
30"x36"	V–5668	
30"x48"	V–5669	
36"x36"	V–5636	V–5636–80
36"x48"	V–5670	



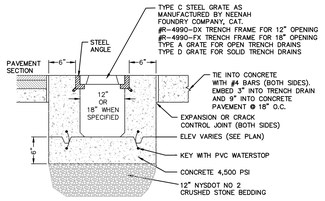
NOTE
ALL PRECAST CONSTRUCTION IN ACCORDANCE W/ ASTM C478

SECTION

NOTES:

1. CATCH BASIN INLET BASINS SHALL BE PRECAST CONCRETE, DESIGNED FOR HS20–44 VEHICULAR LOADING + 25% IMPACT AS MANUFACTURED BY FORT MILLER OR APPROVED EQUAL.
2. CATCH BASIN SHALL NOT HAVE A DEPTH GREATER THAN 60" FROM FINISHED SURFACE.
3. BACKFILL USING TRENCH BACKFILL, COMPACTED IN 6" LIFTS.
4. MAX STORM SEWER PIPE FOR SHALLOW 3' CATCH BASIN IS 15"

12 **PRECAST CONCRETE SHALLOW CATCH BASIN DETAIL**
SCALE: NOT TO SCALE



NOTES:

1. DEPTH OF TRENCH DRAINS VARY. SEE GRADING AND DRAINAGE PLAN FOR DIMENSIONS OF EACH INDIVIDUAL TRENCH DRAIN.
2. ALL GRATES SHALL BE "BICYCLE SAFETY" APPROVED.
3. PROVIDE HORIZONTAL OUTLET END PLATES AT DOWNSTREAM END OF EACH TRENCH DRAIN.

13 **TRENCH DRAIN DETAIL**
SCALE: NOT TO SCALE

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labellapc.com

NOT FOR CONSTRUCTION
EXP: ##/##/20## EXP: ##/##/20##

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

It is a violation of New York Education Law Art. 145 Sec. 7209 & Art. 147 Sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

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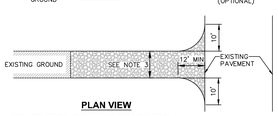
NO	DATE	DESCRIPTION
2	04/30/24	REVISED PER CITY COMMENTS
1	3/26/24	REVISED PER CITY COMMENTS
Revisions		

PROJECT NUMBER: CZ81750.00
DRAWN BY: CJL
REVIEWED BY: KGA
ISSUED FOR: ISSUED FOR PLANNING BOARD APPROVAL
DATE: 02/14/24
DRAWING NAME:

STORM SEWER DETAILS

DRAWING NUMBER:

C540

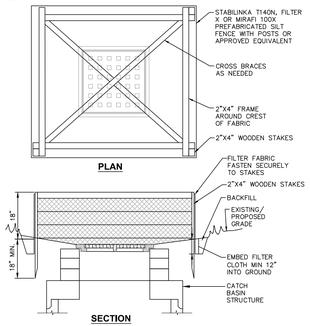


PLAN VIEW

CONSTRUCTION ENTRANCE SPECIFICATIONS:

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS – NOT LESS THAN SIX (6) INCHES.
3. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY FOUR (24) FEET IF SINGLE ENTRANCE TO SITE.
4. LENGTH – NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH WOULD APPLY).
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 ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

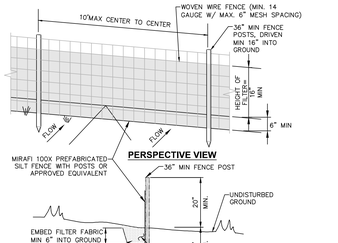
① **STABILIZED CONSTRUCTION ENTRANCE DETAIL**
SCALE: NOT TO SCALE



NOTES:

1. FILTER FABRIC SHALL HAVE AN EOS OF 40–85.
2. CUT FABRIC FROM CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED, OVERLAP TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2"x4" WOOD OR EQUIVALENT, WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE MINIMUM 18" DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2"x4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVERFLOW STABILITY.
7. MAXIMUM DRAINAGE AREA IS 1 ACRE.
8. INLET PROTECTION SHALL REMAIN IN–PLACE UNTIL SITE HAS BEEN STABILIZED.
9. ONCE BINDER COURSE IS PLACED INLET PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH DETAIL 6, SHEET SD3, "CATCH BASIN STONE AND BLOCK INLET PROTECTION."

OUT-OF PAVEMENT

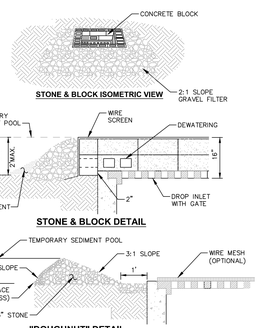


NOTES:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL "T" OR "L" TYPE OR HARDWOOD.
2. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAX MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIALS REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
5. MAXIMUM DRAINAGE AREA FOR OVERLAND FLOW TO A SILT FENCE SHALL NOT EXCEED 1/4 ACRE PER 100 FEET OF FENCE.
6. SILT FENCE SHALL BE USED WHERE EROSION COULD OCCUR IN THE FORM OF SHEET EROSION.
7. SILT FENCE SHALL NOT BE USED WHEN A CONCENTRATION OF WATER IS FLOWING TO THE BARRIER.
8. MAXIMUM ALLOWABLE SLOPE LENGTHS CONTRIBUTING RUN–OFF TO A SILT FENCE ARE:

SLOPE STEEPNESS	MAXIMUM SLOPE LENGTH(FT)
2:1	25
3:1	50
4:1	75
5:1 OR FLATTER	100

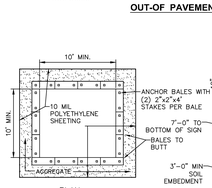
② **SILT FENCE INSTALLATION DETAIL**
SCALE: NOT TO SCALE



CONSTRUCTION SPECIFICATIONS:

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.
5. MAXIMUM DRAINAGE AREA IS 1 ACRE.

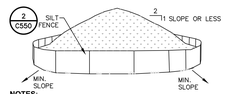
IN PAVEMENT



NOTES:

1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL. THIS INCLUDES REPLACEMENT OF THE 10 MIL POLYETHYLENE SHEETING.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY, REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

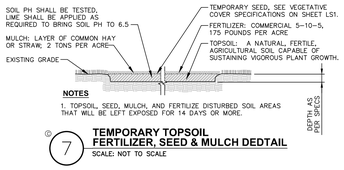
④ **CONCRETE WASHOUT AREA DETAIL**
SCALE: NOT TO SCALE



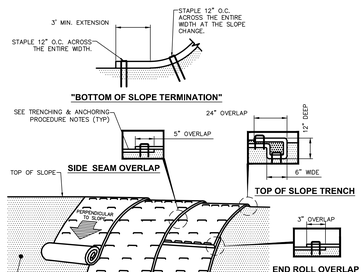
NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1V:2H.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.

⑤ **TEMPORARY SOIL STOCKPILE DETAIL**
SCALE: NOT TO SCALE



⑦ **TEMPORARY TOPSOIL FERTILIZER, SEED & MULCH DEDTAIL**
SCALE: NOT TO SCALE



NOTES:

1. MINIMUM DEPTH OF SWALE SHALL BE 12".
2. SWALE SHALL BE AT LEAST 6 FEET WIDE AT TOP.
3. SWALE SHALL BE SEEDED AND MULCHED WITH FAST GERMINATING RYE 15 LBS. TO 25 LBS. PER 1,000 SQ. FT.
4. SLOPE OF SWALE SHALL BE MINIMUM 2%

⑥ **TEMPORARY GRASS LINED DIVERSION SWALE DETAIL**
SCALE: NOT TO SCALE

SPDES GENERAL PERMIT GP-0-15-002 COMPLIANCE NOTES:

HAVE BEEN SUBMITTED AS A SET. THESE ENGINEERING DRAWINGS ARE CONSIDERED AN INTEGRAL PART OF THE SWPPP, THEREFORE THE PLAN SET IS NOT CONSIDERED COMPLETE WITHOUT THE SWPPP.

1. THIS PROJECT HAS REQUESTED WRITTEN APPROVAL FROM **(INSERT NYSDEC OR MUNICIPALITY OF MS4)** ALLOWING THE DISTURBANCE OF MORE THAN FIVE (5) ACRES OF LAND AT ANY ONE TIME. CONTRACTOR SHALL NOT DISTURB MORE THAN FIVE (5) ACRES UNTIL SUCH TIME THAT THE WAIVER IS GRANTED AND WRITTEN AUTHORIZATION IS RECEIVED FROM NYSDEC.

CONSTRUCTION SEQUENCING NOTES:

1. PRIOR TO COMMENCING ANY CLEARING, GRUBBING, EARTHWORK ACTIVITIES, ETC.AT THE SITE, THE CONTRACTOR SHALL FLAG THE WORK LIMITS AND SHALL INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (I.E. SILT FENCES, TREE PROTECTION/BARRIER FENCES, STABILIZED CONSTRUCTION ENTRANCES, STORM DRAIN SEDIMENT FILTERS, DRAINAGE DITCH SEDIMENT FILTERS, ETC.) INDICATED ON THE PROJECT DRAWINGS. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THEIR TRIBUTARY AREAS.
2. THE CONTRACTOR SHALL CLEAR AND GRUB THE AREA OF THE STORMWATER MANAGEMENT FACILITIES, THIS AREA SHALL NOT EXCEED FIVE (5) ACRES IN EXTENT AT ANY TIME WITHOUT TEMPORARY STABILIZATION.
3. PRIOR TO COMMENCING CLEARING, GRUBBING AND/OR EARTHWORK ACTIVITIES IN ANY OTHER AREA OF THE SITE, THE CONTRACTOR SHALL INSTALL INLET AND OUTLET PROTECTION MEASURES (RIPRAP OVERFLOW WEIR(S), CULVERT INLET/OUTLET PROTECTION, ETC.) AND SHALL STABILIZE THE AREAS DISTURBED DURING THE CONSTRUCTION OF THE SEDIMENT BASIN.
4. THE CONTRACTOR SHALL INSTALL TEMPORARY DIVERSION MEASURES WITH ASSOCIATED STABILIZATION MEASURES (I.E., VEGETATIVE COVER, DRAINAGE DITCH SEDIMENT FILTERS, STORM DRAIN SEDIMENT FILTERS, ETC.)TO ASSURE THAT STORMWATER RUNOFF IS CONVEYED TO THE TEMPORARY SEDIMENT BASIN.
5. TEMPORARY DIVERSION MEASURES SHALL BE LOCATED IN A MANNER THAT WILL ASSURE THAT ANY AREA TRIBUTARY TO EACH DIVERSION DOES NOT EXCEED FIVE (5) ACRES. THESE TEMPORARY DIVERSION MEASURES SHALL BE INSPECTED DAILY AND REPAIRED/STABILIZED AS NECESSARY TO MINIMIZE EROSION.
6. THE CONTRACTOR SHALL COMMENCE SITE CONSTRUCTION ACTIVITIES INCLUDING CLEARING & GRADING OF THE PROPOSED AREA OF DISTURBANCE AS REQUIRED.
7. INSTALL PROTECTIVE MEASURES AT THE LOCATIONS OF ALL GRATE INLETS, CURB INLETS, AND AT THE ENDS OF ALL EXPOSED STORM SEWER PIPES.
8. CONSTRUCT ALL UTILITIES, CURB AND GUTTER, GUTTER INLETS, AREA INLETS, AND STORM SEWER MANHOLES, AS SHOWN ON THE PLANS. INLET PROTECTION MAY BE REMOVED TEMPORARILY FOR THIS CONSTRUCTION. PLACE REQUIRED RIP–RAP AT LOCATIONS SHOWN ON THE PLANS.
9. FINALIZE PAVEMENT SUB–GRADE PREPARATION.
10. REMOVE PROTECTIVE MEASURES AROUND INLETS AND MANHOLES NO MORE THAN 24 HOURS PRIOR TO PLACING STABILIZED BASE COURSE.
11. INSTALL SUB–BASE MATERIAL AS REQUIRED FOR PAVEMENT.
12. PRIOR TO FINALIZING CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITY, ALL CATCH BASINS AND DRAINAGE LINES SHALL BE CLEANED OF ALL SILT AND SEDIMENT.
13. UPON COMPLETION OF SITE CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL FINALIZE CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITY. CONTRACTOR SHALL FINISH GRADE THE FORBAY(S), AQUATIC BENCHES, AND WET POOL(S) AND STABILIZE AS INDICATED IN THE PROJECT DRAWINGS.
14. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AND IMMEDIATELY ESTABLISH PERMANENT VEGETATION ON THE AREAS DISTURBED DURING THEIR REMOVAL.

EROSION AND SEDIMENT CONTROL MEASURES:

1. DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
2. AS MUCH AS IS PRACTICAL, EXISTING VEGETATION SHALL BE PRESERVED, FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES IN ANY PORTION OF THE SITE, PERMANENT VEGETATION SHALL BE ESTABLISHED ON ALL EXPOSED SOILS
3. SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISRUPTION.
4. PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL POINTS OF ENTRY ONTO THE PROJECT SITE.

MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES:

PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. 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 & AFTER EVERY RAIN EVENT. CHECK FOR MUD, SEDIMENT BUILD–UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL, WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF–SITE BY VEHICLES. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE.

SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP–SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO 1/3 THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.

SOIL STOCKPILE:
INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE OR HAY BALE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP–SLOPE FACE OF THE SEDIMENT CONTROL BARRIER BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO 1/3 THE HEIGHT OF THE SEDIMENT CONTROL BARRIER. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE, OR IN ANYWAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCK PILE. REMOVE THE SEDIMENT CONTROL BARRIER WHEN THE SOIL STOCKPILE HAS BEEN REMOVED.

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

EROSION CONTROL BLANKET:
INSPECT THE BLANKET EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. REPLACE WIRE STAPLES AS REQUIRED. REPAIR AND RESEED WHERE CRACKS APPEAR. ANY DAMAGED VEGETATION IS EVIDENT, WHEN DAMAGED BEYOND REPAIR OR NO LONGER FUNCTIONING, THE BLANKET SHALL BE REPLACED.

TEMPORARY SWALE:
INSPECT ALL EARTH DIKES EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. ALL AREAS DAMAGED BY EROSION SHALL BE REPAIRED IMMEDIATELY.

STORM DRAIN INLET PROTECTION:
INSPECT ALL STORM DRAIN INLET PROTECTION DEVICES EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. MAKE REPAIRS AS NEEDED, REMOVE SEDIMENT FROM THE POOL AREA AS NECESSARY.

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 CONSTRUCT NEW PITS AS NEEDED.

SNOW AND ICE CONTROL:
PARKING LOTS, ROADWAYS, AND DRIVEWAYS ADJACENT TO WATER QUALITY FILTERS SHALL NOT BE SANDED DURING SNOW EVENTS DUE TO HIGH POTENTIAL FOR CLOGGING FROM SAND IN SURFACE WATER RUNOFF. USE SALT ONLY FOR SNOW AND ICE CONTROL.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IN STRICT COMPLIANCE WITH "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", NOVEMBER 2016.
2. EXCESS SOIL TO BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. INSTALL SILT FENCE AROUND SOIL STOCKPILES.
3. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, SUSPENDED, OR INCOMPLETE AND WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. (SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER). AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE. (SEE SPECIFICATIONS FOR PERMANENT VEGETATIVE COVER). SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER WORK IS COMPLETE, FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.
4. SEEDED AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST BY SPRINKLING EXPOSED SOIL AREAS PERIODICALLY WITH WATER AS REQUIRED. THE CONTRACTOR IS TO SUPPLY ALL EQUIPMENT AND WATER.
7. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

TOPSOIL SPECIFICATIONS:

1. EXISTING EXCESS TOPSOIL SHALL BE REMOVED AND STORED IN TOPSOIL STOCKPILES. SUFFICIENTLY REMOVED FROM OTHER EXCAVATION OR DISTURBANCE TO AVOID MIXING. SILT FENCE SHALL BE INSTALLED AROUND TOPSOIL STOCKPILE AREAS.

SITE PREPARATION:
1. COMPLETE ROUGH GRADING AND FINAL GRADE, ALLOWING FOR DEPTH OF TOPSOIL TO BE ADDED.
2. SCARIFY ALL COMPACT, SLOWLY PERMEABLE, MEDIUM AND FINE TEXTURED SUBSOIL AREAS. SCARIFY AT APPROXIMATELY RIGHT ANGLES TO THE SLOPE DIRECTION IN SOIL AREAS THAT ARE STEEPER THAN 5%
3. REMOVE REFUSE, WOODY PLANT PARTS, STONES OVER 3 INCHES IN DIAMETER, AND OTHER LITTER.

TOPSOIL MATERIALS:
1. NEW TOPSOIL SHALL BE BETTER THAN OR EQUAL TO THE QUALITY OF THE EXISTING ADJACENT TOPSOIL. IT SHALL MEET THE FOLLOWING CRITERIA:
   A. ORIGINAL LOAM TOPSOIL, WELL DRAINED HOMOGENEOUS TEXTURE AND OF UNIFORM GRADE, WITHOUT THE ADMIXTURE OF SUBSOIL MATERIAL AND FREE OF DENSE MATERIAL, HARDPAN, CLAY, STONES, SOD OR OTHER OBJECTIONABLE MATERIAL.
   B. CONTAINING NOT LESS THAN 5% NOR MORE THAN 20% ORGANIC MATTER IN THAT PORTION OF A SAMPLING PASSING A 1/4" SIEVE, WHEN DETERMINED BY THE WET COMBUSTION METHOD ON A SAMPLE DRIED AT 105°C.
   C. CONTAINING A PH VALUE WITHIN THE RANGE OF 6.5 TO 7.5 ON THAT PORTION OF THE SAMPLE WHICH PASSES A 1/4" SIEVE.
   D. CONTAINING THE FOLLOWING WASHED GRADATIONS:

SIEVE DESIGNATION	% PASSING
1"	100
1/4"	97–100
NO 200	20–60

APPLICATION AND GRADING:
1. TOPSOIL SHALL BE DISTRIBUTED TO A UNIFORM DEPTH OF 4" OVER THE AREA. IT SHALL NOT BE PLACED WHEN IT IS IMPROPERLY FROZEN, MUDDY, OR ON FROZEN SLOPES OR OVER ICE, SNOW, OR STANDING WATER.
2. TOPSOIL PLACED ON GRADED OR SLOPES STEEPER THAN 5% SHALL BE PROMPTLY FERTILIZED, SEEDED, MULCHED AND STABILIZED BY "TRACKING" WITH SUITABLE EQUIPMENT.

VEGETATIVE COVER SPECIFICATIONS:

TEMPORARY VEGETATIVE COVER (DURING CONSTRUCTION):
1. SITE PREPARATION
   (SAME AS PERMANENT VEGETATIVE COVER)
2. SEED MIX: (APPLY AT RATE OF 3 TO 4 LBS PER 1000 SF)

AMOUNT BY:		MINIMUM %	
WEIGHT	SPECIES OR VARIETY	PURITY	GERMINATION
100%	ANNUAL RYEGRASS	98%	90%

3. SEEDING
   (SAME AS PERMANENT VEGETATIVE COVER)

PERMANENT VEGETATIVE COVER (AFTER CONSTRUCTION):
1. SITE PREPARATION
   A. BRING AREA TO BE SEEDED TO REQUIRED GRADE. A MINIMUM OF 4" OF TOPSOIL IS REQUIRED.
   B. PREPARE SEEDBED BY LOOSENING SOIL TO A DEPTH OF 4 INCHES.
   C. REMOVE ALL STONES OVER 1 INCH IN DIAMETER, STICKS AND FOREIGN MATTER FROM THE SURFACE.
   D. LIME TO PH OF 6.5.
   E. FERTILIZER: USE 5–10–5 (NPK) OR EQUIVALENT. APPLY AT RATE OF 4 LBS/1000 SF.
   F. INCORPORATE LIME AND FERTILIZER IN THE TOP 4 INCHES OF TOPSOIL.
   G. SMOOTH AND FIRM THE SEEDBED.
2. SEED MIXTURE FOR USE ON LAWN AREAS, LOW–MAINTENANCE AREAS AND BIORETENTION AREAS: PROVIDE FRESH, CLEAN, NEW–CROP SEED MIXED IN THE PROPORTIONS SPECIFIED FOR SPECIES AND VARIETY, AND CONFORMING TO FEDERAL AND STATE STANDARDS.
   A. LAWN SEED MIX: (APPLY AT RATE OF 6 TO 8 LBS PER 1000 SF WITH COVER CROP OF TEMPORARY SEED AT 2 TO 3 LBS PER 1000 SF)

ECO–LAWN*. AMOUNT BY: WEIGHT	SPECIES OR VARIETY	MINIMUM % PURITY	% GERMINATION
20%	SR5250 CREEPING RED FESCUE	95%	80%
20%	SR5150 CHEWINGS FESCUE	95%	80%
20%	SHORELINE SLENDER CREEPING RED FESCUE	95%	85%
20%	QUATRO SHEEP FESCUE	95%	85%
20%	SR3210 BLUE FESCUE	95%	80%
100%			

   *STANDARD OF QUALITY: ECO–LAWN SEED MIX MANUFACTURED BY WILDFLOWER FARM COLDWATER, ON, CA OR APPROVED EQUAL.
   B. BIORETENTION AREA SEED MIX: NATIVE DETENTION AREA MIX – ERNMX–183, MANUFACTURED BY ERNST SEEDS, MEADVILLE, PA OR APPROVED EQUAL.
      i. APPLICATION RATE: 0.5 LBS PER 1000 SF WITH COVER CROP OF GRAIN RYE (FALL SEEDING) OR JAPANESE MILLET (SPRING–SUMMER SEEDING), SEEDING RATES AND METHOD PER MANUFACTURER'S DIRECTION.
3. SEEDING (LAWN AREAS):
   A. APPLY SEED UNIFORMLY BY CYCLONE SEEDER CULTI–PACKER OR HYDRO–SEEDER AT RATE INDICATED.
   B. ALL SEEDED AREAS SHALL BE PROTECTED FROM EROSION BY ONE OF THE FOLLOWING METHODS:
      i. A UNIFORM BLANKET OF STRAW APPLIED AT A RATE OF 2 TONS /ACRE MIN., TO BE APPLIED ONCE SEEDING IS COMPLETE.
      ii. WOOD FIBER CELLULOSE APPLIED WITH SEED MIX BY HYDROSEEDER AT RATE OF 2,000 LBS/ACRE.
   C. ALL SEEDED SLOPES 3:1 OR GREATER SHALL BE PROTECTED FROM EROSION WITH JUTE MESH OR APPROVED EQUAL.
   D. IRRIGATE TO FULLY SATURATE SOIL LAYER, BUT NOT TO DISLODGE PLANTING SOIL.
   E. UNLESS OTHERWISE DIRECTED IN WRITING, SEED FROM MARCH 15TH TO JUNE 15TH, AND FROM AUGUST 15TH TO OCTOBER 15TH.

COMPACTION REQUIREMENTS

LOCATION	COMPACTION	TESTING FREQUENCY
PIPE TRENCH BACKFILL (IN PAVED AREAS)	95% ASTM D1557	1 SERIES OF TESTS FOR EACH 150 FT OR LESS OF TRENCH LENGTH. SERIES INCLUDE 3 COMPACTION TESTS SPREAD EVENLY ALONG TRENCH PROFILE.
PIPE TRENCH BACKFILL (IN UNPAVED AREAS)	90% ASTM D1557	1 SERIES OF TESTS FOR EACH 150 LF OR LESS OF TRENCH LENGTH. SERIES INCLUDE 3 COMPACTION TESTS

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

KATHY HOCHUL
Governor

MARIE THERESE DOMINGUEZ
Commissioner

LANCE MacMILLAN, P.E.
Regional Director

April 12, 2024

M. Perez, Planning Board Secretary
City of Beacon Planning Board
One Municipal Plaza, Suite 4
Beacon, NY 12508

Re: SEQR # 19-012
19-012 248 Tioronda Avenue
City of Beacon
NY, 12508

To Whom it May Concern:

The New York State Department of Transportation (NYSDOT) is in receipt of the Site Plan dated March 26, 2024, along with Notice of Intent to serve as Lead Agency from the City of Beacon planning Board. The NYSDOT consents to the City of Beacon planning Board assuming the role of Lead Agency for review of the referenced proposal.

Please submit subsequent plans and documents for this project as well as those for any future development proposals in DIGITAL (.pdf) FORMAT –CD, DVD or Thumb drive. Documents can also be sent by email to Jason.Brenner@dot.ny.gov.

Very Truly Yours,

David A. Groucher
Construction Specialist 1
New York State Department of Transportation, Hudson Valley
Traffic & Safety Group, R8
4 Burnett Blvd, Poughkeepsie NY 12603
(845) 431-5897 | david.groucher@dot.ny.gov | www.dot.ny.gov

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

City of Beacon
Planning Board
One Municipal Plaza, Suite 4
Beacon, NY 12508
Phone: 845-838-5002

SEQR
19-012

DESIGNATION OF LEAD AGENCY RESPONSE FORM

To: City of Beacon Planning Board **Date:** 4/12/2024

From (agency name): New York State Dept of Transportation

Subject: **Designation of Lead Agency in Accordance with SEQRA**
248 Tioronda Avenue, Beacon, NY 12508, Tax Grid No. 6054-45-012574

The City of Beacon Planning Board intends to continue to serve as the Lead Agency for the environmental review of the proposed action consisting of a proposal to amend a previously approved Site Plan with two multi-family buildings with a total of 64 units and a separate office building with 23,124 square feet to modify the location of the proposed Greenway Trail.

The above identified agency: *(please check one below)*

☑ Has no objection to the Planning Board serving as Lead Agency.

☐ Takes no position with respect to the Planning Board serving as Lead Agency.

☐ Objects to the Planning Board serving as Lead Agency.

David Groucher
Printed Name

Signature

CS1
Title

Mercedes Perez, Planning Board Secretary: **mperez@beaconny.gov**

LANC & TULLY
Engineering and Surveying, P.C.

May 8, 2024

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

RE: Beacon 248 Development
Amended Site Plan
City of Beacon
Tax Map Nos. 6054-45-012574

Dear Mr. Gunn:

Our office has reviewed the following documents as submitted for the 248 Tioronda Avenue Development amended site plan:

- Response correspondence dated April 30, 2024, as prepared by LaBella.
- Short Environmental Assessment Form dated April 30, 2024.
- Plans titled "Amended Site Plan – 248 Tioronda Ave.", with the latest revision date of April 30, 2024, and consisting of Sheets G001, C101, C130, C140, C150, C160, C161, C162, C180, C190, C530, C540, and C550, as prepared by Labella Associates.

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

General Comments:

1. The plans note in the upper right-hand corner that they are "Not for Construction". This note shall be removed prior to signing of the amended plans by the Planning Board Chair.

2. As this project previously received approval from the Dutchess County Department of Health (DCDOH) in November of 2020 for the water main extension and sewage collection system, the applicant will need to resubmit for the proposed changes to the sewer collection system. As the applicant previously made submission to the DCDOH, the applicant should provide the Planning Board status update as to review and approval of the project by the DCDOH.

3. As previously stated, based upon the re-alignment of the Greenway Trail in several areas, new easement agreements and descriptions will be required. ***The Applicant is requesting this be made a condition of approval.***

This completes our review at this time. Further comments may be forth coming based upon future plan submissions to the City. **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: Jennifer Gray, Esq.
Natalie Quinn, Planner
Bruce Flower, Building Inspector

SUE SERINO
COUNTY EXECUTIVE

LIVIA SANTIAGO-ROSADO, MD, FACEP
COMMISSIONER

ANTHONY J. RUGGIERO, MPA
ASSISTANT COMMISSIONER

DUTCHESS COUNTY GOVERNMENT
DEPARTMENT OF BEHAVIORAL & COMMUNITY HEALTH

May 7, 2024

RECEIVED
MAY 14 2024
By MP

City of Beacon Planning Board
John Gunn, Chair
One Municipal Plaza, Suite 1
Beacon, NY 12508

Re: Designation of Lead Agency in Accordance with SEQRA
248 Tioronda Avenue
Beacon, NY 12508
Tax ID: 6054-45-012574

Dear Mr. Gunn,

This department has received a Notice of SEQR Lead Agency Declaration (dated April 5, 2024; received April 10, 2024),

1. This Department has no objection to the City of Beacon Planning Board serving as the lead agent for SEQR, and requests that the undersigned continue to be notified of SEQR determinations, proceedings and hearings in this matter.
2. Detailed plans and specifications will have to be submitted to this Department by a New York State licensed professional for approval of proposed water supply and sewage disposal system arrangements. Reference is made to the Dutchess County Sanitary Code Articles 5, 16, and 19.

Should you find that we can be of assistance please contact us at (845) 486-3404.

Sincerely,

William 'Jay' Gieseler, PE
Senior Public Health Engineer
Environmental Health Services

cc: file 120432

Agency Use Only [If applicable]

Project: 248 Tioronda Ave - 2d Amended Site Pl

Date: 5-14-24

Short Environmental Assessment Form
Part 2 - Impact Assessment

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

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

PRINT FORM

Agency Use Only [If applicable]

Project: 248 Tioronda Ave

Date: 5-14-24

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.

Please 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	5-14-24
Name of Lead Agency	Date
John Gunn	Chairperson
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

City of Beacon Planning Board
248 Tioronda Avenue
May 14, 2024

ATTACHMENT TO
SECOND AMENDED NEGATIVE DECLARATION
REASONS SUPPORTING DETERMINATION

APPLICATION FOR SECOND AMENDED SITE PLAN APPROVAL
FOR 248 TIORONDA AVENUE

Parcel ID No. 6054-45-012574

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 narrative 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 the 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 Applicant is proposing several modifications to the approved Amended Site Plan. The modifications to the Amended Site Plan are analyzed herein to determine whether such modifications will result in a significant adverse environmental impact as compared to that which was previously studied. The proposed modifications are as follows:

- The Greenway Trail is proposed to eliminate the previously approved stairs and a portion of the trail that was proposed to be within the limits of the floodplain. Revisions to the Greenway Trail also account for an extension of the northern section of the trail along the Fishkill Creek in addition to a new stub of the trail proposed in the vicinity of Building 100.
- The Greenway Trail is proposed to be located further from Building 100 and closer to Fishkill Creek. This is proposed to be accomplished by decreasing the size of Bioretention Area 1 and treating the rooftop area for Building 100 in two (2) newly proposed stormwater planter areas.
- Revisions to the Erosion and Sediment Control Plan to provide live cuttings along the Fishkill Creek to improve vegetated stabilization along Fishkill Creek.
- Revisions to plantings and landscaping to improve vegetated stabilization along Fishkill Creek.
- Replacement of light poles with low-height lighted bollards along the frontage of Buildings 100, 200, and 300 to reduce potential light glare.

- Relocation of the refuse enclosure for Building 100 closer to the building for both convenience and to free up space in the previous location for designated Greenway Trail parking.
- Proposed addition of 10 EV charging stations, including an ADA-accessible charging station to Building 100 as well as additional EV stations within the parking garage of Buildings 200 & 300.
- Realignment of the sewer collection system to accommodate improvements to the interior plumbing of Buildings 200 & 300.

Collectively, these proposed changes are anticipated to result in an additional disturbance to approximately 0.26 acres of land beyond that which was previously reviewed and approved, and a reduction of approximately 0.14 acres of impervious surfaces.

Site History:

On June 11, 2019, the Planning Board adopted a SEQRA Negative Declaration (the "2019 SEQRA Negative Declaration"). Thereafter, on November 18, 2019, the City Council adopted a Fishkill Creek Development Concept Plan Approval and on April 14, 2020 the Planning Board adopted Subdivision (lot merger)[1] and Site Plan approval. Thereafter, the Applicant submitted an application for amended Site Plan approval which was approved on November 9, 2021, as well as the Planning Board's granting of an LWRP Consistency Determination. In connection with the 2021 Amended Site Plan approval the Planning Board adopted an Amended SEQRA Negative Determination on September 14, 2021 (the "2021 SEQRA Negative Declaration"). [2]

The previously approved site plan provided for redevelopment of the 9.18-acre project site with a 64-unit multifamily residential development and a 25,400 s.f. office building, with associated parking. The multifamily residential development is proposed in two buildings with a

[1] As part of this approval, former Beacon Tax Map Parcel No. 5954-16-993482 was merged into this parcel, *See* Dutchess County Map No. 10970A, filed on April 14, 2021.

[2] Additional history concerning the redevelopment of the Property is as follows: Approvals were previously granted by the City for a project on the Site consisting of a 100-unit multifamily residential development with four (4) buildings, a 1,200 s.f. clubhouse, swimming pool and associated parking ("Prior Project"). The Prior Project also included a Greenway Trail and an access easement was granted by the MTA for the Tioronda Avenue access drive. The Planning Board served as Lead Agency for the environmental review of the Prior Project and a Negative Declaration was adopted on April 8, 2014 along with a determination of the Prior Project's consistency with the Local Waterfront Revitalization Program (LWRP). The Prior Project then received Concept Plan and Special Permit approvals from the City Council on August 4, 2014, followed by Subdivision (lot consolidation) and Site Plan approvals from the Planning Board on January 13, 2015. The approvals were extended from time to time by the City Council and the Planning Board. The City Council adopted zoning amendments in 2017 which resulted in a reduction of the number of dwelling units that would be permitted for the Site. The amendments also eliminated the requirement for a Special Permit in the Fishkill Creek Development District. Following the adoption of the 2017 amendments, the 100-unit multifamily residential development was no longer a permitted use of the Site.

configuration having a total of 29 one-bedroom units, 28 two-bedroom units, 6 three-unit bedrooms, and 1 four-bedroom unit (107 bedrooms). This reconfiguration of bedrooms results in 64 total units, as previously approved.

The property is identified on the City of Beacon Tax Map as **Parcel No. 6054-45-012574** and located within the Fishkill Creek Development (FCD) Zoning District (the "Property" or "Site"). Access to the development is provided from Tioronda Avenue across the Metropolitan Transit Authority (MTA) property via an easement.

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

Summary of Rationale for Negative Declaration: The Proposed Action, as amended, will not result in any significant adverse environmental impacts.

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 proposed amendment to the Site Plan will not have a significant adverse environmental impact as a result of any physical change to the project site.

Under the second proposed amendment to the Site Plan, the disturbance area is proposed to increase by 0.26 acres from 6.49 acres to 6.75 acres. Such disturbance area continues to be almost entirely within the areas previously disturbed by the former Tuck Tape Industries development area. Additionally, the proposed Second Amended Site Plan will reduce impervious surfaces by approximately 0.14 acres.

Therefore, no significant adverse environmental impacts are expected as a result of any physical change to the project site as compared to the previous approval which was the subject of the 2021 Amended SEQRA Negative Declaration.

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

There continue to be 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.

Stormwater: The Second Amended Site Plan provides a reduction of approximately 0.14 acres of impervious surface coverage. While there is a proposed reduction to the Bioretention Area 1, there are two (2) newly proposed stormwater planter areas for the rooftop area at Building 100. These changes have been accounted for in the revised Stormwater Pollution Prevention

Plan (SWPPP) which has been found acceptable by the City Engineer. Therefore, the Second Amended Site Plan is not expected to result in any significant adverse impacts with respect to stormwater.

Water resources: The Site is contiguous to the Fishkill Creek, a NYSDEC stream identified as H-95, a tributary of the Hudson River. This stream is classified as a Class C stream in the vicinity of the Site; therefore, it is not regulated by NYSDEC as a protected water, as confirmed by letter from NYSDEC dated March 21, 2019. The Greenway Trail improvements which are proposed to be revised pursuant to the Second Amended Site Plan are in close proximity to the Fishkill Creek but have been designed in a manner to avoid any significant adverse impacts to the creek both during and after construction.

Groundwater: The Project will continue to be connected to the existing public water distribution and sanitary sewer systems. No change is proposed in the Second Amended Site Plan that would have a significant adverse impact on groundwater resources.

Water & Wastewater: The Applicant has proposed a realignment of the sewer collection system to better accommodate improvements to the interior plumbing of Buildings 200 and 300. The Applicant submitted such plans to the Dutchess County Department of Behavior and Community Health. However, there have been no changes in the water/wastewater demand since the 2021 Amended SEQRA Negative Determination. Capacity for both remains and therefore there will be no significant adverse environmental impacts as a result of the Second Amended Site Plan.

For the reasons set herein, and in the 2019 SEQRA Negative Declaration and the 2021 Amended SEQRA Negative Determination, the Project will not result in a significant adverse impact on 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 National Flood Insurance Program Flood Insurance Rate Map (FIRM), City of Beacon, New York, Community Panel 360217, a portion of the Site along the Fishkill Creek is located within Flood Zone AE, which is described as an area of the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual (100-year) chance flood can be carried without substantial increases in flood heights. No building construction is proposed within Zone AE.

The proposed amendments eliminate the previously proposed stairs and a portion of the Greenway Trail within the limits of the floodplain. As a result of the realignment of the Greenway Trail, flooding concerns are expected to be reduced. Additionally, revisions to the Erosion and Sediment Control Plan along Fishkill Creek have been made to improve vegetated stabilization along Fishkill Creek.

For the reasons set herein, and the 2019 SEQRA Negative Declaration and 2021 Amended SEQRA Negative Determination, the Project will not have a significant adverse impact on or alter drainage flows or patterns, or on surface water runoff.

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

Potential impacts on air quality remain unchanged since the 2021 Amended SEQRA Negative Determination.

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

The Second Amended Site Plan proposes to substitute certain previously approved non-native plantings with native species. The Second Amended Site Plan does not result in any changes to potential impacts to endangered, threatened or rare species.

For the reasons set forth herein, and in the 2019 SEQRA Negative Declaration and the 2021 Amended SEQRA Negative Determination, no significant adverse impacts to endangered, threatened or rare species are anticipated as a result of the Proposed Action.

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

There continues to be 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.

Proposed amendments will not result in the obstruction, elimination or significant screening of one or more officially designated scenic views. The Proposed Action is not currently within any designated viewsheds.

For the reasons set forth herein, and in the 2019 SEQRA Negative Declaration and the 2021 Amended SEQRA Negative Determination, no significant adverse impacts to aesthetic resources are anticipated as a result of the Proposed Action.

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

The impacts to Historic and Archeological Resources examined by the Planning Board during its review of the proposed Action when it made its 2019 SEQRA Negative Declaration and the 2021 Amended SEQRA Negative Determination are unaffected by this Proposed Action.

For the reasons set forth herein and in the 2019 SEQRA Negative Declaration and the 2021 Amended SEQRA Negative Determination, no significant adverse impacts on historic or archaeological resources are anticipated to result from the Second Amended Site Plan.

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

No changes are proposed which will impact open space or recreation. For the reasons set forth herein and in the 2019 SEQRA Negative Declaration and the 2021 Amended SEQRA Negative Determination, no significant adverse impacts on open space or recreation are anticipated to result from the Second Amended Site Plan.

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 Second Amended Site Plan does not propose any changes that would alter the number of vehicle trips during the peak hours. For the reasons set forth herein and in the 2019 SEQRA Negative Declaration and the 2021 amended SEQRA Negative Declaration, there will be no significant adverse impacts on transportation as a result of the Second Amended Site Plan.

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, including the demand from the additional 10 EV charging stations to be located near Building 100. The Proposed Action does not require a new, or an upgrade to any existing substation.

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 previously approved light poles are proposed to be replaced by low-height lighted bollards along the frontage of Buildings 100, 200 and 300 to reduce potential light glare in the western-facing windows of the ground and 2nd floor units. This change is expected to reduce lighting impacts. No other changes to lighting are proposed from what was previously reviewed and approved. No changes are proposed from what was previously reviewed and approved with respect to odors or noise.

For the reasons set forth herein and in the 2019 SEQRA Negative Declaration and the 2021 Amended SEQRA Negative Declaration, there will be no 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.

All prior conditions related to prior site contamination remain in effect and the Second Amended Site Plan proposes no changes that would create new or different impacts on human health. For the reasons set forth herein and in the 2019 SEQRA Negative Declaration and the 2021 Amended SEQRA Negative Declaration, there will be no significant adverse environmental impact on human health as a result of the Second Amended Site Plan.

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

The Second Amended Site Plan does not present any new or different impacts as compared with that which was previously reviewed and determined to be consistent with community plans and community character. For the reasons set forth herein and in the 2019 SEQRA Negative Declaration and the 2021 Amended SEQRA Negative Declaration, there will be no significant adverse environmental impact on adopted community plans or community character as a result of the Second Amended Site Plan.

Based upon this information and the information in the Environmental Assessment Form including the Project Narrative, the Planning Board finds that the Proposed Action, as amended, will not have any significant adverse impacts upon the environment. This Second Amended Negative Declaration indicates that no environmental impact statement needs be prepared and that the SEQRA process is complete.

Dated: May 14, 2024
Beacon, New York

_____ _____, 2024
John Gunn, Chairperson Dated
City of Beacon Planning Board

Motion by_____, seconded by _____:

Kevin Byrne	Voting ____	Leonard Warner	Voting ____
Karen Quiana	Voting ____	J. Randall Williams	Voting ____
Donna Francis	Voting ____	John Gunn, Chairperson	Voting ____
David Jensen	Voting ____		

RESOLUTION

PLANNING BOARD
BEACON, NEW YORK

SECOND AMENDED SITE PLAN APPROVAL &
LWRP CONSISTENCY DETERMINATION FOR
248 TIORONDA AVENUE

Parcel No. 6054-45-012574

WHEREAS, Beacon 248 Holdings LLC (the "Applicant") submitted an application to the City of Beacon Planning Board (the "Planning Board") for approval of a Second Amended Site Plan to revise certain aspects of the Greenway Trail, to revise the Erosion and Sediment Control Plan to improve vegetative stabilization along the Fishkill Creek, as well as revisions to landscaping associated with the Greenway Trail and bioretention/planters, to use low-height lighted bollards along the frontage of Buildings 100, 200, and 300 to reduce potential light glare, revisions related to refuse and garbage pickup, add 10 electric vehicle ("EV") charging stations which includes an ADA-accessible EV charging space, and revisions to the sewer collection system, on a 9.18 acre property having an address of 248 Tioronda Avenue, known and designated on the City of Beacon Tax Map as **Parcel ID No. 6054-45-012574** (the "Property") in the Fishkill Creek Development ("FCD") Zoning District and LWRP area (the "Project" or "Proposed Action"); and

WHEREAS, on June 11, 2019 the Planning Board adopted a SEQRA Negative Declaration and a Local Waterfront Revitalization Program ("LWRP") Consistency Determination, on November 18, 2019 the City Council adopted an FCD Concept Plan Approval, and on April 14, 2020 the Planning Board adopted Subdivision[1] (lot merger) and Site Plan approval the construction of two multifamily buildings with a total of 64 dwelling units and a separate office building with 25,400 square feet along with a Greenway Trail on the Property; and

WHEREAS, on November 9, 2021, the Planning Board approved an Amended Site Plan to eliminate the previously approved emergency vehicle access ramp to Wolcott Avenue and replace it with an emergency turnaround north of Building 300, relocate a stormwater retention basin, relocate the proposed Greenway Trail from the Wolcott Avenue ramp to the MTA right-of-way, relocate parking spaces and reduce the height of Building 100 to two stories with an expanded footprint, and also issued an LWRP Consistency Determination in connection with said Amended Site Plan; and

[1] The "Beacon 248 Holdings LLC Final Lot Consolidation Plat," dated February 22, 2020, last revised September 2, 2020, was filed in the Dutchess County Clerk's Office on March 23, 2021 as Map No. 10970A.

WHEREAS, the Planning Board is the approval authority for the Second Amended Site Plan pursuant to the Beacon City Code § 223-41.G(5); and

WHEREAS, the subject property is located in the Costal Management Zone as defined by the City's LWRP and the Planning Board finds that the Second Amended Site Plan remains consistent with the LWRP for the same reasons set forth in the Planning Board's 2019 LWRP Consistency Determination for the Project, as reaffirmed in the 2021 Amended Site Plan Approval; and

WHEREAS, there are no proposed changes to the architecture of the buildings, which remain as previously approved; and

WHEREAS, the application for the Second Amended Site Plan consists of application forms, environmental assessment forms, correspondence and professional studies and reports submitted to the Planning Board; and

WHEREAS, the Second Amended Site Plan is shown on plans entitled, "Amended Site Plan," last revised April 30, 2024, prepared by LaBella Associates, D.P.C.; and

WHEREAS, on April 9, 2024, the Planning Board opened a duly noticed public hearing on the application, at which time all those interested were given an opportunity to be heard, and the public hearing was closed on April 9, 2024; and

WHEREAS, the Proposed Action is an Unlisted Action pursuant to the New York State Environmental Quality Review Act, and on May 14, 2024 after hearing public comment and taking a "hard look" at the Environmental Assessment Form and all of the associated materials prepared in connection with the Proposed Action, the Planning Board adopted a Negative Declaration, finding the Proposed Action will not result in any significant adverse environmental impacts; and

WHEREAS, the Planning Board has reviewed the proposed Second Amended Site Plan in accordance with City of Beacon Code §223-16.B concerning impacts to Very Steep Slopes; and

WHEREAS, the Planning Board has reviewed the Site Plan against the relevant conditions and standards set forth in the City of Beacon Code §§ 223-41.13.G and 223-41.13.I and finds that the proposed Site Plan complies with the relevant sections of the City Code; and

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

NOW, THEREFORE, BE IT RESOLVED, that the Planning Board hereby readopts and reaffirms its June 11, 2019 LWRP Consistency Determination for the Project, as reaffirmed on November 9, 2021, as set forth therein and finds that the Second Amended Site

Plan continues to be consistent with the relevant policies of the LWRP for the reasons set forth in the June 11, 2019 LWRP Consistency Determination.

BE IT FURTHER RESOLVED, that the Planning Board has reviewed the proposed Second Amended Site Plan in accordance with City of Beacon Code §223-16.B concerning impacts to Very Steep Slopes and finds that there is no other suitable alternative to the disturbance of very steep slopes resulting from grading that is necessary for the Greenway Trail, the proposed disturbance is the minimum necessary, all feasible construction standards and precautions will be taken to minimize impacts, and the purpose and intent of Section 223-16.B is satisfied to the maximum degree feasible.

BE IT FURTHER RESOLVED, that the Planning Board hereby grants Second Amended Site Plan Approval as described herein and as set forth and detailed on the plans prepared by LaBella Associates, D.P.C., last revised April 30, 2024, upon the following conditions:

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

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

2. The Applicant shall seek and obtain all required permits and/or approvals from the appropriate agencies for the Project, including by not necessarily limited to the Dutchess County Department of Health, and shall meet all conditions contained in such approvals, as required therein.

3. The comments contained in the City Engineer's letter to the Planning Board dated May 8, 2024, and all comments in any subsequent letter(s) issued, shall be fulfilled to the satisfaction of the City Engineer.

4. The Applicant shall prepare and submit to the City Attorney for review as to form an Amended Greenway Trail Easement which reflects the revised location for the Greenway Trail, as well as any additional changes necessitated by the Second Amended Site Plan. After the Amended Greenway Trail Easement is accepted by the City Attorney as to form, the document is subject to acceptance by the City Council. If and when accepted by the City Council, the document shall be recorded by the Applicant in the Dutchess County Clerk's Office and a copy of the recorded documents shall be submitted by the Applicant to the City Clerk and Building Department for filing.

5. The Applicant shall post a performance guaranty with the City of Beacon to guarantee the satisfactory construction, installation and completion of any required improvements within the City's right-of-way in an amount acceptable to the City Engineer based on review of a cost estimate to be prepared by the Applicant.

6. The Applicant shall establish an escrow with the City of Beacon for the inspection of all improvements and work to occur within the City's right of way in the amount acceptable to the City Engineer based on review of a cost estimate to be prepared by the Applicant's professional engineer, which amount shall be equivalent of 6% of the amount of the estimated construction cost.

7. The Applicant shall establish an escrow for stormwater inspections by the City Engineer on behalf of the City of Beacon pursuant to City Code 190-13.

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

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

1. All conditions and/or requirements of approval in previous approvals granted by the Planning Board, the City Council, other City Land Use Boards, and City Departments are hereby reaffirmed and shall remain in full force and effect and are otherwise deemed to be inserted as conditions/requirements of this Resolution as if fully stated herein.

2. The Building Inspector and the City Engineer shall have the right to direct the Applicant to cause the placement and/or repair of sedimentation and erosion control devices wherever and whenever deemed necessary in their sole discretion during construction.

3. The Building Inspector and the City Engineer shall have the right to direct the Applicant to cause the placement, cleaning and/or repair of sedimentation and erosion control devices wherever and whenever deemed necessary during construction.

4. This approval is conditioned upon compliance with all of the mitigation measures specified in the Applicant's Full EAF and related application documents, including the SEQRA Negative Declaration, SEQRA Amended Negative Declaration and SEQRA Second Amended Negative Declaration. The Applicant shall be responsible for the funding and/or implementation of all such identified mitigation measures. Where the terms of this resolution may be inconsistent with the Full EAF, the terms of this resolution shall be controlling.

5. The Applicant shall be responsible for the payment of all application review costs incurred by the City in its review and approval of this Project. Such fees shall be paid by the Applicants within thirty (30) days of each notification by the City that

such fees are due. If such fees are not paid within the thirty (30) day period, and an extension therefore has not been granted by the City, this resolution shall be rendered null and void.

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

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

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

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

10. Pursuant to the City of Beacon Code § 223-25.J , the Site Plan approval granted herein shall expire unless a bona fide building permit application shall be submitted within one year of the date of this approval, and all improvements shall be completed within two years from the date of the building permit issuance. The Planning Board may grant extensions of this deadline upon written request from the Applicant.

Resolution Adopted: May 14, 2024
Beacon, New York

_____ _____, 2024
John Gunn, Chairperson Dated
City of Beacon Planning Board

Motion by_____, seconded by _____:

Kevin Byrne	Voting	Leonard Warner	Voting
Karen Quiana	Voting	J. Randall Williams	Voting
Donna Francis	Voting	John Gunn, Chairperson	Voting
David Jensen	Voting		

Approved:
Denied

City of Beacon Planning Board Agenda
05/14/2024

Title:

Continue review of application for Subdivision Approval, residential, 39 Howland Avenue, submitted by John Vergara.

ATTACHMENTS

39 Howland PB 5.14.24 Subdivision Response Letter_2024-0430.pdf

39 Howland PB 5.14.24 Engineer's Report (pump)_2024-0430.pdf

39 Howland PB 5.14.24 Subdivision I&I Study_2024-0430.pdf

39 Howland PB 5.14.24 EXHIBIT A.pdf

39 Howland PB 5.14.24 Subdivision Plan_2024-0430.pdf

39 Howland PB lead agency response DCDBCH 4.26.24.pdf

Lanc & Tully 39 Howland Ave 05-13-24 review.pdf

KARC Review PB_39 Howland Ave 2024.05.13.pdf

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 30, 2024

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

Re: 39 Howland Avenue Residential Subdivision
John Vergara (Applicant)
39 Howland Avenue
Tax Parcel: 6054-47-345576, ±0.68 ac.
City of Beacon, New York

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) has revised the subdivision plan set in response to comments received at the April 9, 2024 planning board meeting, as well as in response to Lanc & Tully's comment letter dated April 4, 2024 and KARC's comment memorandum dated April 7, 2024. The following is provided for continued review:

- 5 copies of a Subdivision Plan Set (5 sheets);
- 5 copies of a Subdivision Plat Sheet (1 sheet);
- 5 copies of a sewer pump station engineer's report;
- 5 copies of an I&I report, and
- 5 copies of Exhibit A.

The planning board discussed looking into whether there was enough frontage to be able to move the Lot 2 dwelling forward such that it is closer to the road, and line up with the existing residential structures adjacent to the lot. There was also concern that the Lot 2 dwelling was directly facing the rear of the existing dwelling on Lot 1. The existing parent lot only has 114.17 feet of frontage. Exhibit A shows the proposed lot line between Lot 1 and Lot 2 in red that will provide the maximum width of frontage on Lot 2 while maintaining a minimum of 75 feet of lot width on Lot 1. There would only be between 34 to 36 feet of width provided which is not enough to move the proposed dwelling up toward the frontage. Therefore, the lot must remain as a flag style lot. The house has been moved to the north such that it is not directly behind the existing dwelling on Lot 1. The previously submitted bulk table on sheet 3 and the Subdivision Plat sheet incorrectly stated

that Lot 1 had 110.1 feet of width where in fact it only had 84.6 feet after subdivision. The bulk tables on sheets 3 and the subdivision plat have been updated.

The plans have been updated in response to comments from the Planning Board and from the City's consultants for the Planning Board's continued review and consideration of the Application at this Board's April 9, 2024 meeting. The following are point-by-point responses to each comment within the letters prepared by the City's consultants:

Lanc & Tully Review Letter, Dated April 4, 2024:

General Comments:

1. An I&I Study was performed on the existing residential dwelling located on Lot 1. No illicit stormwater connections were observed. An I&I report is included with this submission.

Preliminary Subdivision Plat:

1. Comment noted. A new boundary and topographic survey has bene prepared by Johnson Surveying, whom will remain as surveyor of record for the project. The plans have been updated with the new survey and adjusted accordingly.

2. Lot numbers and areas have been added to the plat sheet.

3. Bulk Table notes a, d and e have been removed.

4. The survey data has been updated using a map entitled "Boundary & Topographic Survey Prepared for John Vergara." Prepared by Brendan Johnson PLS and completed 4/10/2024.

5. A new topographic survey has been completed by Brendan Johnson PLS.

6. The adjoining parcel owners have been added to the Plat Sheet as part of the new survey.

7. Comment noted. It is proposed to allow the encroachments on the lots. An "Encroachment Note" has been added to the Subdivision Plat sheet that states "The filing of this plat does not constitute any endorsement, approval or authorization of any kind for the continuation or removal of any existing encroachments on the subject property".

Subdivision Plan Set:

Sheet 2 of 5:

1. The survey data has been updated using a map entitled "Boundary & Topographic Survey Prepared for John Vergara." Prepared by Brendan Johnson PLS and completed 4/10/2024.

Sheet 3 of 5:

1. Bulk Table notes a, d and e have been removed.

2. Existing water and sewer service locations are shown on the updated plan.

3. The locations of existing fence were updated with the inclusion of the new survey.

4. The size and material of water mains located on Howland Avenue have been updated with the inclusion of the new survey. The water service line is shown connecting to the 6" ACP water main. A tapping saddle is provided in the service connection detail on sheet 5.

5. The size and material of stormwater lines present on Howland Avenue have been updated with the inclusion of the new survey.

6. A Curb Stop is provided on the Lot 2 water service line.

7. The size and material of sewer line located on Howland Avenue have been updated with the inclusion of the new survey. The location of the existing sewer main is shown per a 1995 record drawing prepared by Lanc & Tully. Utility Notes #4 and 5 have been added to Sheet 3 of the plan set that require investigative test pits to verify the location, depth and material of the existing sewer main. It is assumed that the material vitrified clay pipe (VCP). Therefore, a tapping saddle is proposed for the lateral connection detail on sheet 5.

8. A LSE has been added to the plan. Upon review of the Lanc & Tully record drawings mentioned above, it has been verified that a pump station will be required to transmit the sewer to the existing sewer main. A sewer pump station within a 1,500 gallon concrete is now proposed on the plan. A grinder pump is proposed to transmit the sewage to a proposed manhole located at the frontage of Lot 2. The sewer will be transmitted via gravity to the existing sewer main from there. We are unsure if the individual pump station will require Department of Health (DOH) approval. We have reached out to the department to verify same. If approval is required, the plans will be updated accordingly with DOH approval blocks and notation. A sewer pump station report and calculations are provided with this submission.

9. A first floor elevation has been added to sheet 3 the plan set.

10. Front door, rear door, deck and porch locations have been added to the plan.

11. The proposed dwelling will have a basement and its elevation is called out on the plan. A sump pump will be required for the basement. Sump pump notes are provided on the plans.

12. A proposed garage floor elevation has been added to the plan.

13. Additional grading detail is now provided on Lot 2 to demonstrate that drainage will be directed away from the proposed dwelling.

14. Proposed screening between lots 1 and 2 as well as north property line has been added to the plan.

15. The plan has been updated to note that the driveway will be paved.

16. The driveway and side slopes have been graded such that drainage is not directed toward the neighboring property.

Sheet 5 of 5:

1. The driveway entrance detail has been revised for connection to a City street with curbing or sidewalks.
2. The water service connection detail has been revised to specify a Power Seal tap sleeve with threaded outlet.

KARC Planning Consultants, Inc. Review Letter, Dated April 7, 2024:

1. The proposed dwelling on Lot 2 has been updated to indicate the front door and porch which faces Howland Avenue. The front setback dimension is noted in bulk table which also indicates the front of the dwelling.

2. Two existing parking spaces are shown on Lot 1 by utilization of the existing parking areas that are present now. The proposed dwelling on Lot 2 will have a two-car garage which will provide the required off-street parking for the lot.

The Applicant looks forward to appearing at the Board's May 14, 2024 meeting Agenda for continued discussion and circulation of SEQR. Thank you for your attention to this matter. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,

Michael A. Bodendorf, P.E.
Principal

cc: John Vergara
Daniel G. Koehler, P.E. (HLD file)

Engineer's Report

39 Howland Avenue Subdivision: Pump Chamber Design

Prepared for:
John Vergara
39 Howland Avenue
Beacon, NY 12508

April 30, 2024

Prepared by:
Hudson Land Design Professional Engineering, P.C.
174 Main Street
Beacon, NY 12508
Ph: 845-440-6926

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4.0 WATER SUPPLY 1

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APPENDICES

Appendix A: Pump Station Calculations

Appendix B: Product Cut Sheets

1.0 PROJECT LOCATION

The project is located on the east side of Howland Avenue, just north of the intersection with Robinson Street within the R1-7.5 Residential Zoning district, consists of approximately 0.68 acres, and contains a single-family dwelling on the northern portion of the property. The parcel is identified as 6054-47-345576 on the City of Beacon Tax Map.

2.0 PROJECT DESCRIPTION

The Applicant proposes to subdivide the parcel into two (2) lots, one (1) of which will serve as a new building lot. Water supply for the new lot will be obtained via the City's municipal water system. Wastewater generated by the proposed home will be disposed of by means of a new connection to the existing City sewer collection system. The new building lot (proposed Lot 2) will require a pump to convey the wastewater to the collection system. Lot 2 will discharge sewage via gravity flow into a proposed pump chamber, that will be equipped with a grinder pump and 2" force main that will convey the sewage to a proposed gravity manhole located at the frontage of Lot 2. The sewage will flow by gravity to the existing sewer main within Howland Avenue.

This report summarizes all data and information necessary for the design of the water and sewer infrastructure that will serve the proposed dwelling located within the proposed subdivision.

The design has been based on New York State Department of Health (NYSDOH), Dutchess County Department of Health (DCDOH), and New York State Department of Environmental Conservation (NYSDEC) standards.

3.0 ESTIMATED WATER & WASTEWATER QUANTITIES

Water and wastewater quantities for the project are based on a total of three bedrooms for the proposed residential dwelling. Using 110 gallons per day (gpd) per bedroom, the maximum daily wastewater generation is calculated to be 330 gpd per house.

4.0 WATER SUPPLY

The property resides in the bounds of the City of Beacon Water District; therefore, the proposed dwelling is to be served via an individual service connection to the existing water main along Howland Avenue, reputed to be 6" diameter ACP water main. The existing water service line to the existing house will remain. The proposed building lot will be served by 1-inch diameter type k copper tubing.

All minimum separation distance requirements from the individual service connections shall be maintained. A minimum of 10 feet of separation is required between water and sewer (storm or sanitary) lines that are running parallel, and to storm and sanitary structures (catch basins and manholes). If a water line and a sewer line must cross, they shall do so perpendicular to each

other as practicable. A minimum of 18" shall be provided from the crown of the sewer pipe to the bottom of the water pipe or the crown of the water pipe to the bottom of the sewer pipe.

5.0 SEWAGE CONVEYANCE

The property resides in the bounds of the City of Beacon Sewer District; therefore, the proposed dwelling is to be served via connection to the existing sewer collection system. There is an existing 8" sewer main along Howland Avenue, along the property frontage. Sewage flows northwest via 8-inch diameter piping. The existing house currently has a 4" gravity lateral connection to the sewer main.

The proposed dwelling shall have a 4-inch diameter SDR-35 PVC pipe convey the raw sewage to a proposed pump chamber located on the eastern portion of proposed Lot 2. Minimum pitch on the individual sewer lateral to the proposed pump chamber shall be 2%. The proposed pump chamber will pump sewage via a 2" DR-11 force main to the proposed sewer manhole at the frontage with Howland Avenue. The sewer will flow via gravity from the proposed manhole to the existing sewer main.

5.1 Pump Station Design

A dosage volume of 209 gallons has been provided in the pump chamber, which will be controlled by a float system. Based on average daily flow rates, the pump will run approximately 2 times per day. Refer to Appendix A for detailed pump calculations.

It is proposed to provide a Liberty Pump Model PRG101 2" grinder pump (1 HP) within 1,500-gallon pump chambers Woodard's Model HD-1500. The pumping equipment has been sized for a discharge of 36.5 gallons per minute at 20.6 ft. of total dynamic head (TDH). Based on the dosage volume, the pump will run for approximately 5.7 minutes per dose. The pump rate provides a minimum scouring velocity of 2 feet per second (calculated 3.73 feet per second).

The pump will be single phase 115 volt with an electrical disconnect box located at the control panel. The control panel shall be located within the main home on proposed lot 2 to monitor the system. All electrical equipment will be designed and installed to comply with the National Electric Code for Class I, Group C or D, Division I locations.

More than two days design flow storage is provided above the high water alarm in case of pump failure. Three (3) float switches are to be installed: low-level pump off, high-level pump on, and high-level alarm. The alarm shall be located on the main home on proposed lot 2 in a clearly visible and audible location.

Upon completion, the pump chamber will be hydrostatically tested for 24 hours, unless it is seamless. Hydrostatic tests will be considered passing if the leakage is less than allowable leakage. A NYS Licensed Professional Engineer shall certify the installation of the pump chamber. The certification shall be submitted to the City of Beacon.

APPENDIX A

Pump Station Calculations

PUMP CALCULATIONS FOR 39 HOWLAND AVENUE

I. Design Criteria

A. Minimum velocity of 2 feet per second in forcemain (pg. 40-4 of 10 State Standards For Wastewater Treatment).
B. Shutoff and check valve shall be placed in discharge line of each pump. Check valve shall be located between shutoff valve and pump (pg. 40-5 of Ten States Standards For Wastewater Treatment).
C. For smooth pipe materials such as PVC and polythethylene, a "C" value not to exceed 120 may be allowed for design (pg. 40-14).

II. Knowns

A. Proposed forcemain.	2.00 inch PVC
B. Pump discharges to existing manhole at invert elevation of	238.90 ft
C. Lowest Pump Off Elevation Pump Chamber =	228.32 ft

III. Design Flows

A. Flow (Total) = 330 gpd — Refer to Engineer's Report for design flow

B. Size Discharge Line For a Minimum Velocity of 2 fps based upon 2014 Recommended Standards for Wastewater Facilities

Q = VA

- Q = Discharge (cfs)
- V = Velocity (fps)
- A = Area (sf)

Existing & Proposed PVC Forcemain size: 2 inch

- Area = 3.14 x 2 in. x 2 in x 0.25 / (144 in^2 / sf) = 0.02181 sf

Q = VA

- Q = 2 fps x 0.0123 sf = 0.0436 cfs

0.17 cfs x 7.48 gal/cf x 60 sec/min = 19.57 gpm (min flow rate)

IV. Pump Calculations

A. Determine Head Requirements

1. Proposed Force Main Calcs

Proposed+existing length of 2" PVC pipe = 121 ft.

19.7 gal. in forcemain

Proposed length of 2" PVC in pump chamber = 12 ft.

Fittings =	45's	4	L_e (Equivalent Length) =	2.6	ft/fitting	=	10.4	ft
	90's	5	L_e (Equivalent Length) =	5.7	ft/fitting	=	28.5	ft

- Equivalent Lengths from Figure 37, pg. 225 of the Handbook for PVC Pipe.
- 90's in lift station and prior to distribution boxes.
- 45's along line.

Valves =	Check -	1	L_e (Equivalent Length) =	19	ft/valve	=	19	ft
	Ball -	1	L_e (Equivalent Length) =	55	ft/valve	=	55	ft

- Equivalent Lengths from Figure 37, pg. 225 of the Handbook for PVC Pipe.
- Gate Valve will be open.

Total Length = 245.9 ft

Velocity Head = $V^2 / 2g$

Proposed Static Head = (Invert to manhole) - (Pump off elevation) = 10.58 ft

Pump Performance Curve

Flow Rate (gpm)	Velocity (fps)	Total Static Head (ft)	Velocity Head (ft)	Friction Loss / 100' C = 120	Friction Loss (ft)	TDH (ft)
0	0.00	10.58	0.00	0	0.00	10.58
4	0.41	10.58	0.00	0.07	0.16	10.75
6	0.61	10.58	0.01	0.14	0.35	10.93
10	1.02	10.58	0.02	0.36	0.89	11.49
20	2.04	10.58	0.06	1.31	3.22	13.86
25	2.55	10.58	0.10	1.98	4.87	15.55
30	3.07	10.58	0.15	2.77	6.82	17.55
40	4.09	10.58	0.26	4.73	11.62	22.46
50	5.11	10.58	0.41	7.15	17.57	28.56

Notes:
1) Friction Loss / 100' for C120 from attached chart.
2) Friction Loss = Length of Pipe x Friction Loss (C = 120) / 100'.
3) TDH = Total Static Head + Velocity Head + Friction Loss.

VI. Pump Selection

- 2" PRG101-Series 1HP Grinder Pump
- Flowrate = 38 gpm

Flow Rate (gpm)	Velocity (fps)	Total Static Head (ft)	Velocity Head (ft)	Friction Loss / 100' C = 120	Friction Loss (ft)	TDH (ft)
36.5	3.73	10.58	0.22	3.99	9.81	20.61

VII. Dosing Calculations

Total sewage flow	330	gallons per day

Pump Chamber (using 1,500 gallon pump tank):

Interior Width:	4.92	feet
Interior Length:	9.75	feet
Invert to Tank Bottom:	4.25	feet
Volume Per Ft Depth:	358.9	gallons

Dose:

Dose Depth:	7.00	inches
Dose Volume within tank:	209.3	gallons
Doses per day at ADF:	1.6	

VIII. Determine Pump Cycle

Pump Running Time :

Dose Volume:	209.3	gallons
Pump Rate:	36.5	gallons per minute
Running Time:	5.7	minutes

IX. Determine Alarm Elevations

Invert In:	231.90	ft	
Depth to Bottom Tank from Invert:	4.25	ft**	**Woodards 1,500 Gallon
Bottom of Tank:	227.65	ft	Pump Tank
Low Level Pump Off:	228.32	ft (recommended 8" min. effluent level above floor)	
Pump On Elev.:	228.90	ft (manufacturer recommends 7" min. between float levels)	
High Level Alarm:	229.49	ft (manufacturer recommends 7" min. between float levels)	
Storage over high level alarm:	866.06	gallons	
Storage Time above high level alarm:	2.6	days	

Liberty Pumps®

ProVore®

PRG-Series

Grinder Pump

1 hp
2" Discharge

Designed for residential sewage applications

Higher flow rates allow use with 2" discharge lines

Operates on standard 115 or 230 volt 20 amp circuits

Features:

- Heavy cast iron construction
- 115V or 230V single phase
- Patented V-Slice® cutter technology
- Shreds difficult solids such as feminine products, rags, towels and wipes that can jam a solids-handling style pump
- Hardened stainless steel cutter and plate
- Oil-filled, thermally protected motor
- PRG-Series residential grinders can be used as a replacement pump in 2" discharge systems using LE40 and LE50-series solids-handling pumps.*

**Consult factory with actual application and head specifications prior to replacing LE40 and LE50-series pumps.*

Models:

PRG101M 115V, 12a, Manual

PRG101A 115V, 12a, Automatic, wide-angle

PRG101AV 115V, 12a, Automatic, vertical float

PRG102M 230V, 6a, Manual

PRG102A 230V, 6a, Automatic

Vertical Float
Model PRG101AV

innovate. evolve.

PRG-Series
1 hp Grinder Pump

Impeller
Cast Iron, Class 25

Paint
Powder Coat

Max Liquid Temp.
60°C / 140° F

Motor
CSCR style, Class B windings.
Oil-filled, thermally protected

Power Cord Type
SJTW, quick disconnect design 10' standard length. (25' Optional)

Motor Housing
Cast Iron, Class 30

Volute
Cast Iron, Class 30

Shaft
303 Series Stainless Steel

Hardware
Stainless Steel

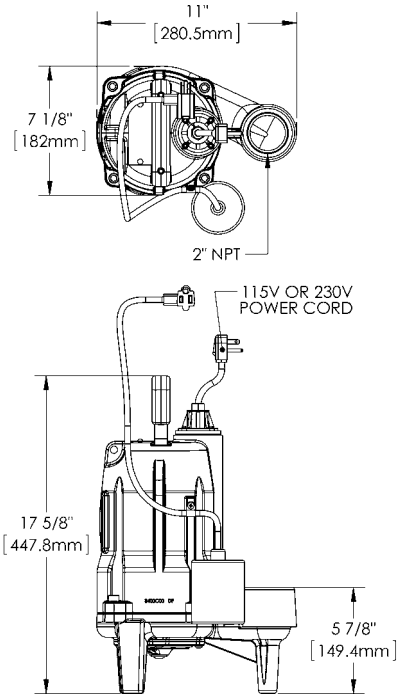
Mechanical Shaft Seal
Unitized Silicon Carbide

Bearings
Upper and lower, ball bearings

Cutter and Cutter Plate
V-Slice® design. 440 Stainless Steel hardened to Rockwell 57c

Switch (automatic models)
Mechanical wide angle float with series (piggyback) plug

DIMENSIONAL DATA



MODELS	HP	VOLTS	PHASE	Hz.	AMPS	CORD LENGTH	DISCHARGE	AUTOMATIC	WEIGHT LBS.
PRG101A	1	115	1	60	12	10'	2"	Wide-Angle	58
PRG101AV	1	115	1	60	12	10'	2"	Vertical Float	58
PRG101M	1	115	1	60	12	10'	2"	No	57
PRG102A	1	230	1	60	6	10'	2"	Wide-Angle	58
PRG102M	1	230	1	60	6	10'	2"	No	57

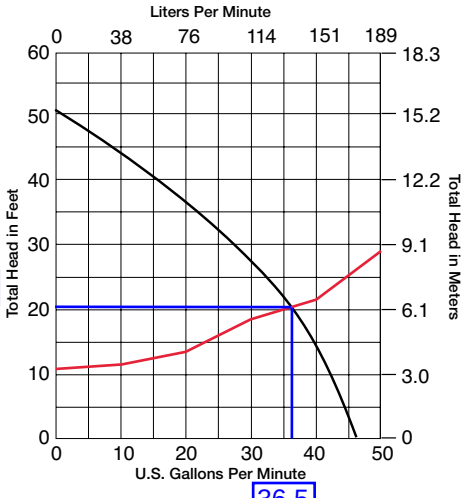
For optional 25' power cords, add a "-2" suffix to model number. Example: PRG101A-2

Maximum Fluid Temperature: 140˚ F (60˚ C)

V-Slice® Cutter Technology
Shreds difficult solids-such as feminine products, wipes, rags and other debris.

Patent: See www.libertypumps.com/patents

PERFORMANCE CURVE
60 Hz., 3400 RPM



SSPMA CERTIFIED

C SP US Certified

Specifications subject to change without notice.

Liberty Pumps • 7000 Apple Tree Avenue • Bergen, New York 14416 • Phone 800-543-2550 Fax (585) 494-1839
www.libertypumps.com

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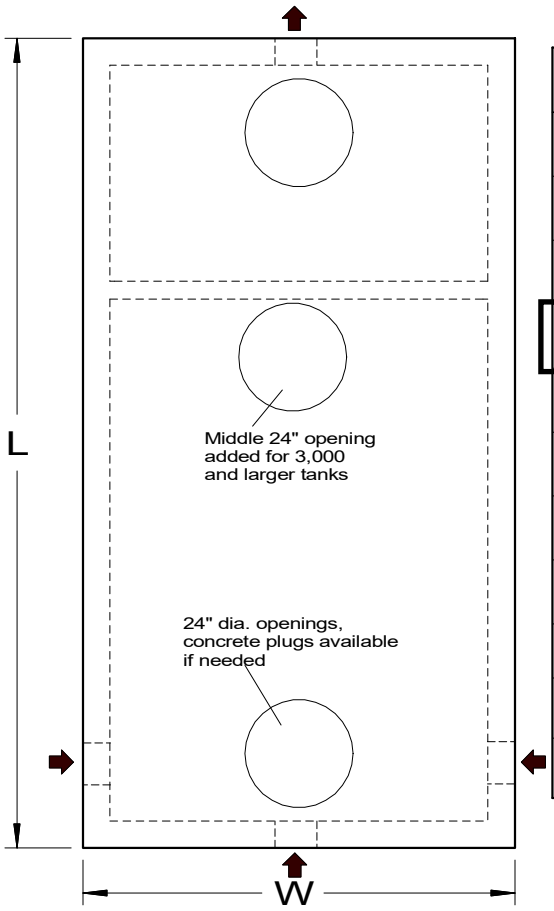
APPENDIX B

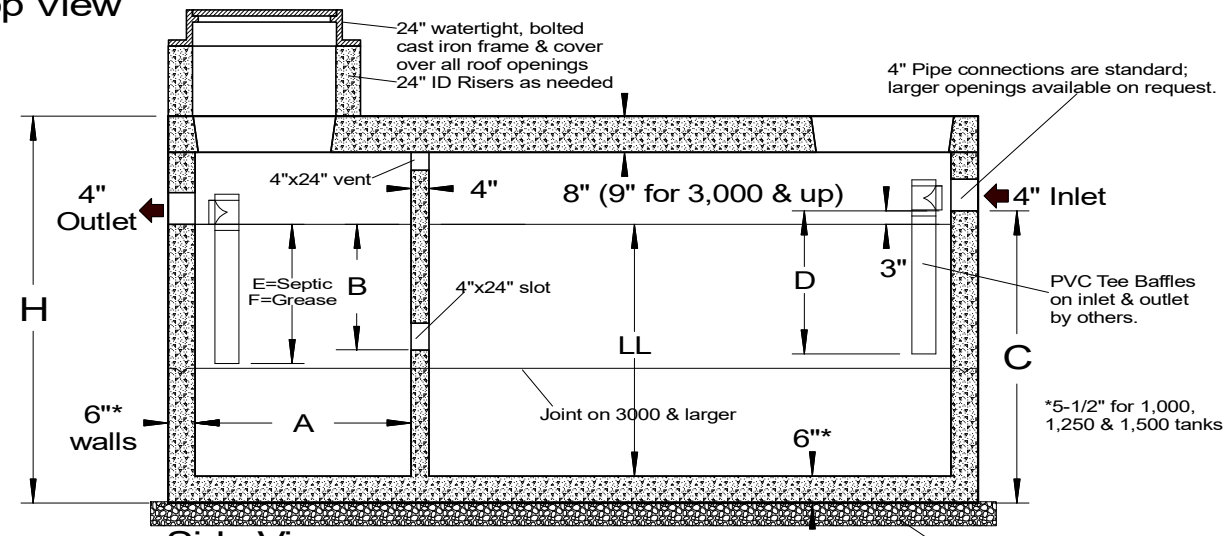
Product Cut Sheets



Top View

Gallons	L	W	H	LL	A	B	C	D	E	F
750	9'-6"	4'-6"	5'-11"	42"	34"	23"	51"	24"	21"	30"
1,000	10'-9"	5'-11"	4'-8"	35"	38"	16"	43"	21"	18"	23"
1,250	10'-9"	5'-11"	5'-2"	41"	38"	19"	49"	24"	21"	29"
1,500	10'-9"	5'-11"	5'-10"	49"	38"	22"	57"	27"	24"	37"
2,000	12'-6"	6'	7'-2"	58"	46"	31"	67"	32"	29"	46"
2,500	14'	6'-6"	7'-2"	58"	46"	31"	67"	32"	29"	46"
3,000	15'-6"	7'	7'-3"	58"	52"	31"	67"	32"	29"	46"
3,500	15'-6"	8'	7'-3"	58"	52"	31"	67"	32"	29"	46"
4,000	17'-2"	8'	7'-3"	58"	58"	31"	67"	32"	29"	46"
5,000	18'-8"	9'	7'-3"	58"	70"	31"	67"	32"	29"	46"
6,000	20'-0"	9'-6"	7'-3"	60"	70"	33"	69"	32"	30"	48"

Notes:
1. Effluent outlet filters are available as well as high level alarms.
2. Gas deflectors are available for 4" outlet pipes.
3. Tank designs based on the 2014 NYSDEC design standards.
4. Grease Traps are Type 2 with longer outlet baffles than Septic Tanks.
5. 1,000, 1,250, and 1,500 tanks are two-piece design with center seam.



Side View

SPECIFICATIONS

Concrete Min. Strength: 4,000 psi at 28 days
Reinforcement: #4 & #5 Rebar / ASTM A615
Air Entrainment: 6%
Construction Joint: Butyl Rubber Sealant
Pipe Connection: Polylok Seal or as needed
Load Rating: HS20-44 + 30% / ASTM C857

PRECAST TRAFFIC DUTY TANKS
750 TO 6,000 GALLONS
SEPTIC TANKS & GREASE TRAPS

Woodard's Concrete Products, Inc.
629 Lybolt Road, Bullville, NY 10915
(845) 361-3471 / Fax 361-1050

JMM HIGH DENSITY POLYETHYLENE (HDPE) PE4710 PRODUCT SPECIFICATION

Description:

JMM manufactures High Density Polyethylene (HDPE) water pressure pipes for municipal and industrial transmission systems. Our pressure pipe is used in many types of applications such as potable water, sewer, drain, mining, irrigation, slip lining, and reclaimed water.

Materials:

JMM HDPE pressure pipe is manufactured with premium, highly engineered PE4710 resin that provides maximum performance benefits to service today's municipal and industrial water needs. The PE4710 material conforms to ASTM D3350 with the cell classification of 445574C/E and is listed with the Plastic Pipe Institute's (PPI) TR4. It is formulated with carbon black and/or ultraviolet stabilizer for maximum protection against UV rays for added assurance.

Size	Type	DR	Standard (If Applicable)
4" – 63"	IPS / DIPS	7 – 41	ASTM F714

Quality Assurance:

JMM takes great pride in the quality and workmanship of all of our products. JMM quality control programs monitor three critical aspects of the manufacturing process: the raw material, pipe production, and the finished goods. Incoming raw material is inspected and tested to ensure the material meets all applicable requirements before its release for production. During production, the pipe will be examined and pipe samples will be collected for physical verification and testing for compliance. The finished product is subjected to further visual inspection to ensure it has met all the appropriate specifications and packaging requirements. Our pipes are continuously monitored throughout the entire manufacturing process to validate that they are in accordance with all applicable specifications. Certificates of Compliance are available upon request.

Lengths & Bending Radius:

Standard laying lengths of HDPE pressure water pipe is 40/50 foot lengths. Pipe sizes under 6" may be coiled at continuous longer lengths upon request.

Marking:

The standard markings printed on JMM pipes generally consist of the JMM logo, nominal size and OD base, material code, dimension ratio, pressure class, current AWWA C906 (if applicable), ASTM F714 (if applicable), and production date (day, month, & year).

Website:

Please visit our website at www.jmm.com for more information.

Note: Information provided here is a general guideline of JMM PE products. JMM reserves the right to modify any information as necessary. For more detailed information, please contact your JMM sales representative. Always follow project specifications and adhere to local rules, codes and regulations

HDPE IRON PIPE SIZE (IPS) PRESSURE PIPE PE4710

		DR 7 (333 psi)			DR 7.3 (318 psi)			DR 9 (250 psi)			DR 9.3 (241 psi)			DR 11 (200 psi)			DR 13.5 (160 psi)		
Pipe Size	Avg OD	Min Wall	Avg ID	Weight lb/ft	Min Wall	Avg ID	Weight lb/ft	Min Wall	Avg ID	Weight lb/ft	Min Wall	Avg ID	Weight lb/ft	Min Wall	Avg ID	Weight lb/ft	Min Wall	Avg ID	Weight lb/ft
1/2	0.840	0.120	0.59	0.12	0.115	0.60	0.11	0.093	0.64	0.10	0.090	0.65	0.09	0.076	0.68	0.08	0.062	0.71	0.07
3/4	1.050	0.150	0.73	0.19	0.144	0.75	0.18	0.117	0.80	0.15	0.113	0.81	0.15	0.095	0.85	0.12	0.078	0.88	0.10
1	1.315	0.188	0.92	0.29	0.180	0.93	0.28	0.146	1.01	0.23	0.141	1.02	0.23	0.120	1.06	0.20	0.097	1.11	0.16
2	2.375	0.339	1.66	0.95	0.325	1.69	0.91	0.264	1.82	0.77	0.255	1.83	0.74	0.216	1.92	0.64	0.176	2.00	0.53
3	3.500	0.500	2.44	2.06	0.479	2.48	1.98	0.389	2.68	1.66	0.376	2.70	1.61	0.318	2.83	1.39	0.259	2.95	1.16
4	4.500	0.643	3.14	3.40	0.616	3.19	3.28	0.500	3.44	2.75	0.484	3.47	2.67	0.409	3.63	2.30	0.333	3.79	1.91
5 3/8	5.375	0.768	3.75	4.85	0.736	3.81	4.68	0.597	4.11	3.92	0.578	4.15	3.81	0.489	4.34	3.29	0.398	4.53	2.73
5	5.563	0.795	3.88	5.20	0.762	3.95	5.02	0.618	4.25	4.20	0.598	4.29	4.08	0.506	4.49	3.52	0.412	4.69	2.92
6	6.625	0.946	4.62	7.36	0.908	4.70	7.12	0.736	5.06	5.96	0.712	5.11	5.79	0.602	5.35	4.99	0.491	5.58	4.15
7	7.125	0.976	5.06	8.23	0.976	5.06	8.23	0.792	5.45	6.89	0.766	5.50	6.70	0.648	5.75	5.78	0.528	6.01	4.80
8	8.625	1.232	6.01	12.48	1.182	6.12	12.06	0.958	6.59	10.09	0.927	6.66	9.81	0.784	6.96	8.46	0.639	7.27	7.03
10	10.750	1.536	7.49	19.40	1.473	7.63	18.74	1.194	8.22	15.68	1.156	8.30	15.24	0.977	8.68	13.14	0.796	9.06	10.92
12	12.750	1.821	8.89	27.28	1.747	9.05	26.36	1.417	9.75	22.07	1.371	9.84	21.44	1.159	10.29	18.49	0.944	10.75	15.36
14	14.000	2.000	9.76	32.90	1.918	9.93	31.78	1.556	10.70	26.61	1.505	10.81	25.85	1.273	11.30	22.30	1.037	11.80	18.52
16	16.000	2.286	11.15	42.97	2.192	11.35	41.51	1.778	12.23	34.75	1.720	12.35	33.76	1.455	12.92	29.12	1.185	13.49	24.19
18	18.000	2.571	12.55	54.37	2.466	12.77	52.53	2.000	13.76	43.97	1.935	13.90	42.73	1.636	14.53	36.84	1.333	15.17	30.61
20	20.000	2.857	13.94	67.13	2.740	14.19	64.85	2.222	15.29	54.28	2.151	15.44	52.77	1.818	16.15	45.49	1.481	16.86	37.79
24	24.000	3.429	16.73	96.68	3.288	17.03	93.39	2.667	18.35	78.18	2.581	18.53	75.98	2.182	19.37	65.52	1.778	20.23	54.44
26	26.000							2.889	19.88	91.75	2.796	20.07	89.17	2.364	20.99	76.89	1.926	21.92	63.89
28	28.000							3.111	21.40	106.40	3.011	21.62	103.42	2.545	22.60	89.15	2.074	23.60	74.09
30	30.000							3.333	22.93	122.13	3.226	23.16	118.72	2.727	24.22	102.35	2.222	25.29	85.04
32	32.000													2.909	25.83	116.46	2.370	26.98	96.76
34	34.000													3.091	27.45	131.48	2.519	28.66	109.26
36	36.000													3.273	29.06	147.41	2.667	30.35	122.49

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 30, 2024

Bruce Flower
City of Beacon Building Inspector
1 Municipal Plaza
Beacon, New York 12508

Re: Inflow and Infiltration Report
39 Howland Avenue
Tax Parcel: 6054-47-345576, ±0.68 ac.
City of Beacon, New York

Dear Mr. Flower,

Hudson Land Design (HLD) has completed an infiltration and inflow investigation at the above referenced parcel as required by the City of Beacon. The investigation was conducted on April 8, 2024 at the existing residential structure located at 39 Howland Avenue, which consists of a two-story wood framed single family residential dwelling.

The first phase of the study consisted of an exterior inspection of the building to determine the location of roof leader discharge points. The existing residential dwelling has an upper gabled roof that is pitched to the front and to the rear (away from 39 Howland Avenue). The front roof line has a gutter with a roof leader discharge location at the north end adjacent to the driveway. Currently, there is no roof leader downspout connected to the gutter. There is also a small hip roof below the upper roof covering the front door bump out that has a gutter surrounding the roof with a roof leader downspout discharging to the ground on the south side of the roof. See photo 1 at the end of this report.

There is a shed roof below the upper gabled roof in the rear of the building. The upper gabled roof flows to the lower shed roof. The lower shed roof does not have a gutter. It appears that there was once a gutter on the roof line evidenced by existing gutter hangers seen in photos 2 and 3 below.

The gabled roof does not pitch toward south side or north side oof the house. There is a small shed roof on the north side that has no gutter. See photos 4 and 5 below for the south and north side respectively. Based upon the visual inspection, it is concluded that the roof runoff is not connected to the house sewer; therefore, there is no inflow to the City sewer system from the roof.

The second phase of the study consisted of interior inspection of the dwelling to determine if there are any illicit connections to the building sewer line from sump pumps, floor drains and the like. HLD personnel located the last section of the interior sanitary sewer plumbing. See photos 6 and 7 below. The sanitary sewer line flows easterly towards Howland Avenue's sanitary sewer collection system. There were no floor drains or sump pumps observed in the basement, and the basement was dry. Based upon the interior inspection, it is concluded that there are no illicit connections to the sewer line; therefore, there is no inflow to the City sewer system from the existing dwelling.

Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,

Michael A. Bodendorf, P.E.
Principal

cc: John Vergara
Daniel G. Koehler, P.E. (HLD file)

Photo 1 – View of Front

Photo 2 – View of Rear

Photo 3 - View of Rear North Side

Photo 4 - View of South Side

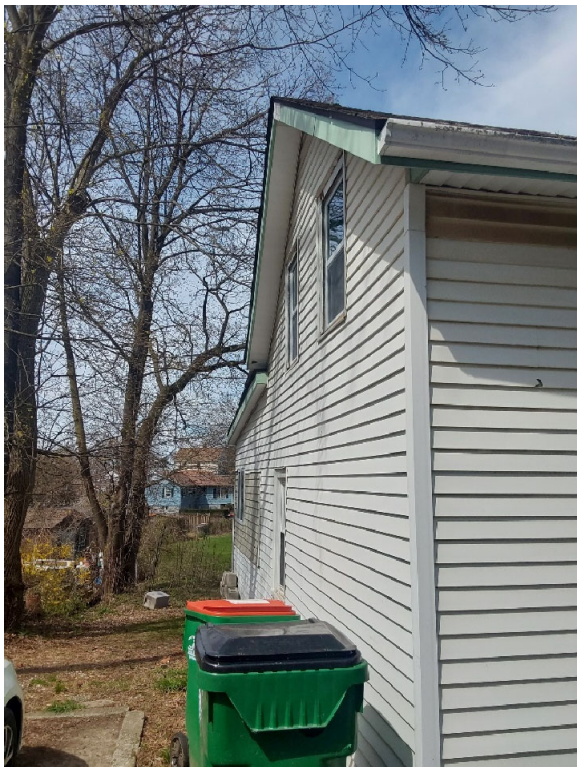


Photo 5 - View of South Side

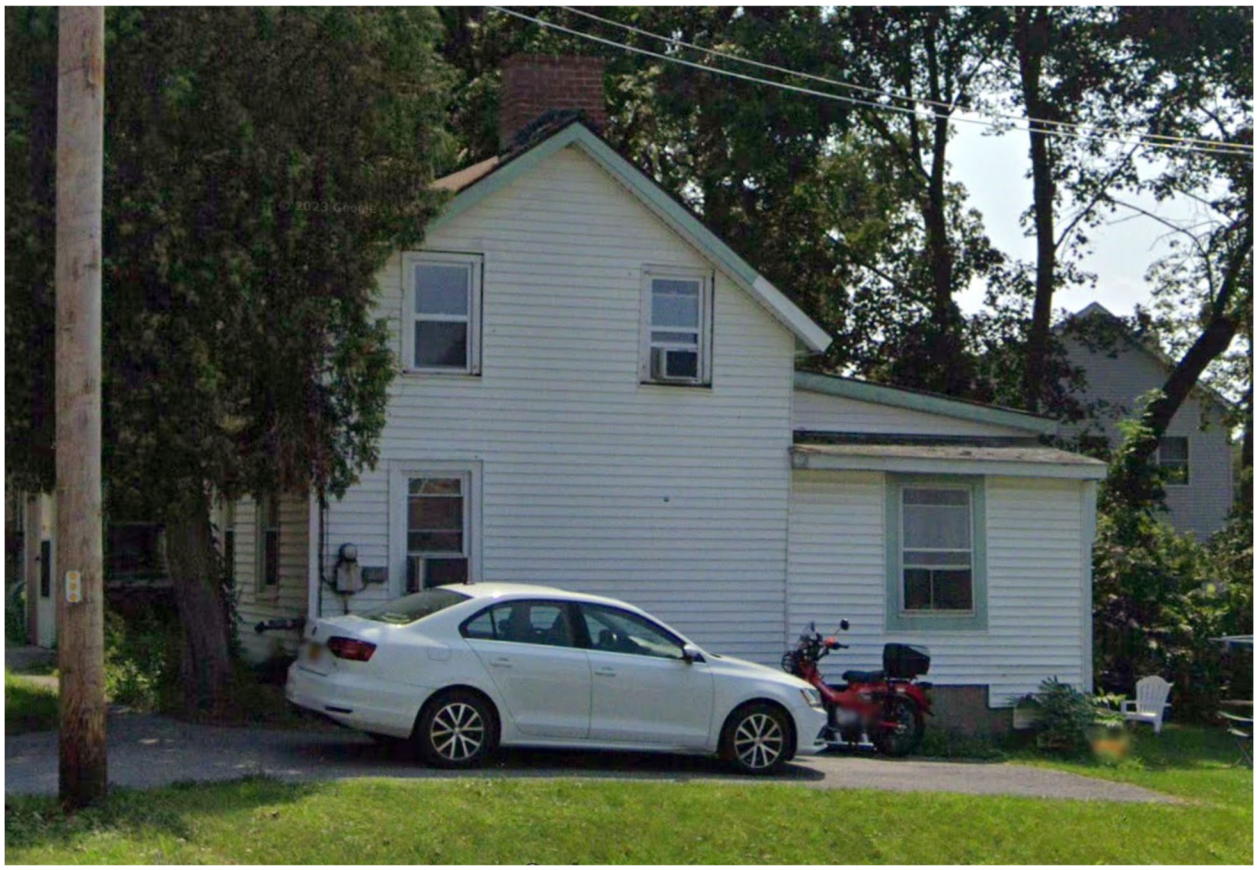
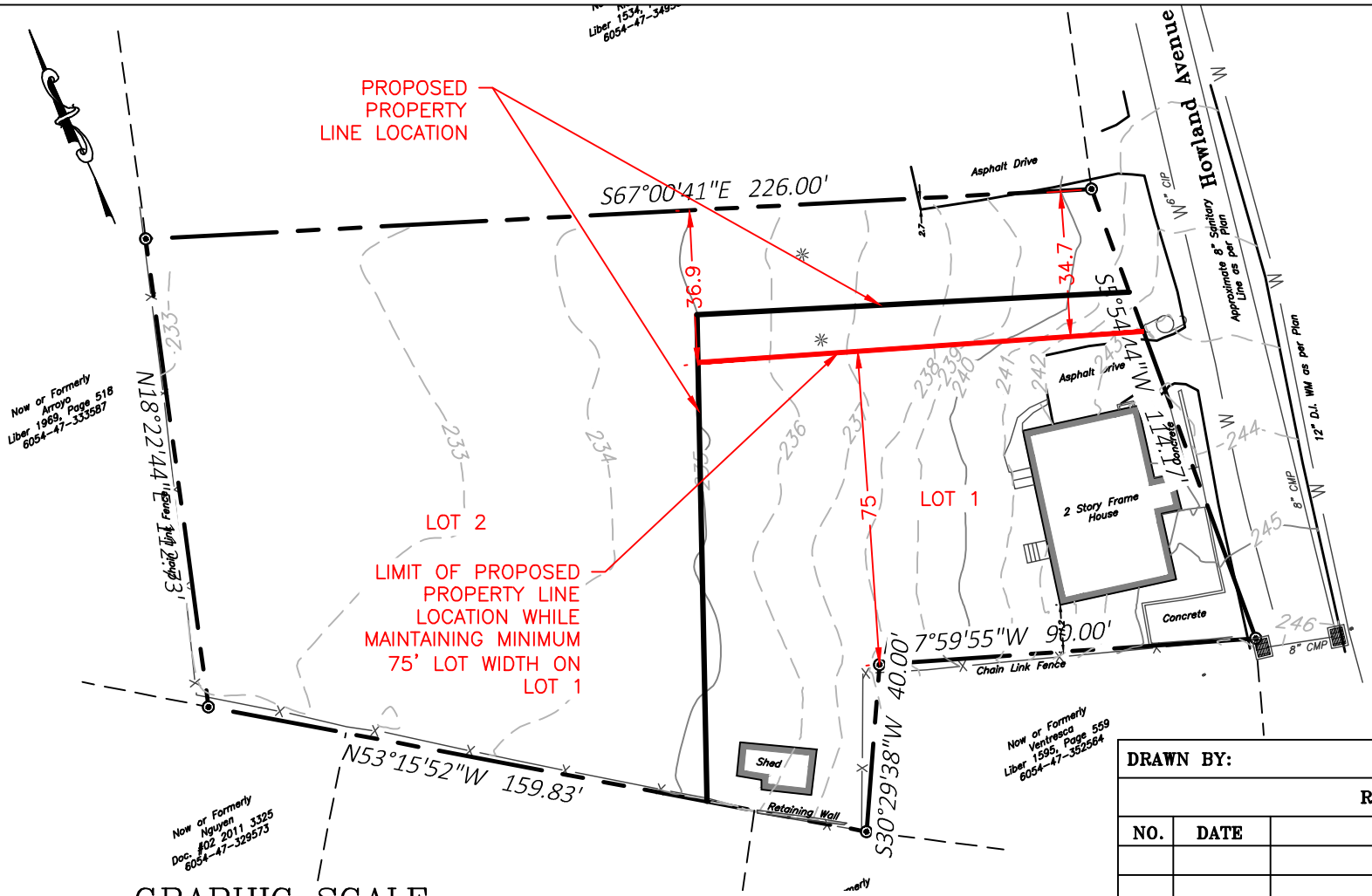


Photo 6 - View of Sewer Line in Basement

Photo 7 - View of Sewer Line in Basement

Photo 8 - View of sewer Vent and Cleanout at Building Front



GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

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

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

SEAL

EXHIBIT A

39 HOWLAND AVENUE SUBDIVISION

39 HOWLAND AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-47-345576

JOB #:	2024:010
DATE:	4/3024
SCALE:	1"=40'
TITLE:	EX A
SHEET:	1 OF 1

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

39 HOWLAND AVENUE SUBDIVISION

RESIDENTIAL SUBDIVISION

39 HOWLAND AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

PARCEL INFORMATION:
TAX ID: 6054-47-345576
TOTAL LOT AREA: ±0.68 ACRES
ZONING DISTRICT: R1-7.5

PROJECT INFORMATION:	
PARCEL OWNER:	JOHN VERGARA; 39 HOWLAND AVENUE, BEACON, NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	39 HOWLAND AVENUE, BEACON, NY 12508
TAX PARCEL ID:	6054-47-345576
PARCEL AREA:	±0.68-ACRE
WATER SUPPLY:	MUNICIPAL (EXISTING RESIDENCE), PROPOSED MUNICIPAL (FOR NEW RESIDENCE)
SEWAGE DISPOSAL:	MUNICIPAL (EXISTING RESIDENCE), PROPOSED MUNICIPAL (FOR NEW RESIDENCE)

SITE LOCATION MAP SCALE: 1" = 200'

ADJOINING OWNERS
PARCEL: OWNER & ADDRESS
1. BRANDON PERKINS, 33-42 87TH STREET, JACKSON HEIGHTS, NY 11372
2. DIMAS ARROYO, 47 ALICE STREET, BEACON, NY 12508
3. JOHN FLYNN JR, 49 ALICE STREET, BEACON, NY 12508
4. ANDREW J. JOHNSON, 78 CATHERINE STREET, BEACON, NY 12508
5. GLENN A. RICHARDS, 27 HOWLAND AVENUE, BEACON, NY 12508
6. MARK E. SIMMONS, 28 HOWLAND AVENUE, BEACON, NY 12508
7. SUSAN WRIGHT, 497 FARMERS MILL ROAD, CARMEL, NY 10512
8. THOMAS J. BURNS, 40 HOWLAND AVENUE, BEACON, NY 12508
9. THOMAS J. BURNS, 40 HOWLAND AVENUE, BEACON, NY 12508
10. MARK V. LUCAS, 48 HOWLAND AVENUE, BEACON, NY 12508
11. MARIAN M. VENTRESCA, 43 HOWLAND AVENUE, BEACON, NY 12508
12. MATT P. CLIFTON, 78 ROBINSON STREET, BEACON, NY 12508
13. DENISE DEVORE, 68 ROBINSON STREET, BEACON, NY 12508
14. RYAN B. SEWING, 60 ROBINSON STREET, BEACON, NY 12508
15. KHIEM B. NGUYEN, 48 ROBINSON STREET, BEACON, NY 12508
16. TIMOLEON REGUSIS, 44 ROBINSON STREET, BEACON, NY 12508

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

DRAWING INDEX:
SHEET 1: COVER SHEET (CV-1)
SHEET 2: EXISTING CONDITIONS PLAN (XC-1)
SHEET 3: SUBDIVISION PLAN (SP-1)
SHEET 4: EROSION & SEDIMENT CONTROL PLAN (ESC-1)
SHEET 5: CONSTRUCTION DETAILS (CD-1)

REFERENCE DRAWING:
SHEET 1 OF 1 SUBDIVISION PLAT (PT-1)

OWNER/APPLICANT:
JOHN VERGARA
OWNER OF PROJECT PROPERTY
39 HOWLAND AVENUE
BEACON, NEW YORK 12508
PH: 845-309-5917

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

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.

_____ _____
JOHN VERGARA 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: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	4/30/24	PER PLANNING BOARD COMMENTS	CMB				

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STATE OF NEW YORK · ANDREW A. BOERNER · 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

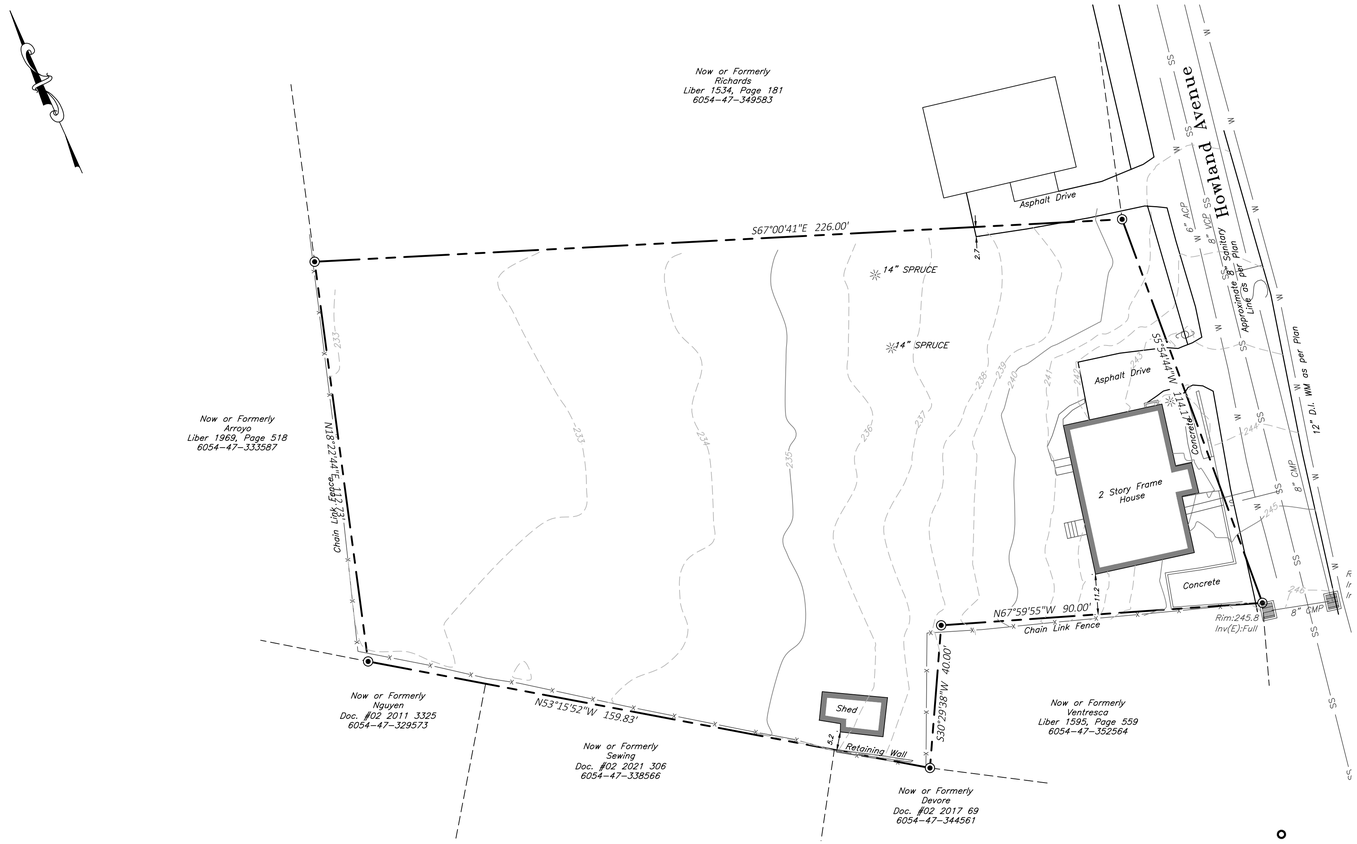
COVER SHEET

39 HOWLAND AVENUE SUBDIVISION

39 HOWLAND AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-47-345576

JOB #:	2024:010
DATE:	3/26/2024
SCALE:	AS SHOWN
TITLE:	CV-1
SHEET:	1 OF 5

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



LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS 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

PROJECT INFORMATION:

PARCEL OWNER:	JOHN VERGARA; 39 HOWLAND AVENUE, BEACON, NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	39 HOWLAND AVENUE, BEACON, NY 12508
TAX PARCEL ID:	6054-47-345576
PARCEL AREA:	±0.68-ACRE
WATER SUPPLY:	MUNICIPAL (EXISTING RESIDENCE), PROPOSED MUNICIPAL (FOR NEW RESIDENCE)
SEWAGE DISPOSAL:	MUNICIPAL (EXISTING RESIDENCE), PROPOSED MUNICIPAL (FOR NEW RESIDENCE)

MAP REFERENCES:

1. BOUNDARY AND TOPOGRAPHIC SURVEY PER "BOUNDARY & TOPOGRAPHIC SURVEY PREPARED FOR JOHN VERGARA" PREPARED BY BRENDAN JOHNSON PLS, DATED APRIL 10, 2024.

SURVEY NOTES:

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4. CERTIFICATIONS ON THIS BOUNDARY SURVEY MAP SIGNIFY THAT THE MAP WAS PREPARED IN ACCORDANCE WITH THE CURRENT EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, INC. THE CERTIFICATION IS LIMITED TO PERSONS FOR WHOM THE BOUNDARY SURVEY MAP IS PREPARED, TO THE TITLE COMPANY, TO THE GOVERNMENTAL AGENCY, AND TO THE LENDING INSTITUTION LISTED ON THIS BOUNDARY SURVEY MAP.
5. THE CERTIFICATIONS HEREIN ARE NOT TRANSFERABLE..
6. THE LOCATION OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS ARE NOT ALWAYS KNOWN AND OFTEN MUST BE ESTIMATED. IF ANY UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS EXIST OR ARE SHOWN, THE IMPROVEMENTS OR ENCROACHMENTS ARE NOT COVERED BY THIS CERTIFICATE.
7. SUBJECT TO THE FINDINGS OF A CURRENT TITLE SEARCH.
8. SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.
9. SUBJECT TO ANY RIGHT, TITLE OR INTEREST THE PUBLIC MAY HAVE FOR HIGHWAY USE.
10. BEARINGS AND NORTH SHOWN HEREON ARE REFERENCED TO NAD 83-NY EAST USING NYSNET RTN GPS.
11. CONTOUR INTERVAL IS ONE FOOT. ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD 88 USING NYSNET RTN GPS.

EXISTING CONDITIONS PLAN

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	4/30/24	PER PLANNING BOARD COMMENTS	CMB				

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STATE OF NEW YORK MICHAEL A. BOEHNKE 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

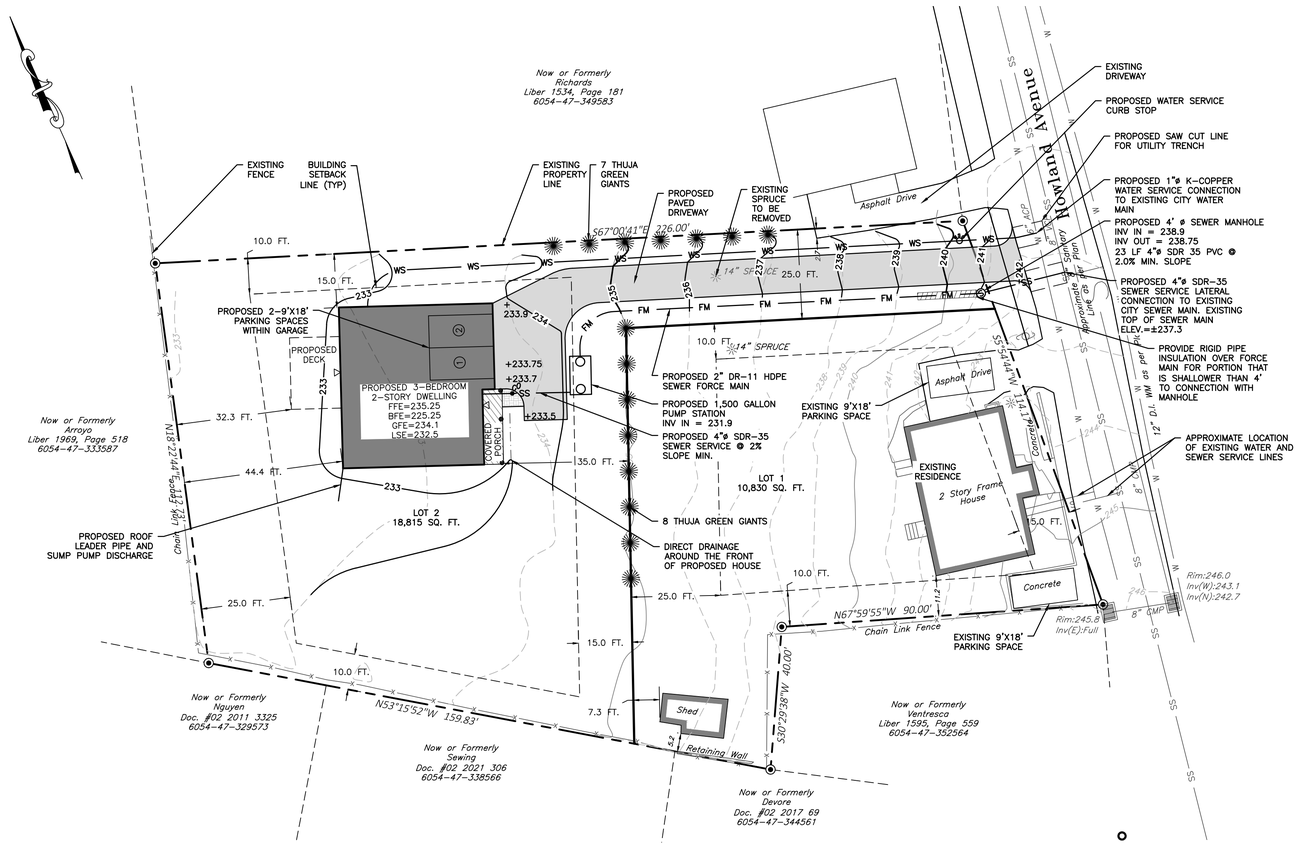
EXISTING CONDITIONS PLAN

39 HOWLAND AVENUE SUBDIVISION

39 HOWLAND AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-47-345576

JOB #:	2024:010
DATE:	3/26/2024
SCALE:	1" = 20'
TITLE:	XC-1
SHEET:	2 OF 5

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



SUBDIVISION PLAN

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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 1"ø K-COPPER ON LOT 2.
6. THE SEWER SERVICE LINE ON LOT 2 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 LOCATION ON PLAN.
10. SUMP PUMP TO BE PROVIDED FOR FOOTING DRAINS, IF NECESSARY ON PROPOSED LOT 2. THE TYPE OF PUMP AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT. BACKFLOW PREVENTION DEVICES SHALL BE PLACED ON THE FOOTING DRAINS TO PREVENT BACKFLOW INTO THE FOOTING DRAIN.
11. THE PROPOSED DRIVEWAY SIGHT DISTANCE SHALL BE IN COMPLIANCE WITH THE CITY OF BEACON'S 192-9(B) CODE AND THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS. THE STATE UTILIZES THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) GUIDELINES FOR INTERSECTION SIGHT DISTANCES. FOR ROADS WITH A SPEED LIMIT OF 30 MPH, AASHTO DESIGN TABLES CALL FOR A SIGHT DISTANCE OF 290 FEET TO THE LEFT AND 335 FEET TO THE RIGHT. THE MEASURED SIGHT DISTANCE IS AS FOLLOWS:

    PROPOSED LOT 2: SLSD LEFT = ±475 FEET TO THE INTERSECTION WITH EATS MAIN STREET. SLSD RIGHT = ±325 FEET TO THE STOP SIGN FOR THE SOUTHBOUND LANE OF HOWLAND AVENUE AT THE INTERSECTION WITH ROBINSON STREET. STOPPING SIGHT DISTANCE (SSD) WAS OBSERVED TO BE ±275 FEET WHEN APPROACHING THE PROPOSED DRIVEWAY FROM THE SOUT, AND ±455 FEET WHEN APPROACHING THE DRIVEWAY FROM THE NORTH.

12. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS, STORM SEWER LINES, SANITARY MANHOLES, SEWER LINES, WATERLINES, AND UNDERGROUND UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS.
13. THE CONTRACTOR SHALL EXCAVATE TEST PITS ON HOWLAND AVENUE AT THE PROPOSED CONNECTION POINTS WITH THE EXISTING WATER AND SEWER SERVICE LINES FROM PROPOSED LOT 2 TO VERIFY THE LOCATION AND DEPTHS OF THE EXISTING LINES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER OF ANY CONFLICTS OR OTHER ISSUES WITH THE SERVICE LINES.
14. BEDROCK SHALL REMOVED BY MECHANICAL MEANS. NO BLASTING SHALL BE PERMITTED WITHOUT APPROVAL FROM THE BUILDING DEPARTMENT.
15. THE APPLICANT/APPLICANT'S PLUMBER SHALL ACQUIRE WATER METERS AND MXU UNITS (SIGNAL SENDING AND RECEIVING UNIT) FOR THE AMI SYSTEM (ADVANCED METERING INFRASTRUCTURE) FROM THE CITY OF BEACON WATER DEPARTMENT. THE MXU UNIT SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING AND SHALL BE LOCATED 2 TO 3 FEET ABOVE THE EXTERIOR GROUND ELEVATION.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- EXISTING ROOF LEADER
- EXISTING CATCH BASIN
- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S PROPOSED SEWER LINE
- SS SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W PROPOSED WATER LINE
- WS WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

UTILITY NOTES:

1. ALL WATER & SEWER CONNECTIONS SHALL COMPLY WITH CITY WATER AND SEWER DISTRICT REQUIREMENTS.
2. THE PROPOSED BUILDING SHALL BE SET AT SUCH ELEVATION TO ENSURE GRAVITY FLOW FROM THE RAW SEWER LINE TO THE POINT OF CONNECTION WITH THE EXISTING SEWER MAIN, WHILE MAINTAINING PROPER EARTH COVER ABOVE ALL PIPING.
3. NO CELLAR, ROOF, OR FOOTING DRAINS SHALL BE DISCHARGED INTO THE SANITARY SEWER SYSTEM.
4. EXISTING SEWER INFORMATION TAKEN FROM A RECORD PLAN ENTITLED "RECORD PLAN WATER SUPPLY PROJECT CITY OF BEACON", PREPARED BY LANC & TULLY ENGINEERING AND SURVEYING P.C., DATED JANUARY 1993, LAST REVISED OCTOBER 18, 1995. ELEVATIONS AND LOCATION SHALL NOT BE ASSUMED ACCURATE.
5. THE CONTRACTOR SHALL PERFORM INVESTIGATIVE TEST PITS TO VERIFY THE EXISTING SEWER DEPTH AND PIPE CONDITION PRIOR TO CONSTRUCTING THE GRAVITY SEWER MANHOLE IN LOT 2 TO ENSURE GRAVITY FLOW CAN BE ACHIEVED.

GENERAL CONSTRUCTION NOTES:

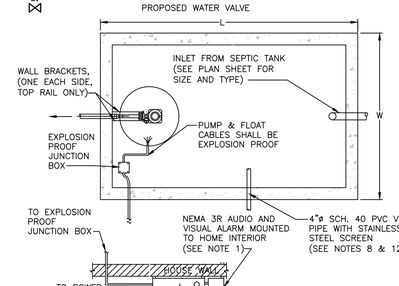
1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.
2. WATER, SEWER AND STORM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS. ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE 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.

SCHEDULE OF REGULATIONS AND LOT CONFORMANCE TABLE (R1-7.5 ZONING DISTRICT):

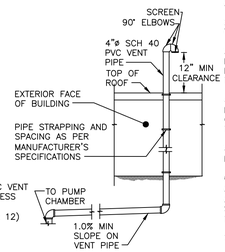
PARAMETER:	PERTAINING TO:	REQUIRED	PROPOSED LOT 1	PROPOSED LOT 2
MINIMUM LOT SIZE AREA[h]	AREA (SQ. FEET)	7,500 SQ. FT.	10,830 SQ. FT.	18,815 SQ. FT.
	PER UNIT (SQ. FEET)	7,500 SQ. FT.	10,830 SQ. FT.	18,815 SQ. FT.
	WIDTH (FEET)	75 FEET	84.6 FEET	126.4 FEET
	DEPTH (FEET)	100 SQ.FT.	109.1 FEET	129.1 FEET
MINIMUM YARDS	FRONT	15 FEET	4.5 FEET*	25.0 FEET
	SIDE	10 FEET	11.0 FEET	37.1 FEET
	REAR	25 FEET	72.2 FEET	71.4 FEET
MAXIMUM HEIGHT OF MAIN BUILDING		2.5 STORIES /35 FEET	EXISTING	2.5 STORIES /35FEET
MAXIMUM PERCENT BUILDING COVERAGE		30%	11.6%	8.0%
MAXIMUM UNITS PER BUILDING		1	1 (EXISTING)	1

NOTES:
*PRE-EXISTING NON CONFORMING

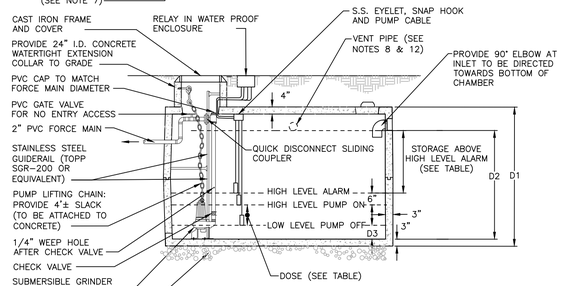
h) FOR ALL DEVELOPMENT PROPOSALS INVOLVING A TOTAL LOT AREA OF MORE THAN THREE ACRES WITHIN AN R1, RD, OR FISHKILL CREEK DEVELOPMENT ZONING DISTRICT, THE LOT AREA PER DWELLING UNIT CALCULATION SHALL FIRST DEDUCT ANY LOT AREA COVERED BY SURFACE WATER, WITHIN A FEDERAL REGULATORY FLOODWAY, WITHIN A STATE OR FEDERALLY REGULATED WETLAND, OR WITH EXISTING, PREDEVELOPMENT VERY STEEP SLOPES OF 25% OR MORE AS DEFINED IN § 223-63.



PLAN VIEW



VENT DETAIL



CROSS SECTION VIEW

PUMP CHAMBER NOTES

1. THREE FLOAT SWITCHES SHALL BE INSTALLED: PUMP ON, PUMP OFF, AND HIGH ALARM. VISIBLE AND AUDIBLE ALARMS SHALL BE PROVIDED. THE ALARMS SHALL BE LOCATED INSIDE THE HOME, CLEARLY VISIBLE AND AUDIBLE.
2. ALL ELECTRICAL WORK AND MATERIAL FOR PUMP INSTALLATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE.
3. AN ELECTRICAL UNDERWRITER'S CERTIFICATE FOR THE PUMP CHAMBER MUST BE PROVIDED TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH PRIOR TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH CONDUCTING A FINAL INSPECTION ON THE PUMP CHAMBER.
4. THERE SHALL BE A MINIMUM OF 2.5' COVER OVER THE CONDUIT CONVEYING THE FLOAT PUMP CABLES AND CONTROL WIRING. CONDUITS FROM ALARM BOX AND CONTROL PANEL TO RELAY PANEL AT PUMP CHAMBER SHALL SHARE THE SAME TRENCH.
5. PROVIDE ADDITIONAL CONDUIT FOR CONTROL WIRING AS PER THE MANUFACTURERS RECOMMENDATIONS. MINIMUM COVER SHALL BE 2.5'.
6. AN ALUMINUM WARNING PLATE SHALL BE RIVETED OR OTHERWISE PERMANENTLY ATTACHED TO THE CHAMBER COVER. THE PLATE SHALL BE A MINIMUM OF 12"x12" AND SHALL BE ENGRAVED WITH THE FOLLOWING LANGUAGE: "WARNING - CONFINED SPACE - ENTRY PROHIBITED WITHOUT AUTHORIZATION - CALL OWNER FOR APPROVAL TO ACCESS".
7. CONTROL PANELS SHALL BE LOCATED WITHIN THE HOME.
8. 4" ø SDR PVC SCREENED VENT SHALL EXTEND TO HOME ROOF LINE (REFER TO NOTE 12).
9. A WATER TIGHTNESS TEST SHALL BE COMPLETED BY THE CONTRACTOR, WITNESSED BY THE ENGINEER, AND SHALL INCLUDE FILLING THE TANK AND MEASURING WATER LEVEL.
10. CONTRACTOR SHALL CAULK INLET AND OUTLET JOINTS AND OTHER CONDUIT PENETRATIONS.
11. INSTALL STAINLESS STEEL GUIDE RAIL FOR PUMP REMOVAL AND MAINTENANCE.
12. LOCATION OF 4" DIA. SDR PVC VENTILATION PIPE SHALL BE APPROVED BY THE OWNER AND SHALL PROVIDE POSITIVE SLOPE TO SURFACE (IE: NO DIPS OR SAGS ALLOWED). THE INVERT OF THE VENT PIPE SHALL MATCH INLET INVERT. THE VENT PIPE SHALL BE SECURELY MOUNTED TO THE EXTERIOR OF THE HOME AND SHALL VENT A MINIMUM OF 12" ABOVE ROOF LINE. VENT PIPE AND BRACKETS TO MATCH EXTERIOR HOUSE COLOR. HOMEOWNER HAS THE OPTION TO TIE VENT TO INTERIOR VENTING PIPING.
13. ALL ELECTRIC SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION.
14. A PROFESSIONAL ENGINEER SHALL CERTIFY INSTALLATION AND TESTING OF PUMP CHAMBER TO DUTCHESS COUNTY DEPARTMENT OF HEALTH.
15. PRE-CAST PUMP CHAMBER SHOWN IS A 1,000 GALLON PUMP CHAMBER MODEL GT 1000, BY WOODARDS CONCRETE PRODUCTS, INC. 629 LYBOLT RD, BULLVILLE, NY (845) 361-3471.
16. PROVIDE AN ALL WEATHER JUNCTION BOX WITH AN OUTLET AND SCREWED COVER AT OR ABOVE GRADE AT THE PUMP CHAMBER TO ALLOW FOR A PLUG IN CONNECTION FOR THE PUMP.
17. THE 1.5" DISCHARGE FROM THE PUMP SHALL BE FITTED WITH A 1.5"-2" REDUCER TO THE FORCEMAIN.

PUMP CHAMBER DIMENSIONS							*DOSE		STORAGE (2 DAYS)					
RIM ELEVATION	LENGTH OF FORCE MAIN PIPE (FT.)	PIPE VOLUME (GAL)	REQ'D DOSE (GAL)	W	L	D1	D2	D3	DEPTH (IN)	VOLUME (GAL)	REQ'D (GAL)	DEPTH PROVIDED (IN)	VOLUME PROVIDED (GAL)	PUMP MAKE AND MODEL	FORCE MAIN SIZE (IN)	NO. OF PUMPS
234.5	121	19.7	209.3	5'-11"	10'-9"	5'-10"	51"	8"	7"	209.3	660	29	866	PRG101 SERIES 101 GRINDER PUMP	2.0	1

PUMP CHAMBER DETAIL
NOT TO SCALE

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	4/30/24	PER PLANNING BOARD COMMENTS	CMB				

Dig Safely. New York Call 811 before you dig

STATE OF NEW YORK MICHAEL A. BOBENKO 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

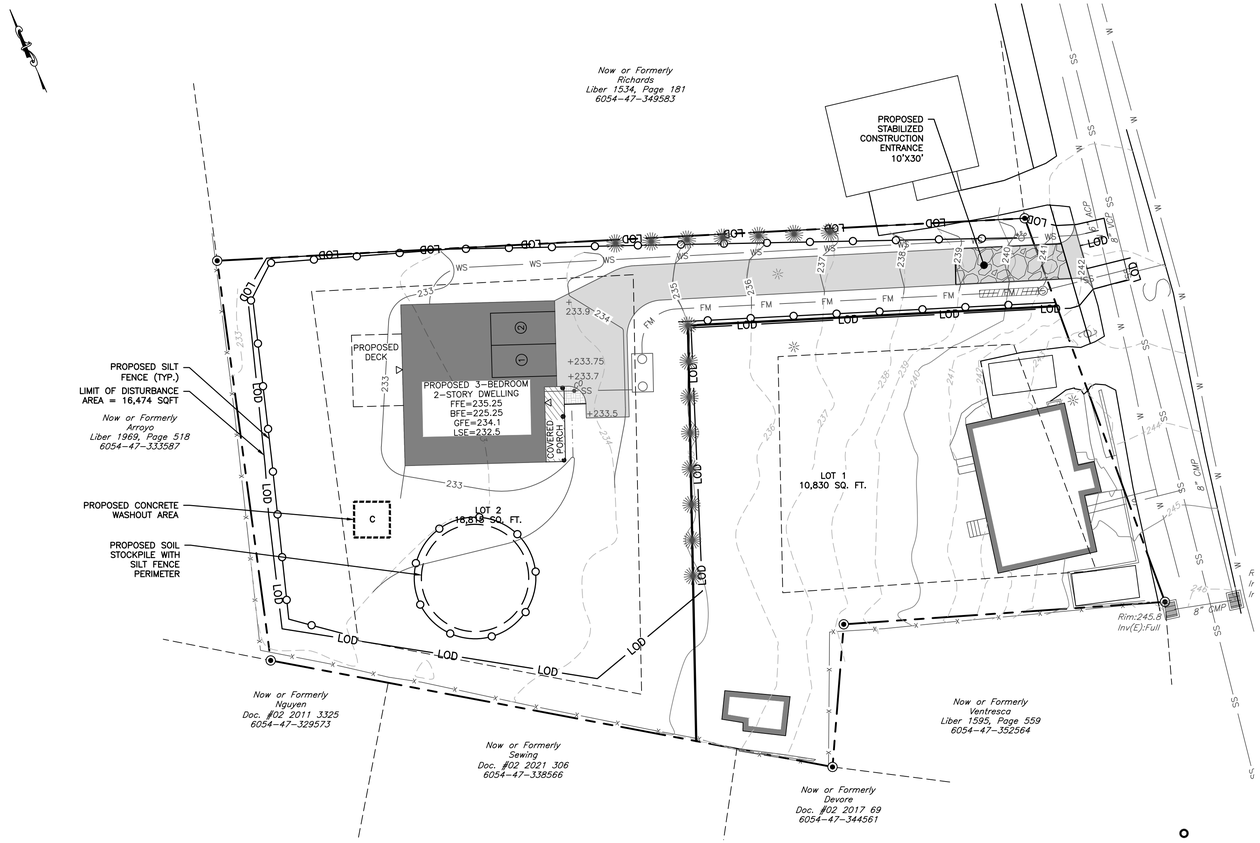
SUBDIVISION PLAN

39 HOWLAND AVENUE SUBDIVISION

39 HOWLAND AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-47-345576

JOB #: 2024:010
DATE: 3/26/2024
SCALE: 1" = 20'
TITLE: SP-1
SHEET: 3 OF 5

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



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

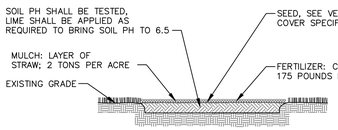
GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- 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
- RL 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
- PROPOSED SILT FENCE
- LOD PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CATCH BASIN INLET PROTECTION
- PROPOSED CONSTRUCTION ENTRANCE



TEMPORARY SEEDING DETAIL
NOT TO SCALE

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

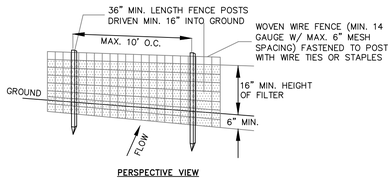
PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

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.

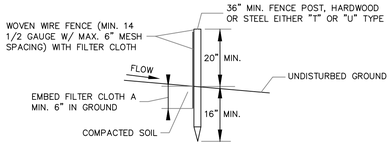
SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE FENCE. IF FENCE FABRIC 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.



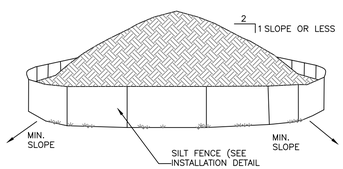
PERSPECTIVE VIEW



SECTION VIEW

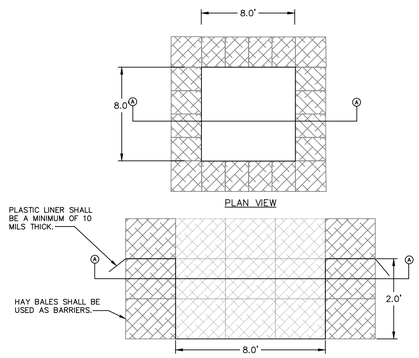
NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED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

SILT FENCE DETAIL
NOT TO SCALE



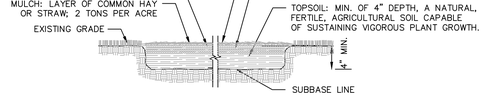
NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE

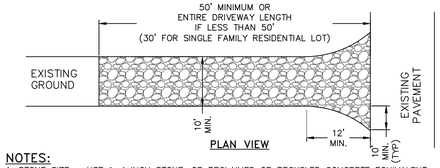


NOTES:
1. WASHOUT STATION SHALL BE LOCATED 100' FROM ANY STORMWATER FEATURE ON SITE OR NATURAL WATERWAYS OR WETLANDS.
2. INSPECT WASHOUT STATION DAILY AND REPLACE PLASTIC LINER WHEN ANY RIPS OR TEARS ARE OBSERVED.
3. REPLACE WASHOUT STATION WHEN IT IS AT 75% OF ITS CAPACITY WITH HARDENED MATERIAL.
4. WATER ACCUMULATION IN WASHOUT AREA FROM RAINWATER SHALL BE PUMPED FROM THE STATION INTO A GRASSED AREA.

CONCRETE WASHOUT STATION DETAIL
NOT TO SCALE



TOPSOIL SEED, FERTILIZER AND MULCH DETAIL
NOT TO SCALE



NOTES:
1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS - NOT LESS THAN SIX (6) INCHES.
3. WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO LARGE COMMERCIAL OF RESIDENTIAL 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

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	4/30/24	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
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PH: 845-440-6926

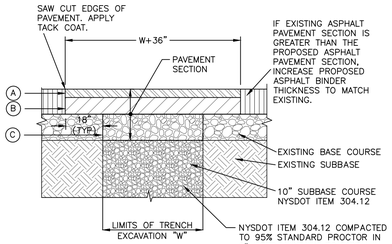
EROSION & SEDIMENT CONTROL PLAN

39 HOWLAND AVENUE SUBDIVISION

39 HOWLAND AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-47-345576

JOB #:	2024:010
DATE:	3/26/2024
SCALE:	1" = 20'
TITLE:	ESC-1
SHEET:	4 OF 5

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



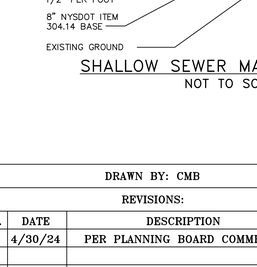
LEGEND

(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.

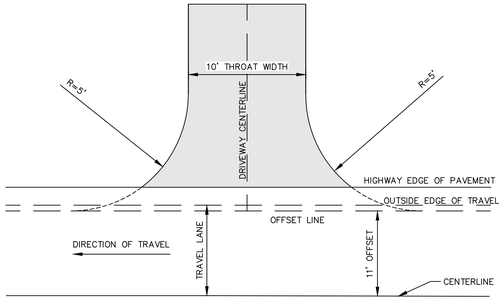
PAVEMENT RESTORATION DETAIL
NOT TO SCALE



NOTES:

1. 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.

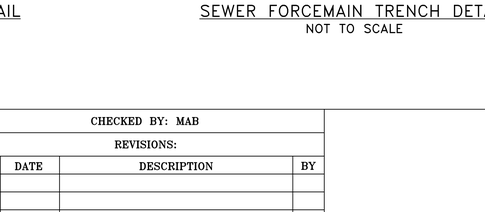
WATER SHUT–OFF VALVE DETAIL
NOT TO SCALE



NOTES:

1. REFER TO PAVEMENT SECTION DETAIL FOR PAVEMENT REQUIREMENTS.
2. GRADE DRIVEWAY AWAY FROM CITY STREET AT SAME PITCH AS EXISTING PAVED SHOULDER FOR A MINIMUM DISTANCE OF 10'.
3. CUT/FILL SLOPES SHALL BE CONSTRUCTED NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL (2:1).

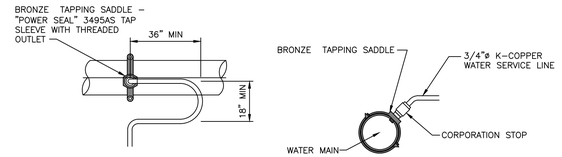
RESIDENTIAL DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE



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.

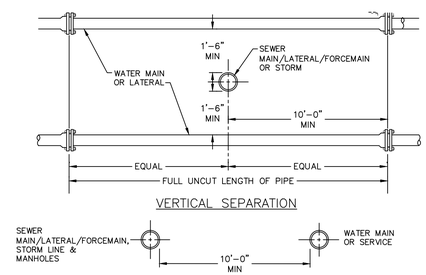
SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



NOTES:

1. A MINIMUM 5' COVER SHALL BE PROVIDED ON THE WATER SERVICE LINE (CONDITIONED ON ACTUAL 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.

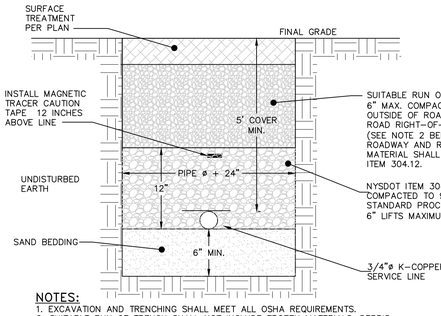
WATER SERVICE CONNECTION DETAIL
NOT TO SCALE



NOTE:

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

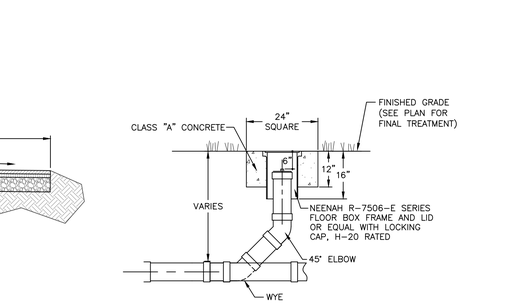
WATER LINE SEPARATION DETAIL
NOT TO SCALE



NOTES:

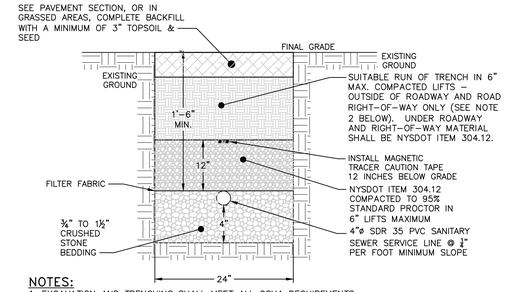
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL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



PAVED DRIVEWAY SECTION DETAIL
NOT TO SCALE

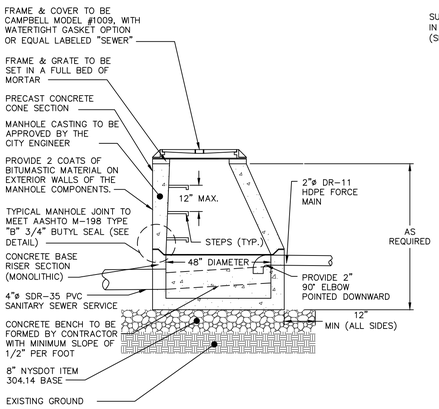
CLEANOUT DETAIL
NOT TO SCALE



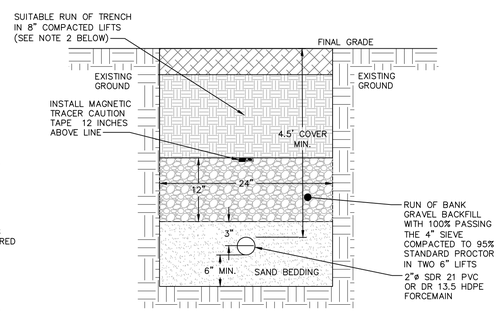
NOTES:

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

SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



SHALLOW SEWER MANHOLE DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, 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.

SEWER FORCEMAIN TRENCH DETAIL
NOT TO SCALE

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	4/30/24	PER PLANNING BOARD COMMENTS	CMB				

Dig Safely. New York Call 811 before you dig.

STATE OF NEW YORK MICHAEL A. BENSEN 098456 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

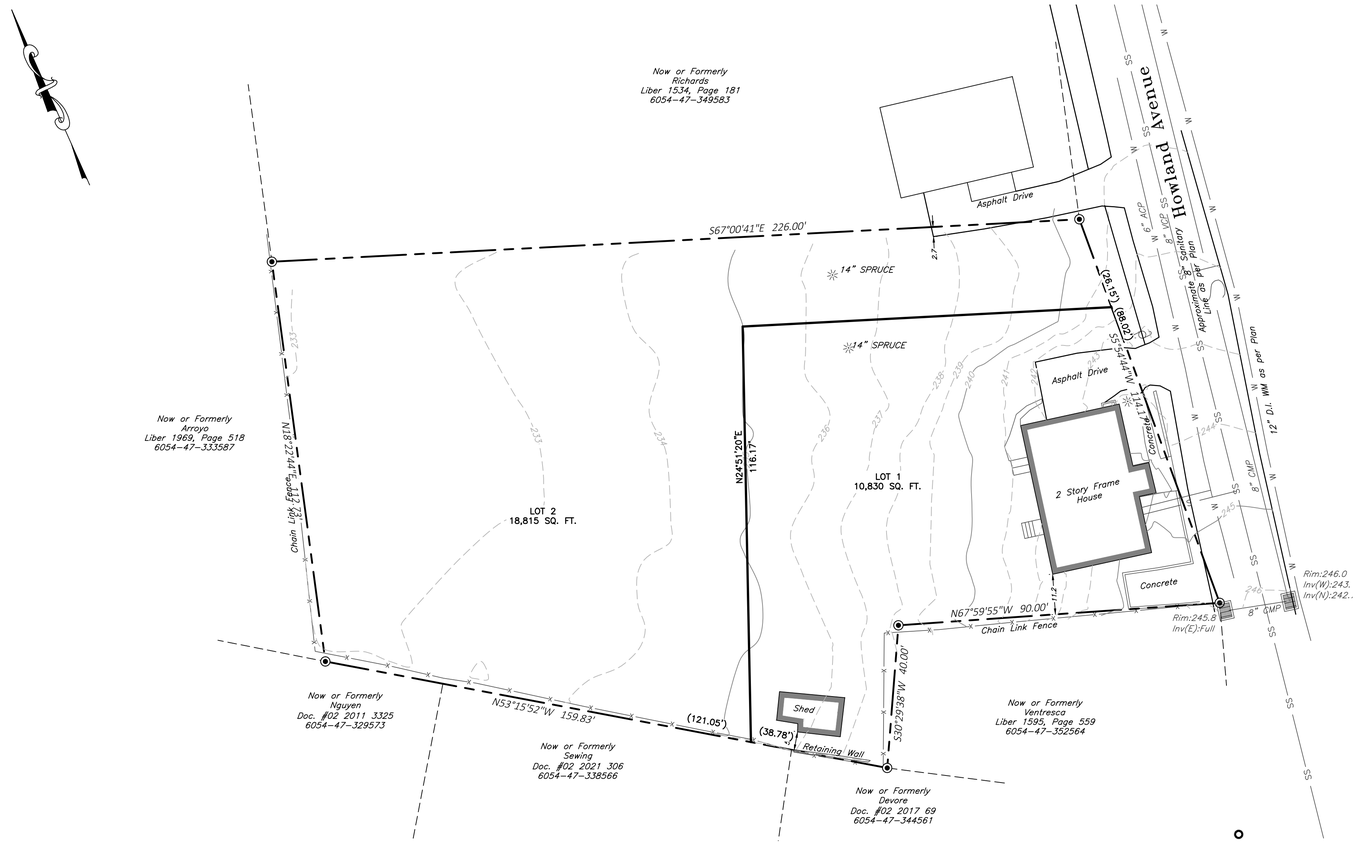
CONSTRUCTION DETAILS

39 HOWLAND AVENUE SUBDIVISION

39 HOWLAND AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054–47–345576

JOB #:	2024:010
DATE:	3/26/2024
SCALE:	AS SHOWN
TITLE:	CD–1
SHEET:	5 OF 5

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



ADJOINING OWNERS

PARCEL: OWNER & ADDRESS
1. BRANDON PERKINS, 33-42 87TH STREET, JACKSON HEIGHTS, NY 11372
2. DIMAS ARROYO, 47 ALICE STREET, BEACON, NY 12508
3. JOHN FLYNN JR, 49 ALICE STREET, BEACON, NY 12508
4. ANDREW J. JOHNSON, 78 CATHERINE STREEY, BEACON, NY 12508
5. GLENN A. RICHARDS, 27 HOWLAND AVENUE, BEACON, NY 12508
6. MARK E. SIMMONS, 28 HOWLAND AVENUE, BEACON, NY 12508
7. SUSAN WRIGHT, 497 FARMERS MILL ROAD, CARMEL, NY 10512
8. THOMAS J. BURNS, 40 HOWLAND AVENUE, BEACON, NY 12508
9. THOMAS J. BURNS, 40 HOWLAND AVENUE, BEACON, NY 12508
10. MARK V. LUCAS, 48 HOWLAND AVENUE, BEACON, NY 12508
11. MARIAN M. VENTRESCA, 43 HOWLAND AVENUE, BEACON, NY 12508
12. MATT P. CLIFTON, 78 ROBINSON STREET, BEACON, NY 12508
13. DENISE DEVORE, 68 ROBINSON STREET, BEACON, NY 12508
14. RYAN B. SEWING, 60 ROBINSON STREET, BEACON, NY 12508
15. KHIEM B. NGUYEN, 48 ROBINSON STREET, BEACON, NY 12508
16. TIMOLEON REGUSIS, 44 ROBINSON STREET, BEACON, NY 12508

PRELIMINARY SUBDIVISION PLAT

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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.

_____ _____
JOHN VERGARA DATE

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

SCHEDULE OF REGULATIONS AND LOT CONFORMANCE TABLE (R1-7.5 ZONING DISTRICT):

PARAMETER:	PERTAINING TO:	REQUIRED	PROPOSED LOT 1	PROPOSED LOT 2
MINIMUM LOT SIZE AREA[h]	AREA (SQ. FEET)	7,500 SQ. FT.	10,830 SQ. FT.	18,815 SQ. FT.
	PER UNIT (SQ. FEET)	7,500 SQ. FT.	10,830 SQ. FT.	18,815 SQ. FT.
	WIDTH (FEET)	75 FEET	84.6 FEET	126.4 FEET
	DEPTH (FEET)	100 SQ.FT.	109.1 FEET	129.1 FEET

h) FOR ALL DEVELOPMENT PROPOSALS INVOLVING A TOTAL LOT AREA OF MORE THAN THREE ACRES WITHIN AN R1, RD, OR FISHKILL CREEK DEVELOPMENT ZONING DISTRICT, THE LOT AREA PER DWELLING UNIT CALCULATION SHALL FIRST DEDUCT ANY LOT AREA COVERED BY SURFACE WATER, WITHIN A FEDERAL REGULATORY FLOODWAY, WITHIN A STATE OR FEDERALLY REGULATED WETLAND, OR WITH EXISTING, PREDEVELOPMENT VERY STEEP SLOPES OF 25% OR MORE AS DEFINED IN § 223-63.

DCDBCH 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

SITE LOCATION MAP SCALE: 1" = 600'

PROJECT INFORMATION:

PARCEL OWNER:	JOHN VERGARA; 39 HOWLAND AVENUE, BEACON, NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	39 HOWLAND AVENUE, BEACON, NY 12508
TAX PARCEL ID:	6054-47-345576
PARCEL AREA:	±0.68-ACRE
WATER SUPPLY:	MUNICIPAL (EXISTING RESIDENCE), PROPOSED MUNICIPAL (FOR NEW RESIDENCE)
SEWAGE DISPOSAL:	MUNICIPAL (EXISTING RESIDENCE), PROPOSED MUNICIPAL (FOR NEW RESIDENCE)

MAP REFERENCES:

1. BOUNDARY AND TOPOGRAPHIC SURVEY PER "BOUNDARY & TOPOGRAPHIC SURVEY PREPARED FOR JOHN VERGARA" PREPARED BY BRENDAN JOHNSON PLS, DATED APRIL 10, 2024.

SURVEY NOTES:

1. COPYRIGHT JOHNSON SURVEYING. ALL RIGHTS RESERVED. REPRODUCTION OR COPYING OF THIS DOCUMENT MAY BE A VIOLATION OF COPYRIGHT LAW UNLESS PERMISSION OF THE AUTHOR AND / OR COPYRIGHT HOLDER IS OBTAINED.
2. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
3. ONLY BOUNDARY SURVEY MAPS WITH THE SURVEYOR'S EMBOSSED OR RED INKED SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE SURVEYOR'S ORIGINAL WORK AND OPINION. A COPY OF THIS DOCUMENT WITHOUT A PROPER APPLICATION OF THE SURVEYOR'S EMBOSSED OR RED INKED SEAL SHOULD BE ASSUMED TO BE AN UNAUTHORIZED COPY.
4. CERTIFICATIONS ON THIS BOUNDARY SURVEY MAP SIGNIFY THAT THE MAP WAS PREPARED IN ACCORDANCE WITH THE CURRENT EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, INC. THE CERTIFICATION IS LIMITED TO PERSONS FOR WHOM THE BOUNDARY SURVEY MAP IS PREPARED, TO THE TITLE COMPANY, TO THE GOVERNMENTAL AGENCY, AND TO THE LENDING INSTITUTION LISTED ON THIS BOUNDARY SURVEY MAP.
5. THE CERTIFICATIONS HEREIN ARE NOT TRANSFERABLE..
6. THE LOCATION OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS ARE NOT ALWAYS KNOWN AND OFTEN MUST BE ESTIMATED. IF ANY UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS EXIST OR ARE SHOWN, THE IMPROVEMENTS OR ENCROACHMENTS ARE NOT COVERED BY THIS CERTIFICATE.
7. SUBJECT TO THE FINDINGS OF A CURRENT TITLE SEARCH.
8. SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.
9. SUBJECT TO ANY RIGHT, TITLE OR INTEREST THE PUBLIC MAY HAVE FOR HIGHWAY USE.
10. BEARINGS AND NORTH SHOWN HEREON ARE REFERENCED TO NAD 83-NY EAST USING NYSNET RTN GPS.
11. CONTOUR INTERVAL IS ONE FOOT. ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD 88 USING NYSNET RTN GPS.

TOTAL PARCEL AREA:

±29,645 SQ. FT. OR 0.681 ACRES

TAX MAP REFERENCE:

CITY OF BEACON TAX ID#: 6054-47-345576

WETLAND NOTE:

NO NYSDEC OR FEDERAL WETLANDS WERE FOUND ONSITE.

ENCROACHMENT NOTE:

THE FILING OF THIS PLAT DOES NOT CONSTITUTE ANY ENDORSEMENT, APPROVAL OR AUTHORIZATION OF ANY KIND FOR THE CONTINUATION OR REMOVAL OF ANY EXISTING ENCROACHMENTS ON THE SUBJECT PROPERTY.

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

DRAWN BY: CMB				CHECKED BY: MAB			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	4/30/24	PER PLANNING BOARD COMMENTS	CMB				

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

PRELIMINARY SUBDIVISION PLAT

39 HOWLAND AVENUE SUBDIVISION

39 HOWLAND AVENUE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-47-345576

JOB #:	2024:010
DATE:	3/26/2024
SCALE:	1" = 20'
TITLE:	PL-1
SHEET:	1 OF 1

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

SUE SERINO
COUNTY EXECUTIVE

LIVIA SANTIAGO-ROSADO, MD, FACEP
COMMISSIONER

ANTHONY J. RUGGIERO, MPA
ASSISTANT COMMISSIONER

DUTCHESS COUNTY GOVERNMENT
DEPARTMENT OF BEHAVIORAL & COMMUNITY HEALTH

April 26, 2024

RECEIVED
MAY 01 2024
By

City of Beacon Planning Board
John Gunn, Chair
One Municipal Plaza, Suite 1
Beacon, NY 12508

Re: Designation of Lead Agency in Accordance with SEQRA
39 Howland Avenue
Beacon, NY 12508
Tax ID: 6054-47-345576

Dear Mr. Gunn,

This department has received a Notice of SEQR Lead Agency Declaration (dated April 16, 2024; received April 19, 2024),

1. This Department has no objection to the City of Beacon Planning Board serving as the lead agent for SEQR, and requests that the undersigned continue to be notified of SEQR determinations, proceedings and hearings in this matter.
2. Detailed plans and specifications will have to be submitted to this Department by a New York State licensed professional for approval of proposed water supply and sewage disposal system arrangements. Reference is made to the Dutchess County Sanitary Code Articles 5, 16, and 19.

Should you find that we can be of assistance please contact us at (845) 486-3404.

Sincerely,

William 'Jay' Gieseler, PE
Senior Public Health Engineer
Environmental Health Services

cc: file 129307

LANC & TULLY
Engineering and Surveying, P.C.

May 13, 2024

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

RE: 39 Howland Ave – 2 Lot Subdivision
Tax No. 6054-47-345576
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding a 2-lot subdivision of the parcel located at 39 Howland Avenue:

- Correspondence from Hudson Land Design dated April 30, 2024.
- Inflow and Infiltration (I&I) Report, dated April 30, 2024, as prepared by Hudson Land Design.
- Engineer's Report titled "39 Howland Avenue Subdivision – Pump Chamber Design", dated April 30, 2024, as prepared by Hudson Land Design.
- 8 ½" x 11" plan titled "Exhibit A – 39 Howland Avenue Subdivision", dated April 30, 2024, as prepared by Hudson Land Design.
- Plan titled "Preliminary Subdivision Plat – 39 Howland Avenue Subdivision" with the latest revision date of April 30, 2024, as prepared by Hudson Land Design.
- Plan set titled "39 Howland Avenue Subdivision", consisting of Sheets 1 of 5 through 5 of 5, with the latest revision date of April 20, 2024, as prepared by Hudson Land Design.

The proposed project entails the subdivision of a 29,646± square foot (0.68± acre) parcel located at 39 Howland Avenue 2 lots, with proposed Lot 1 being 10,830 square feet in size with an existing single-family residence, and proposed Lot 2 being 18,815 square feet in size to allow for the construction of an additional single-family residence. The project is located in the R1-7.5 Zone. Based on our review of the above plans, we would like to offer the following comments:

<u>General Comments:</u>

1. An Inflow & Infiltration study of the existing site and building was conducted, and no illicit stormwater connections were found.

Preliminary Subdivision Plat:

1. The plat will need to be signed and sealed by a licensed Land Surveyor in the State of New York prior to final approval.

2. Prior to final approval, the word "Preliminary" shall be removed from the subdivision plat.

Subdivision Plan Set:

Sheet 3 of 5:

1. Information as to the upstream and downstream manholes on this section of sewer main shall also be provided on the plan, along with the distance between the manholes.

2. Consideration should be given to relocating the proposed sewage pump station to the north side of the house so as to prevent vehicles from parking over the structure or possible damage to the vent pipe from vehicles backing into it. It would also be more visually appealing not to have a vent stack located in the front yard. The water service could be shifted to come through the front of the house.

3. Note No. 1 for the pump station states that visible and audible alarms shall be provided for the pump station. The Engineer's Report notes that the alarms will be located on the house in a clearly visible and audible location. The plan shall show where these alarms are to be mounted.

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: Jennifer Gray, Esq.
Natalie Quinn, Planner
Bruce Flower, Building Inspector

KARC
PLANNING CONSULTANTS, INC.

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

FR: KARC Planning Consultants, Inc.

DATE: May 13, 2024

RE: 39 Howland Avenue Subdivision Application, John Vergara

I have reviewed the following revised and/or additional materials regarding the proposed subdivsision of 39 Howland Avenue:

- Cover letter by Hudson Land Design, dated April 30, 2024
- Engineer's Report by Hudson Land Design, dated April 30, 2024
- Inflow and Infiltration Report Hudson Land Design, dated April 30, 2024
- Exhibit A Sheet by Hudson Land Design, dated April 30, 2024
- Subdivision Plan Set (5 sheets) by Hudson Land Design, last revised April 30, 2024
- Preliminary Subdivision Plat (1 sheet) by Hudson Land Design, last revised April 30, 2024

Project Description:

The applicant is proposing subdivision of an existing 0.68 acre parcel (29,645 sq. ft.) at 39 Howland Avenue into two lots of record, Lot 1 (10,830 sq. ft.) and Lot 2 (18,815 sq. ft.). An existing single-family residence will be retained on Lot 1, with a new two-story single-family residence proposed on Lot 2. The property is located within the R1-7.5 zoning district, in which one-family detached dwellings are a permitted use.

Comments & Recommendations:

1. **Front of New Dwellings & Frontage**
   Section 223-12(N) requires that the front of any new one-family dwelling shall face the front lot line. The new dwelling proposed on subdivided Lot 2 technically faces the front property line, but due to the proposed flag shape of Lot 2, the dwelling is setback a significant distance from the road with minimal to no street presence. The applicant states that it is not feasible to bring the Lot 2 dwelling forward due to the fact that the parent lot maintains only 114.17 feet of frontage, which would not allow the creation of two lots compliant with the minimum 75-foot lot width.

   The existing lots on either side of 39 Howland Avenue are 65 feet and 50 feet in width. If the existing asphalt drive were to become a shared driveway, it may be possible to create two lots with frontages of 64.17 feet and 50 feet respectively, which would be in character with the neighboring properties. The Planning Board may wish to discuss their ability to modify the lot

width requirement under Section 195-6 *Modification of regulations* or the supportability of the applicant seeking an area variance.

2. All other previous comments have been addressed.

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

Natalie Quinn
Beacon Planning Consultant

Cc: Bruce Flower, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer
Michael Bodendorf, P.E., Project Engineer

City of Beacon Planning Board Agenda
05/14/2024

Title:

Continued review of application for Site Plan and Subdivision Approval, Mixed-Use Commercial and Residential, 45 Beekman Street, High Street, and High Street, submitted by Beekman Arts Center LLC and Bay Ridge Studios LLC.

ATTACHMENTS

45 Beekman & High St PB 5.14.24 Supplemental PB Submission with Site Plan & Architectural Plans.pdf

Lanc & Tully 45 Beekman 05-13-24 review.pdf

KARC Review PB_45 Beekman 2024.05.13.pdf

CUDDY +FEDER LLP

300 Westage Business Center, Suite 380
Fishkill, New York 12524
T 845 896 2229
F 845 896 3672
cuddyfeder.com

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

April 30, 2024

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

Re: Application for Site Plan & Subdivision Approval for Proposed Mixed-Use Development
Alternative Proposal Incorporating Excess Lands in Beekman Street Right-Of-Way
Premises: 45 Beekman Street, High Street, & High Street Beacon, New York
Tax Parcel IDs: (5955-19-706012, 5954-26-689990 & 5954-26-781983)

Dear Chairman Gunn and Members of the Planning Board:

On behalf of Beekman Arts Center LLC and Bay Ridge Studios LLC (the "Applicants"), the owners of the above-referenced Premises, we respectfully submit this letter in furtherance of an Application for Site Plan and Subdivision Approval (the "Application"), proposing to redevelop the Premises by constructing two (2) new mixed-use buildings that will be comprised of commercial (retail/office) on the first floors, together with multi-family residences on the upper floors (the "Project").

THE ALTERNATIVE MIXED-USE BUILDING PROGRAM:

By way of update since the Applicants' March 30th submission to this Board, the Applicants finally received confirmation from its title company that New York State Department of Transportation ("NYSDOT") owns the right-of-way areas that abut the Property along its Beekman Street and NYS Route 9D (North Avenue) frontages. The Applicants met with City Staff on April 12, 2024 to discuss these findings.

Accordingly, given the directives provided by this Board, and in response to comments from Dutchess County Planning, as well as from City Staff and Consultants, the Applicants have commenced outreach efforts with NYSDOT to determine whether there is an opportunity available to the Applicants to acquire title to a portion of the right-of-way area along Beekman Street (the "Surplus ROW Property") for utilization for the Project. The Applicant will provide this

Board with additional information upon receipt of same from NYSDOT and as the Applicants progress discussions regarding a potential conveyance of this Surplus ROW Property and the associated application process with NYSDOT.

In the meantime, for the Board's further consideration, the Applicants' design team has prepared an *alternative* building program layout in order to more fully assess the Project design and feasibility of further activating the Beekman Steet frontage utilizing the Surplus ROW Property. The alternative design maintains the Project's proposed two (2) four (4)-story mixed-use buildings comprising commercial spaces on the first floors, together with 64 dwelling units on the upper floors. As is more fully detailed in the enclosed revised Site Plan and Architectural Plans, the alternative design reconfigures both the Beekman and High Street Buildings by expanding the Beekman Building into the NYSDOT Surplus ROW Property along Beekman Street to align more closely with the public sidewalk and by reducing the High Street Building footprint into a rectangular design, as opposed to the former "home plate" configuration. As a result of these changes, the unit count in each building has shifted with the Beekman Building proposed to comprise 45 dwelling units and the High Street Building being comprised of 19 dwelling units, with the total number of dwelling units (64) remaining the same. Additionally, the first-floor commercial spaces in each Building have been expanded, with the Beekman Building comprising 11,663 square feet and the High Street building comprising 4,326 square feet. As a result, the subsurface and surface parking areas have also been updated to total 91 off-street spaces, where 83 spaces were previously proposed.

The Applicants look forward to presenting the alternative design depicted in the enclosed Site Plans to the Board at its May meeting date. As noted, this design is contingent upon the feasibility of the Applicants obtaining title to portions of the Surplus ROW Property along Beekman Street. Should the Applicants decide to proceed with this design, revised traffic and engineering studies will be provided for the Board's consideration in a future supplemental submission.

INDEX OF ENCLOSURES:

In support of this Application, enclosed please find five (5) copies of the following documents:

- Site Plan Sheet entitled "Sketch Site Plan", prepared by Colliers Engineering and Design, P.C., dated April 30, 2024; and
- Architectural Plan Set entitled "Site Plan Application", prepared by Aryeh Siegel, Architect, dated November 28, 2023, last revised April 30, 2024, numbered and titled as follows (unless otherwise noted):
    - Sheet 1 of 3 – Building Plans – Beekman Street (A-101);
    - Sheet 2 of 3 – Building Plans – Beekman Street (A-102); and
    - Sheet 3 of 3 – Building Plans – High Street. (A-103).

CONCLUSION:

We look forward to appearing at this Board's regular meeting on May 14th to introduce and discuss the alternative building program utilizing the portions of the NYSDOT's Surplus ROW Property along Beekman Street. In the meantime, should this Board or City Staff have any questions or comments with regard to the foregoing, please do not hesitate to contact us.

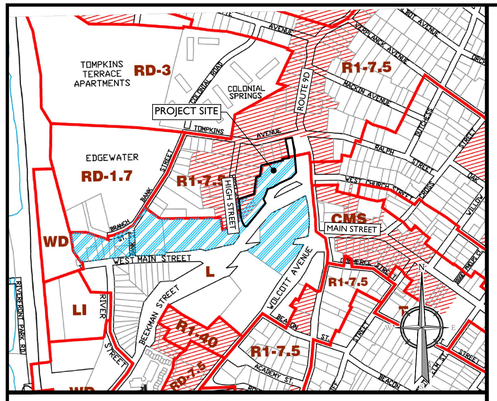
Thank you in advance for your consideration of this matter.

Very truly yours,

Taylor M. Palmer

Enclosures
cc: Jennifer L. Gray, Esq.
John Russo, P.E., Lanc & Tully Engineering & Surveying, P.C.
Natalie Quinn, KARC Planning Consultants, Inc.
Aryeh J. Siegel Architect
Colliers Engineering & Design, P.C.
Allison Fausner, Esq.

Site Plan



VICINITY MAP
SCALE: 1" = 500'
SOURCE: CITY OF BEACON ZONING MAP

ZONING DISTRICT:

L: (LINKAGE DISTRICT)
USE PERMITTED BY RIGHT: RETAIL
USE PERMITTED BY RIGHT: OFFICE
USE PERMITTED BY RIGHT: MULTIFAMILY DWELLING
-IF THE BUILDING FACES THE NORTH SIDE OF BEEKMAN STREET BETWEEN ROUTE 9D AND WEST MAIN STREET
-SUBJECT TO A REQUIREMENT THAT ANY DWELLING UNIT SHALL ONLY BE LOCATED ON THE UPPER STORIES OR AT LEAST 50 FEET BEHIND THE FACADE IN THE REAR PORTION OF THE GROUND FLOOR

HDLO: (HISTORIC DISTRICT AND LANDMARK OVERLAY ZONE)

TABLE OF BULK REQUIREMENTS

L - LINKAGE DISTRICT

MINIMUM	REQUIRED	PROVIDED	REMARKS
LANDSCAPED AREA	15%	35.4%	OK
LOT AREA	N/A	N/A	OK
LOT AREA PER UNIT	N/A	N/A	OK
LOT WIDTH	N/A	N/A	OK
LOT DEPTH	75 FT.	143 FT.	OK
FRONT YARD SETBACK	0 FT.	1 FT.	OK
SIDE YARD SETBACK	0 FT.	N/A	OK
REAR YARD SETBACK	25 FT.	46.7 FT.	OK
DISTANCE BETWEEN BUILDINGS SAME LOT	N/A	N/A	OK
MAXIMUM			
BUILDING HEIGHT	4 STORIES AND 48 FT.	4 STORIES AND ≤48 FT.	OK
BUILDING COVERAGE	N/A	N/A	OK
UNITS PER BUILDING	N/A	N/A	OK
FRONT YARD SETBACK	20 FT.	19.6 FT.	OK
SIDE YARD SETBACK	30 FT.	N/A	OK

ZONING DISTRICT:

R1-7.5: (ONE FAMILY RESIDENTIAL DISTRICT (7,500 SF/DWELLING))
NO USE PROPOSED IN R1-7.5 DISTRICT

TABLE OF BULK REQUIREMENTS

R1-7.5 - ONE FAMILY RESIDENTIAL DISTRICT

MINIMUM	REQUIRED	PROVIDED	REMARKS
LANDSCAPED AREA	15%	NO STRUCTURE PROPOSED IN R1-7.5 DISTRICT	OK
LOT AREA	7,500 SF		OK
LOT AREA PER UNIT	7,500 SF		OK
LOT WIDTH	75 FT.		OK
LOT DEPTH	100 FT.		OK
FRONT YARD SETBACK	15 FT.		OK
SIDE YARD SETBACK	10 FT.		OK
REAR YARD SETBACK	25 FT.		OK
DISTANCE BETWEEN BUILDINGS SAME LOT	N/A		OK
WELL-DESIGNED AND LANDSCAPED RECREATION OR USABLE OPEN SPACE AREA IN REAR YARD	100 SF PER DWELLING UNIT		OK
MAXIMUM			
BUILDING HEIGHT	2.5 STORIES AND 35 FT.		OK
BUILDING COVERAGE	30%		OK
UNITS PER BUILDING	N/A		OK
FRONT YARD SETBACK	35 FT.		OK
SIDE YARD SETBACK	N/A		OK

PARKING REQUIREMENTS:

REQUIRED

RESIDENTIAL:
1 SPACE PER UNIT
64 DWELLING UNITS = 64 SPACES

RETAIL:
3 SPACES PER 1,000 SF OF GFA
15,987 SF OF RETAIL SPACE = 48 SPACES

TOTAL PARKING REQUIRED = 112 SPACES

PROVIDED

TOTAL PARKING PROVIDED = 91 SPACES
(BASED ON SHARED PARKING ANALYSIS)

LOADING REQUIREMENTS:

REQUIRED

RETAIL:
1 SPACE FOR THE FIRST 7,500 SF OF GFA AND 1 SPACE FOR EACH ADDITIONAL 10,000 SF OF GFA OR MAJOR PORTION THEREOF, EXCEPT THAT NO BERTHS SHALL BE REQUIRED FOR BUILDINGS OF LESS THAN 5,000 SQUARE FEET OF GFA

BUILDING 1: 11,661 SF OF RETAIL SPACE = 1 LOADING SPACE
BUILDING 2: 4,326 SF OF RETAIL SPACE = 0 LOADING SPACES

PROVIDED

TOTAL LOADING SPACES PROVIDED:
EAST BLDG: = 1 LOADING SPACE
WEST BLDG: = 1 LOADING SPACE

OWNER/APPLICANT:

BEEKMAN ARTS CENTER LLC (TAX ID: 5955-19-706012)
268 MAIN STREET
BEACON, NY 12508

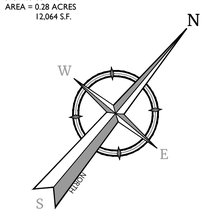
BAYRIDGE STUDIOS LLC (TAX ID: 5954-26-781983 & 5954-26-689990)
268 MAIN STREET
BEACON, NY 12508

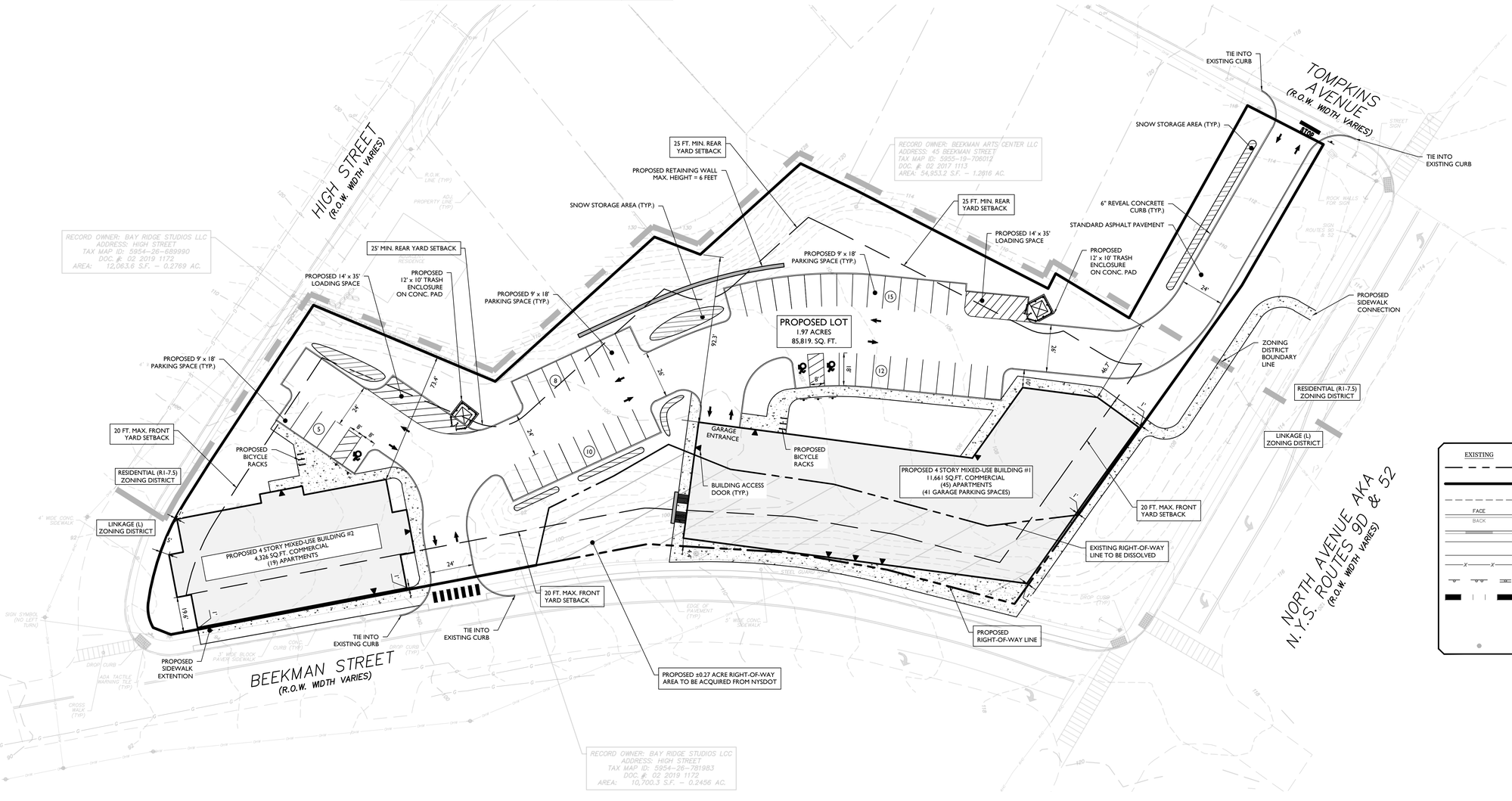
TAX LOTS:

5955-19-706012
AREA = 1.26 ACRES
54,953 S.F.

5954-26-781983
AREA = 0.25 ACRES
10,700 S.F.

5954-26-689990
AREA = 0.28 ACRES
12,064 S.F.





LEGEND

EXISTING		PROPOSED
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	EDGE OF PAVEMENT	
FACE / BACK	CURB	FACE / BACK
	DEPRESSED CURB	
	SIDEWALK	
X X	FENCES	X X
	ROADWAY SIGNS	
	ZONING BOUNDARY LINE	
	STALL COUNT	(10)
	ADA ACCESSIBLE STALL	
	LIGHT POLE	

30 0 30 60
SCALE : 1" = 30'
SELECT LINEAR UNIT OF MEASURE

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Site Plans\C-LAYT.dwg|C-03-DIMENSION PLAN By: MICHAEL.SABA

Colliers
Engineering & Design
www.colliersengineering.com

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

REV	DATE	DRAWN BY	DESCRIPTION

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING D.P.C., DONALD G. GANIS & SAMUEL A. MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/30/2024	KAS	CPM

PROJECT NUMBER: 23010468A
DRAWING NAME: C-LAYT

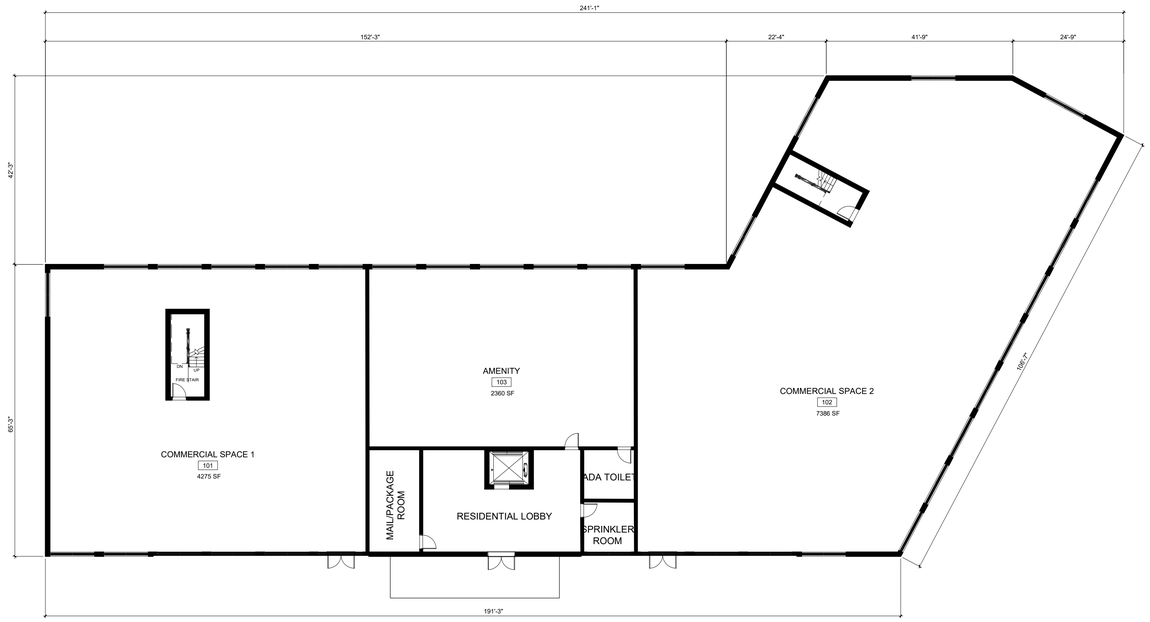
SHEET TITLE: SKETCH SITE PLAN

SHEET NUMBER: 01 of 01

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

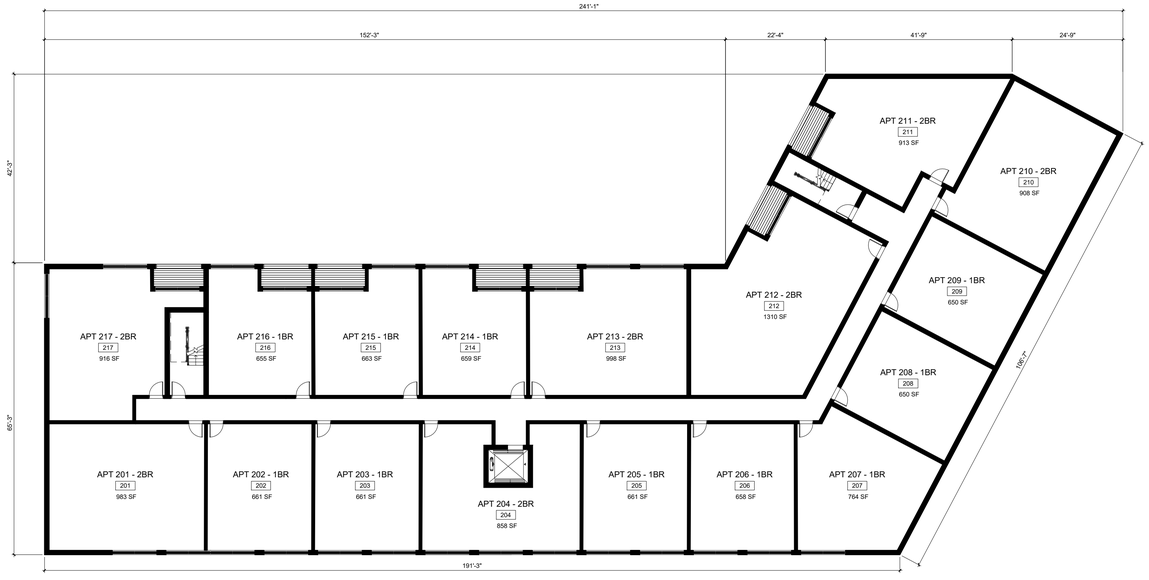
Architecture Plans

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	01/29/24	REVISED PER PLANNING BOARD COMMENTS	AJS
2	04/30/24	REVISED PER PLANNING BOARD COMMENTS	AJS



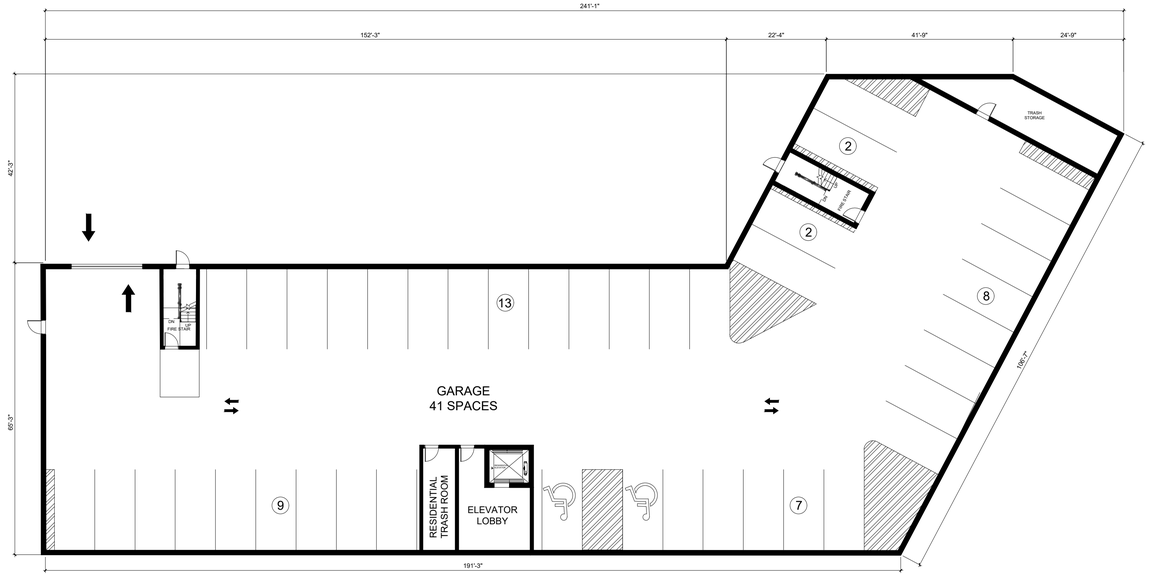
1st Floor Plan

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



2nd Floor Plan

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



Garage Plan

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

Site Plan Application

Sheet A-101 - Building Plans - Beekman Street

Owner / Applicant:
Beekman Arts Center LLC
(Tax ID: 5955-19-706012)
268 Main Street
Beacon, NY 12508

Owner / Applicant:
Bayridge Studios LLC
(Tax ID: 5954-26-781983 & 5954-26-689990)
268 Main Street
Beacon, NY 12508

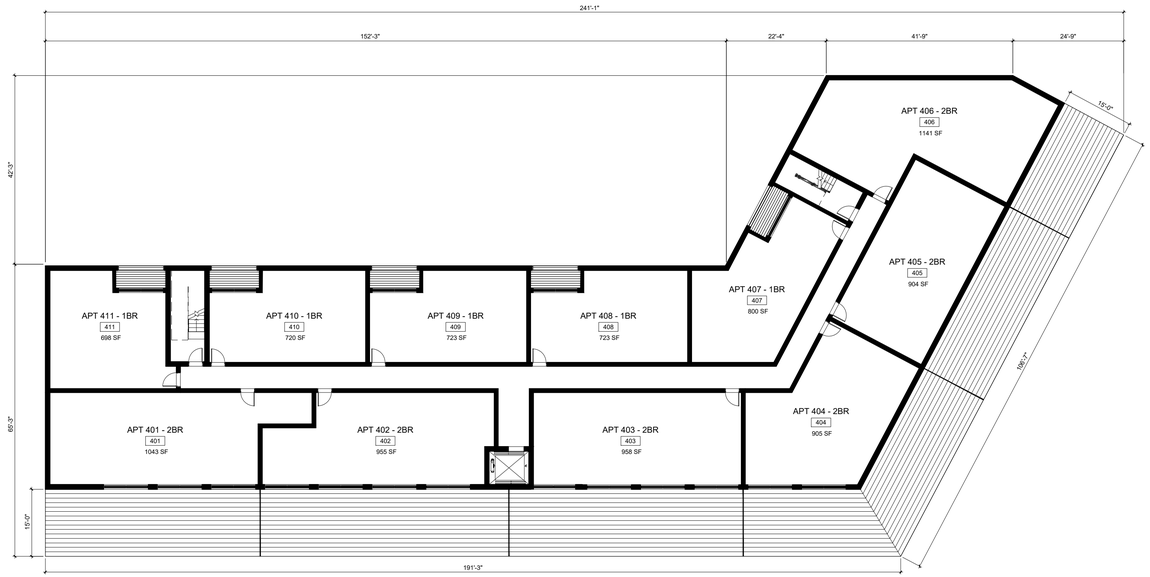
Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Colliers Engineering & Design
555 Hudson Valley Avenue - Suite 101
New Windsor, NY 12553

Surveyor:
Automated Construction Enhanced Solutions, Inc.
1229 Route 300 - Suite 4
Newburgh, NY 12550

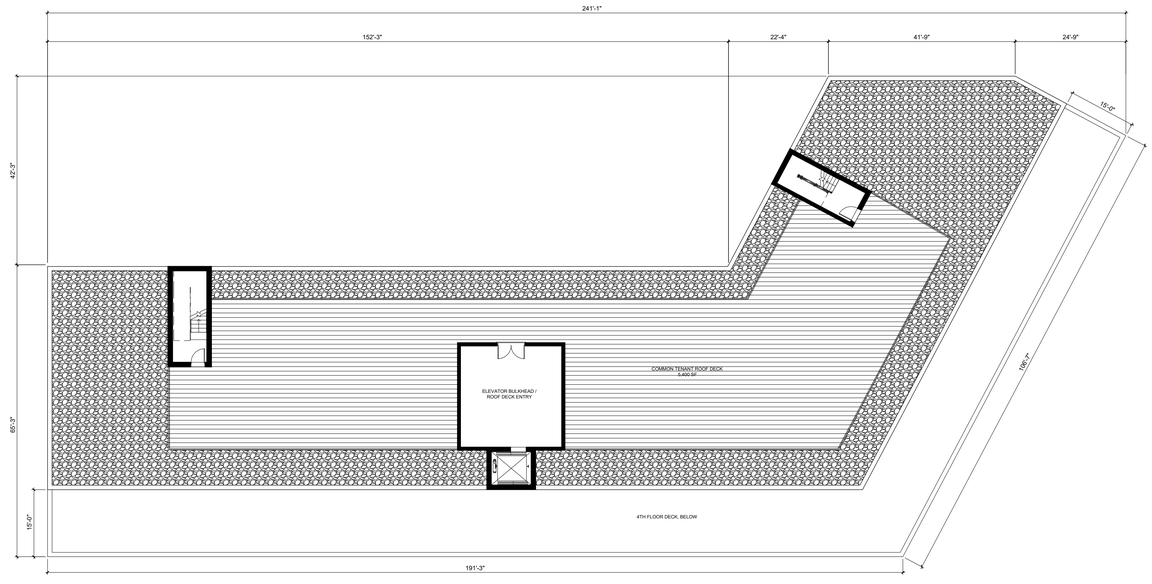
45 Beekman Street
Beacon, New York
Scale: 1/16" = 1'-0"
November 28, 2023

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	01/29/24	REVISED PER PLANNING BOARD COMMENTS	AJS
2	04/30/24	REVISED PER PLANNING BOARD COMMENTS	AJS



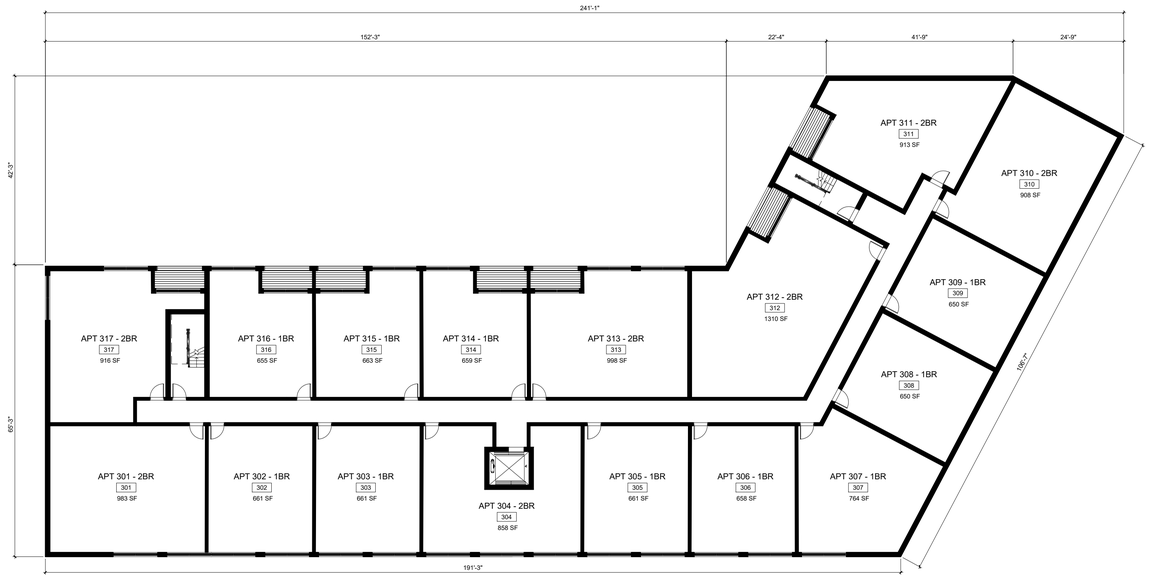
4th Floor Plan

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



Roof Plan

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



3rd Floor Plan

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

Site Plan Application

Sheet A-102 - Building Plans - Beekman Street

Owner / Applicant:
Beekman Arts Center LLC
(Tax ID: 5955-19-706012)
268 Main Street
Beacon, NY 12508

Owner / Applicant:
Bayridge Studios LLC
(Tax ID: 5954-26-781983 & 5954-26-689990)
268 Main Street
Beacon, NY 12508

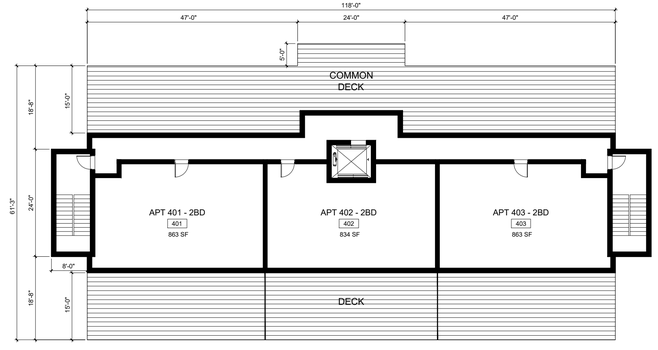
Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Colliers Engineering & Design
555 Hudson Valley Avenue - Suite 101
New Windsor, NY 12553

Surveyor:
Automated Construction Enhanced Solutions, Inc.
1229 Route 300 - Suite 4
Newburgh, NY 12550

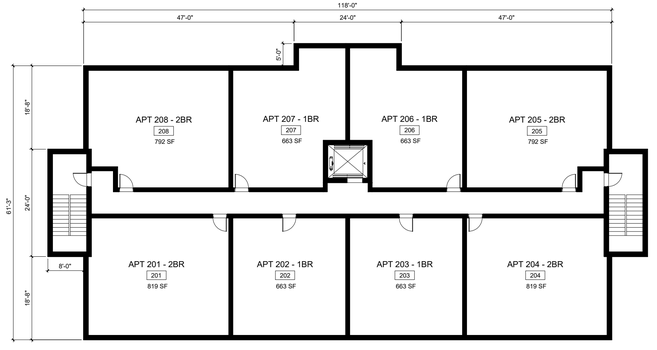
45 Beekman Street
Beacon, New York
Scale: 1/16" = 1'-0"
November 28, 2023

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	01/29/24	REVISED PER PLANNING BOARD COMMENTS	AJS
2	04/30/24	REVISED PER PLANNING BOARD COMMENTS	AJS



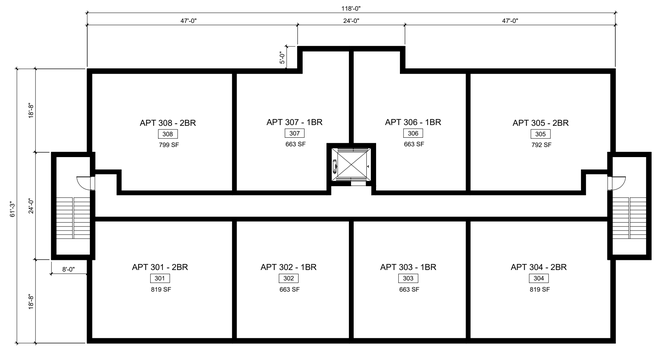
4th Floor Plan

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



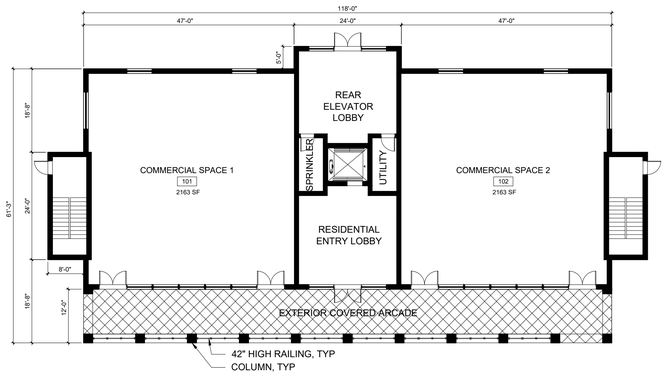
2nd Floor Plan

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



3rd Floor Plan

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



1st Floor Plan

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

Site Plan Application

Sheet A-103 - Building Plans - High Street

Owner / Applicant:
Beekman Arts Center LLC
(Tax ID: 5955-19-706012)
268 Main Street
Beacon, NY 12508

Owner / Applicant:
Bayridge Studios LLC
(Tax ID: 5954-26-781983 & 5954-26-689990)
268 Main Street
Beacon, NY 12508

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

Site / Civil Engineer:
Colliers Engineering & Design
555 Hudson Valley Avenue - Suite 101
New Windsor, NY 12553

Surveyor:
Automated Construction Enhanced Solutions, Inc.
1229 Route 300 - Suite 4
Newburgh, NY 12550

45 Beekman Street
Beacon, New York
Scale: 1/16" = 1'-0"
November 28, 2023

LANC & TULLY
Engineering and Surveying, P.C.

May 13, 2024

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

RE: 45 Beekman Street
Mixed-Use Building
Tax Nos. 5955-19-706012, 5954-26-689990 & 781983
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding a mixed-use building to be located at 152-158 Fishkill Avenue:

- Correspondence dated April 30, 2024, from Cuddy & Feder.
- Plans titled "Building Plans – 45 Beekman Street", with the latest revision date of April 30, 2024, as prepared by Aryeh Siegel, Architect.
- Plan titled "Site Plan for Beekman Arts Center LLC & Bay Ridge Studios, LLC – Sketch Site Plan", dated April 30, 2024, as prepared by Colliers.

The proposed project entails the demolition of the existing structure located at the intersection of North Avenue & Beekman Street, and the merging of the three (3) parcels into a single parcel; and the construction of two (2) mixed-use buildings. Both buildings are proposed to have commercial space, tenant amenity space on the 1st floor and dwelling units on the 2nd through 4th floors. The recently submitted sketch plan is based upon the applicant acquiring land currently owned by NYSDOT along Beekman Street. If the applicant is able to acquire this land, the applicant will be able to develop the site in a more consistent manner with the zoning code, as shown on the sketch plan, in comparison to the previously submitted conceptual site plans. The submitted architectural floor plans show a total of 64 dwelling units consisting of 33 one-bedroom units and 31 two-bedroom units. The project site, with the lots merged, has an area of 2.05± acres and is located in the L (Linkage) Zone, with a small portion of the lot along North Avenue being located in the R1-7.5 Zone and the vacant parcel along High Street being located in the Historic District and Landmark Overly (HDLO) district. The proposed uses, commercial and residential, are permitted uses within the L Zone.

Based on our review of the above documents and plans, and noting that only a sketch plan has been submitted at this time, we would like to offer the following comments:

General Comments:

1. Although the recent sketch plan notes a lot area of 1.97 acres, based upon the areas of the existing lots, and the right-of-way to be acquired, the overall area of the lot to be created appears to be 2.05 acres. The applicant consultants should review this further to determine the actual overall lot area.

2. As previously requested, the applicant's consultant shall conduct an Inflow & Infiltration (I&I) Study of the existing site and building and provide a certified written report to the City of Beacon of the findings. Possible cross-connections to the City's sanitary sewer collection system include roof-leaders, sump pumps, existing site drains, etc. shall be identified. If any cross-connections are found, the report shall include these findings along with the volume of I&I being introduced into the sanitary sewer collection system, and the proposed remediation for the cross-connection(s) found. ***The Applicant has previously noted that the I&I study will be prepared and submitted with a future submission.*** The Applicant should provide a status update to this study be completed.

3. The applicant should provide new elevation views for the new proposed layout and buildings.

4. Although the applicant has submitted a new sketch layout for the site, based upon the acquiring of the NYSDOT right-of-way, plans should be provided showing all utilities that cross the site and are adjacent to the site to determine if there would be any impact on the current site layout provided.

Stormwater Pollution Prevention Plan:

1. The previously submitted stormwater pollution prevention plan (SWPPP) shall be revised once the layout of the project has been determined.

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

Very truly,
LANC & TULLY, P.C.

John Russo, P.E.

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

KARC
PLANNING CONSULTANTS, INC.

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

FR: KARC Planning Consultants, Inc.

DATE: May 13, 2024

RE: 45 Beekman Street Site Plan, Beekman Arts Center LLC & Bay Ridge Studios LLC

I have reviewed the following materials regarding the proposed re-use of the building located at 45 Beekman Street:

- Cover letter by Taylor M. Palmer, Cuddy + Feder LLP, dated April 30, 2024
- Sketch Site Plan (1 sheet) by Colliers Engineering, dated April 30, 2024
- Building Plan Set (3 sheets) by Aryeh Siegel, dated November 28, 2023, last revised April 30, 2024

Project Description:
The applicant has submitted an alternative site plan sketch contingent upon acquisition of "Surplus ROW Property" along Beekman Street and NYS Route 9D. The proposal still includes construction of two 4-story mixed-use buildings with a total of 64 residential dwelling units. Proposed ground floor commercial space (office/retail) has increased from 12,600 SF to 15,989 SF based on revised building footprints. The 1.78-acre site includes three parcels to be merged into a single lot of record. The proposed buildings and parking facilities (91 parking spaces total) are located in the Linkage (L) district with only the northern driveway onto Tompkins Avenue in the R1-7.5 Residential district. The project site is within the Local Waterfront Revitalization Program (LWRP) area, and immediately abuts parcels that fall within the Historic District and Landmark Overlay Zone along High Street and Thompkins Avenue.

Comments & Recommendations:
The proposed project site is strategically positioned to support the City's vision for improved connection between Main Street and the train station area. This vision is well documented in several of the City's previous planning efforts including the Comprehensive Plan (2007 and 2017 version), Beekman Street Complete Streets Analysis (2017), and Connecting Beacon's Main Street with the Hudson River and Railroad Station Report, aka "Linkage Plan" (2007). Each of these planning efforts highlight the need for streetscape improvements along Beekman Street, including new buildings to create activity and security, wider and improved sidewalks, pedestrian-scaled lighting, benches, and continuous tree plantings and landscaping on both sides of the street.

1. **Building Placement / Frontage/ Front Yard Setback:** Relocation of the Beekman Street Building closer to the sidewalk has improved the project's compliance with the intent of the Linkage District deign standards as outlined in Section 223-41.21(K)(1), most importantly to "frame" the street with active uses.

2. **Landscaping Plan:** An updated landscaping plan for the revised layout will be required. Existing

Conditions should include the location, size, and species of all trees on the site over 6 inches in diameter and identify any trees that are to be removed and those to remain. Areas along the street frontage should be "landscaped and used in a manner that enhances the street life by such means as pocket parks, gardens, fountains, outdoor tables, public art, and outdoor display of items for sale on the premises" per Section 223-41.21(D)(1).

3. **Streetscape Improvements:** Section 223-41.21(G) of the Linkage District regulations outlines streetscape improvements within the street transition zone, pedestrian clearway, building transition zone, and building façade. The Planning Board may wish to request that the Applicant provide streetscape profiles to better assess compliance with the intent of this section. The Board may also wish to discuss the potential of planting street trees within the street transition zone.

4. **Lighting Plan:** An updated lighting plan for the revised layout will be required.

5. **Architecture & Design:** Updated elevations noting major dimensions, materials, colors, rooftop projections, and proposed frontage type(s) for the revised layout will be required.

6. **LWRP Review.** The proposal is located in the area covered by the City's Local Waterfront Revitalization Program (LWRP), requiring a Consistency Determination. The applicant should provide an LWRP consistency justification for the project.

Additional comments will be provided for future submissions as the proposed drawing set and materials are progressed. If you have any questions, please feel free to contact me.

Natalie Quinn
Beacon Planning Consultant

Cc: Bruce Flower, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer
Taylor M Palmer, Esq., Attorney for the Applicant

City of Beacon Planning Board Agenda
05/14/2024

Title:

Review of application for Site Plan Approval, 19 Henry Street, townhomes, submitted by Lori Joseph Builders, Inc.

ATTACHMENTS

19 Henry PB 5.14.24 Site Plan Planning Board Submission.pdf

Lanc & Tully 19 Henry Street 05-13-24 review.pdf

KARC Review PB_19 Henry Street 2024.05.13.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 30, 2024

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

Re: Application for Site Plan Approval for Proposed Townhomes
Premises: 19 Henry Street, Beacon, New York – Transitional ("T") District
Tax Parcel ID: (5954-36-955796)

Dear Chairman Gunn and Members of the Planning Board:

On behalf of Lori Joseph Builders, Inc. (the "Applicant"), the owner of the above-referenced Premises, we respectfully submit this letter and the referenced enclosures in support of an Application for Site Plan Approval (the "Application"), proposing to redevelop the Premises with four (4) two (2)-story townhouses (the "Project").

THE PROPOSED TOWNHOUSE PROJECT:

As is more fully shown in the enclosed Site Plan Set and Elevations, the Applicant proposes to construct four (4) zoning-compliant one (1)-family attached/semidetached townhomes on the Premises.[1] Currently, the Premises is improved by an existing one (1)-family residential building and associated accessory structures. *See* **Exhibit A** – Images of the Premises.

The Premises is presently classified in the Transitional ("T") District in the City of Beacon and abuts property in the R 1-5 Zoning District as well as the Central Main Street ("CMS") Zoning District. The Premises is *not* classified in the City's HDLO. The surrounding area includes a mix of commercial, residential and not-for-profit uses, including local businesses, a former automobile repair shop at 5 Henry Street that that is proposed to be rehabilitated into GarageWORKS studios, a community programming facility comprising several artist studios,

[1] Note: City of Beacon Zoning Code Section 223-63 defines "townhomes" as: "[a] one-family dwelling attached in a row of at least three such units with each home having its own front and rear access to the outside."

workshops and an event space,[2] dentist and related business uses, and the Premises is across the street from the City of Beacon parking lots located behind the commercial uses on Main Street. *See* **Exhibit A**.

As is more fully detailed in the enclosed Site Plan Set, the Applicant proposes to construct four (4) attached two (2)-story townhouses with four (4) total residential units. Each of the units will be comprised of 900 square feet and a one (1) car garage. Recognizing the transition between Main Street and the surrounding mixed-use residential neighborhoods, the Project is designed in furtherance of the City's efforts to maintain the community character of the neighborhood,[3] while provid[ing] the opportunity and encouragement for the development of small, [] housing units."[4] As detailed on the enclosed Elevations, the townhomes have been artfully designed with various stone and brick components that compliment the existing built environment in the T District and surrounding CMS and R1-5 Zoning Districts.

PROCEDURAL INFORMATION AND LIST OF ENCLOSURES:

The Applicant is seeking Site Plan Approval for the Project from the Planning Board. As noted above, the instant Application has been designed to be fully zoning-compliant. Accordingly, the Applicant understands that the Project *does not* require any variances from the Zoning Board of Appeals, or review by the City Council.

Following the Applicant's pre-submission meeting with the Building Inspector and City Planner on April 29, 2024, the Applicant respectfully requests to appear at the Planning Board's May 14th meeting Agenda in order to discuss the Project with this Board and in order to initiate the environmental review process pursuant to the State Environmental Quality Review Act ("SEQRA"). For the Board's consideration in connection with the environmental review of the Application, enclosed please find a copy of the Short Environmental Assessment Form ("EAF") for the Project, which is annexed hereto as **Exhibit B**.

---

[2] *See* City of Beacon City Council Agenda Packet dated April 1, 2024.
[3] *See* Section 4.2 of the CITY OF BEACON COMPREHENSIVE PLAN UPDATE, dated April 3, 2017, at page 66.
[4] *See* Zoning Code Section 223-24.1 of the City of Beacon Zoning Code.

INDEX OF ENCLOSURES:

In support of this Application, please find five (5) copies of the following documents:

Exhibit A: Images of the Premises;

Exhibit B: Full Environmental Assessment Form; and

Exhibit C: City of Beacon Application Form for Site Plan Approval.

In further support of this Application, we respectfully submit the following attachments:

- Elevations entitled "New 4 Unit Townhome for Henry Street" prepared by Day Stokosa Engineering P.C.; and
- Site Plans Set entitled "Site Plan Application", prepared by Hudson Land Design Professional Engineering, P.C. dated April 30, 2024, numbered and titled as follows (unless otherwise noted):
  - Sheet 1 of 5 – Cover Sheet (CV-1);
  - Sheet 2 of 5 – Existing Conditions and Removals Plan (XC-1);
  - Sheet 3 of 5 – Site Plan (SP-1);
  - Sheet 4 of 5 – Erosion & Sediment Control Plan (ESC-1); and
  - Sheet 5 of 5 – Construction Details (CD-1).

Additionally, enclosed are two (2) checks payable to the City of Beacon in the amount of $1,500.00 for four (4) dwelling units representing the Application filing fee, and in the amount of $3,000.00 for the establishment of an escrow for professional review costs.

We look forward to appearing at this Board's regular meeting on May 14, 2024 in order to introduce the proposed Project and to initiate the environmental review process. In the meantime, should this Board or City Staff have any questions or comments with regard to the foregoing, please do not hesitate to contact me.

Very truly yours,

Taylor M. Palmer
Enclosures
cc: Jennifer L. Gray, Esq.
Natalie Quinn, KARC Planning Consultants, Inc.
Lanc & Tully, P.C.
Hudson Land Design Professional Engineering, P.C.

Exhibit A

Exhibit A: Images of the Premises and Surrounding Area

Dutchess County Parcel Access Viewer Image: 19 Henry Street (the "Premises"):

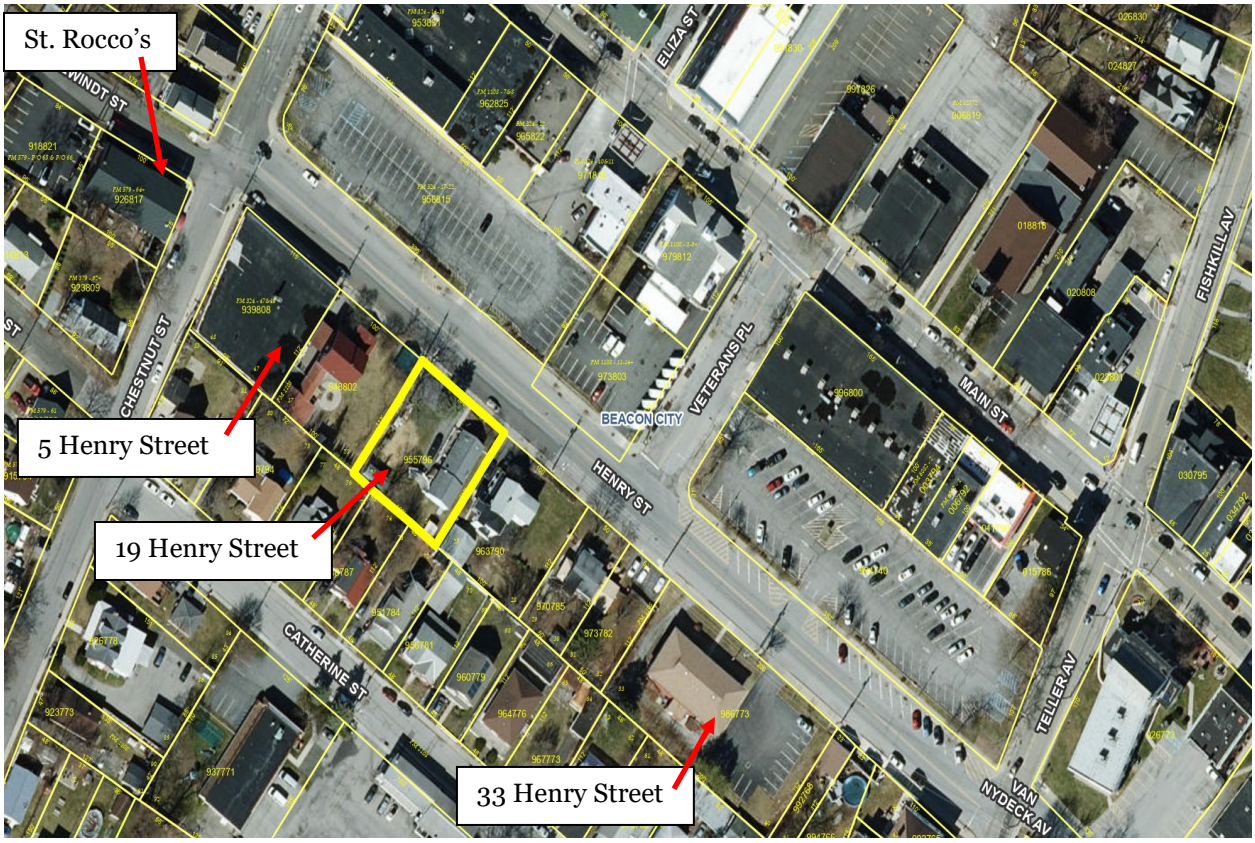


Exhibit A: Images of the Premises and Surrounding Area (cont.)

Google Aerial Image of the Premises:

Exhibit A: Images of the Premises and Surrounding Area (cont.)

Google Street View Image of the Premises: Facing South Toward Premises:

Google Street View Image of the Premises: Northwest View Along Henry Street Toward Henry Street/ Chestnut Street Intersection:

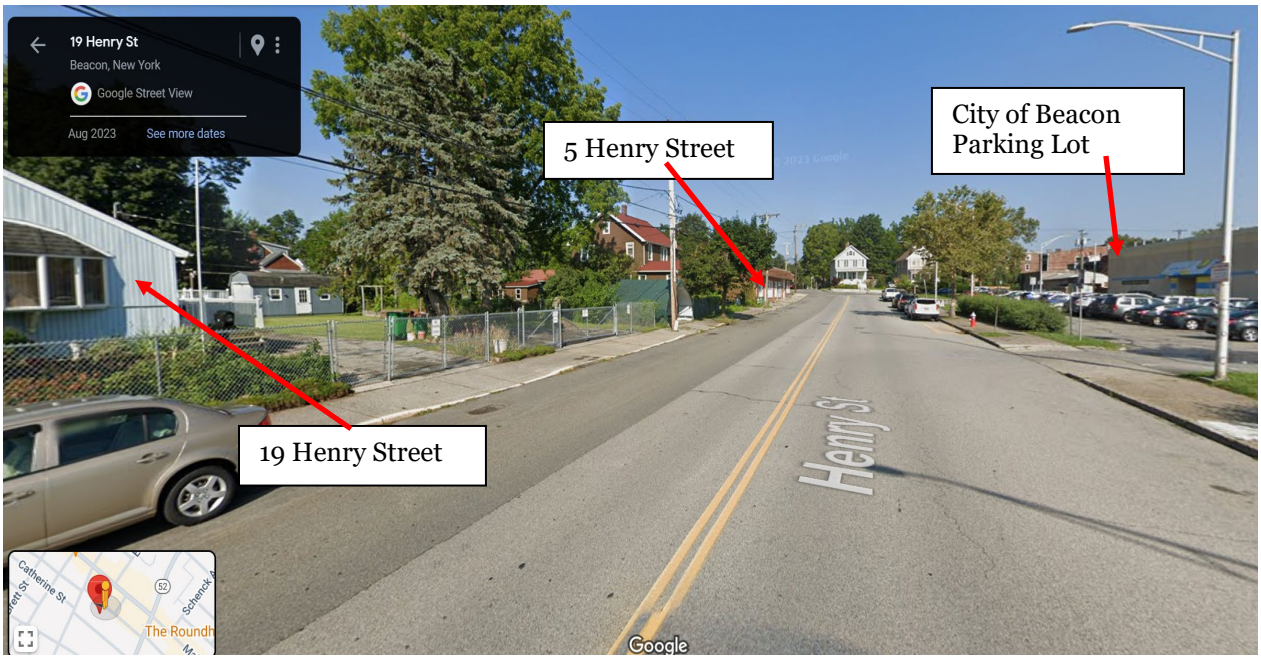


Exhibit A: Images of the Premises and Surrounding Area (cont.)

Google Street View Image of the Premises: Southeast View Toward the Premises:

Google Street View Image of the Premises: Southeast View Along Henry Street Toward the Premises

Exhibit A: Images of the Premises and Surrounding Area (cont.)

City of Beacon Zoning Map Excerpt of the Premises – T District:

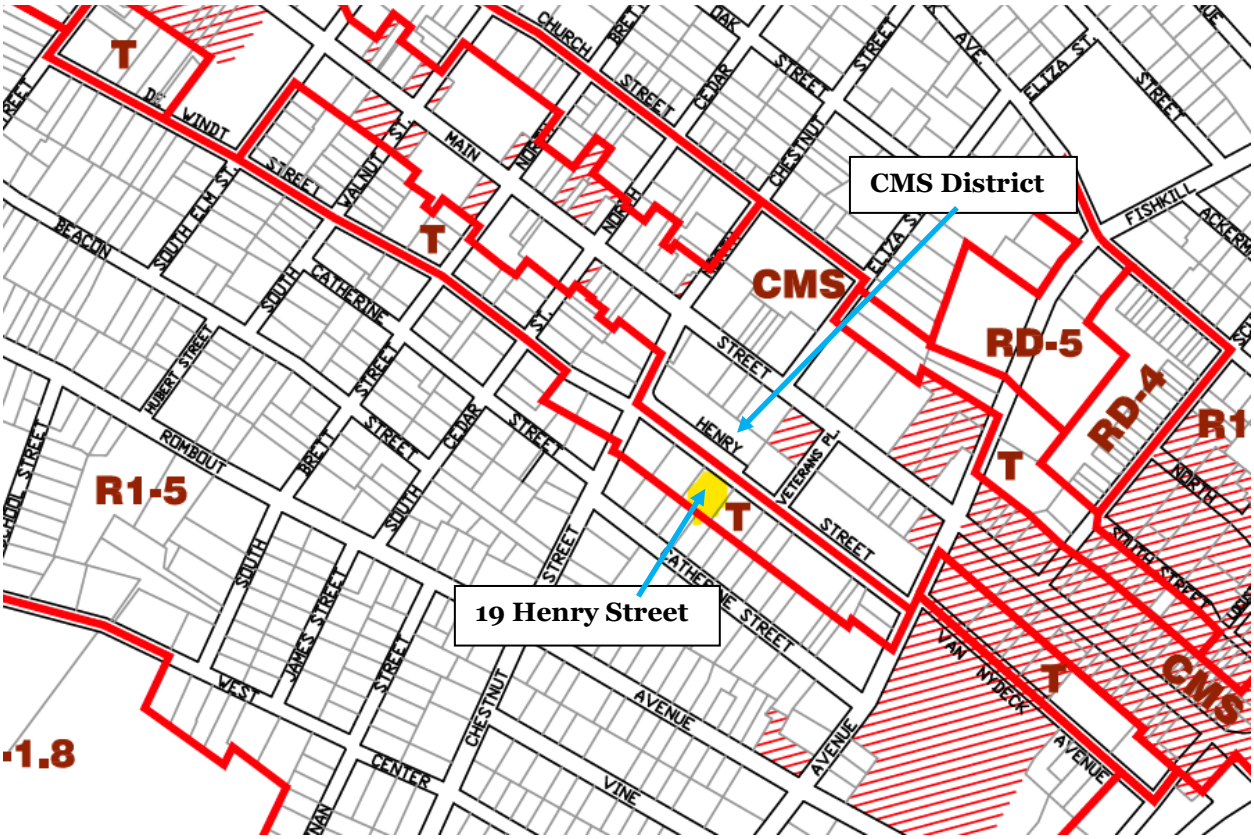


Exhibit B

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:

19 Henry Street

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

19 Henry Street, Beacon NY 12508

Brief Description of Proposed Action:

Proposed multifamily residential building consisting of four (4) town houses. The existing lot contains a single family residential dwelling and two sheds that will be demolished for the new construction. Each unit will be provided with individual water and sewer connections to the City's municipal water and sewer systems.

Name of Applicant or Sponsor:	Telephone: 845-416-1808
Lori Joseph Builders, Inc. c/o Gary Joseph	E-Mail: GaryJoseph625@gmail.com

Address:

49 Shea Lane

City/PO:	State:	Zip Code:
Beacon	NY	12508

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

3. a. Total acreage of the site of the proposed action? 0.258 acres
   b. Total acreage to be physically disturbed? 0.28 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.258 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:		
The proposed action will meet State 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?	☐	☑
Subject property is located across the street from the City of Beacon Post Office which is a listed National Historic Site	☐	☑
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?		

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

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

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

☐ Wetland ☑ Urban ☑ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Indiana Bat	☐	☑
16. Is the project site located in the 100-year flood plan?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	☐	☑
a. Will storm water discharges flow to adjacent properties?	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: Runoff from the building roofs and driveways will be directed to the City of Beacon stormwater conveyance system within Henry Street. A new catch basin will be constructed to facilitate the connection.	☐	☑
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: Within 2,000' of DEC Remediation Sires: Churchill Mills C314118 & Brunetto Cheese B00130	☐	☑

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

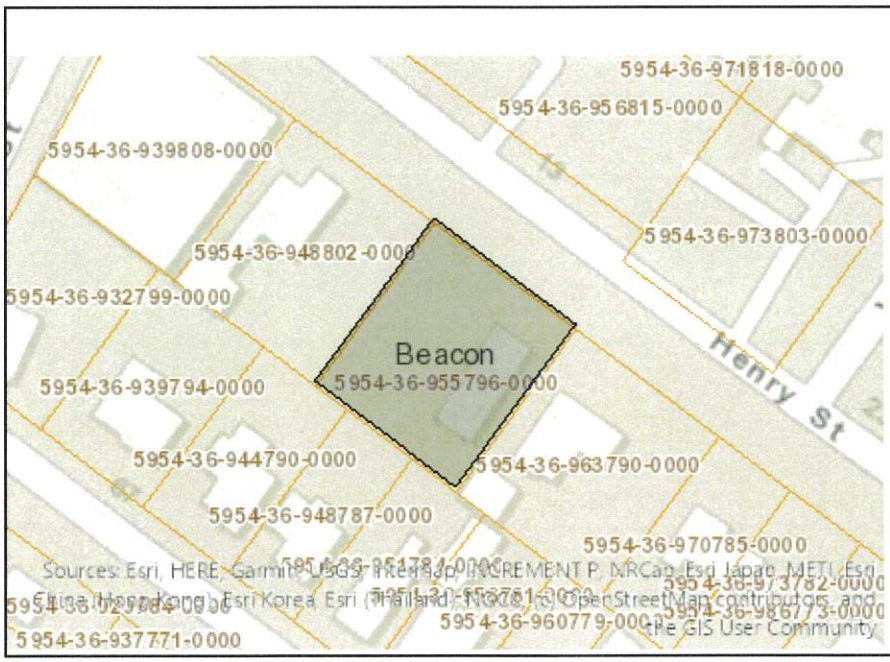
Applicant/sponsor/name: Gary Joseph Date: 4/30/2024

Signature: Title: President

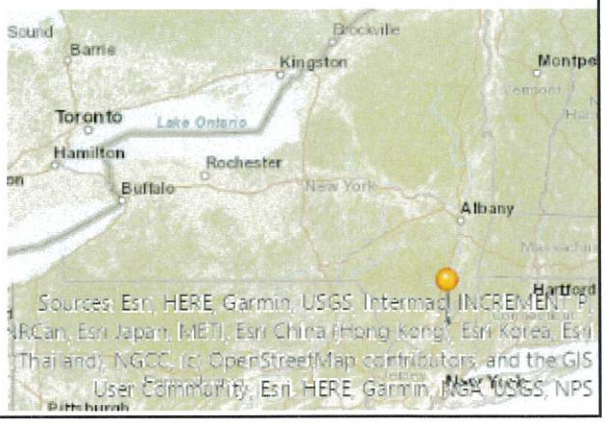
PRINT FORM

EAF Mapper Summary Report

Tuesday, April 23, 2024 12:01 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]	Yes
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	No
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Indiana Bat
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	Yes

Exhibit C

APPLICATION FOR SITE PLAN APPROVAL

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

IDENTIFICATION OF APPLICANT

Name: Lori Joseph Builders, Inc.

Address: 49 Shea Lane
Beacon, NY 12508

Signature: [signature]

Date: 4/30/24

Phone: 845-416-1808

(For Official Use Only)

	Date	Initials
Application & Fee Rec'd		
Initial Review		
Public Hearing		
Conditional Approval		
Final Approval		

IDENTIFICATION OF REPRESENTATIVE / DESIGN PRFESSIONAL

Name: Taylor M. Palmer, Cuddy & Feder LLP, Attorney for the Applicant

Address: 445 Hamilton Avenue, 14th Floor
White Plains, NY 10601

Phone: 914-761-1300

Fax: 914-761-5378

Email address: tpalmer@cuddyfeder.com

IDENTIFICATION OF SUBJECT PROPERTY:

Property Address: 19 Henry Street, Beacon, NY 12508

Tax Map Designation: Section 5954 Block 36 Lot(s) 955796

Land Area: .26 acres

Zoning District(s) T

DESCRIPTION OF PROPOSED DEVELOPMENT:

Proposed Use: Residential

Gross Non-Residential Floor Space: Existing 0 Proposed 0

TOTAL: 0

Dwelling Units (by type): Existing 1 Proposed 4

TOTAL: 4

ITEMS TO ACCOMPANY THIS APPLICATION

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

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

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

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

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

INFORMATION TO BE SHOWN ON SITE LOCATION SKETCH

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

INFORMATION TO BE SHOWN ON THE SITE DEVELOPMENT PLAN

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

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

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

APPLICATION FEES

Site Plan	**Residential** $500 + $250 per dwelling unit **Commercial** $500 + $250 per 1,000 s.f.
Special Use Permit	**Residential** $500 + $250 per dwelling unit **Commercial** $500 + $250 per 1,000 s.f.
Subdivision	$ 750 for 2-4 lots + $100 per lot $1,000 for 5 or more lots + $300 per lot

ESCROW FEES

ALL SUBDIVISIONS, AND RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

No. of Lots or Dwelling Units	Initial Deposit	Depleted to	Replenishment
1-5 (including lot-line realignment)	$ 3,000	$ 1,000	Current bills + $1,200
6-15	$ 9,000	$ 2,500	Current bills + $1,200
Over 15	$ 18,000	$ 5,000	Current bills + $6,000

NON-RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

	Initial Deposit	Depleted to	Replenishment
Existing Buildings/Change of Use with no site development	$ 1,800	$ 1,000	Current bills + $600
Up to 3,000 s.f. gross floor area	$ 3,125	$ 1,000	Current bills + $1,200
3,000 to 10,000 s.f. gross floor area	$ 3,000 + $0.50 per sq.ft. over 3,000	$ 2,500	Current bills + $3,000
Over 10,000 s.f. gross floor area	$ 9,000 + $0.50 per sq.ft. over 10,000	$ 2,500	Current bills + $3,000

ARCHITECTURAL REVIEW OR CERTIFICATE OF APPROPRIATENESS ***(if not currently before PB)***

** if required by Chairman*	Initial Deposit	Depleted to	Replenishment
Single Family House*	$500	$250	Current bills + $250
All others*	$500	$250	Current bills + $250

APPLICATION PROCESSING RESTRICTION LAW

Affidavit of Property Owner

Property Owner: Lori Joseph Builders, Inc.

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

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

Applicant Address: 49 Shea Lane, Beacon, NY 12508

Project Address: 19 Henry Street, Beacon, NY 12508

Project Tax Grid # 5954-36-955796-0000

Type of Application Site Plan Approval

Please note that the property owner is the applicant. "Applicant" is defined as any individual who owns at least five percent (5%) interest in a corporation or partnership or other business.

I, Gary Joseph, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.

1. No violations are pending for ANY parcel owned by me situated within the City of Beacon — X
2. Violations are pending on a parcel or parcels owned by me situated within the City of Beacon — N/A
3. ALL tax payments due to the City of Beacon are current — X
4. Tax delinquencies exist on a parcel or parcels owned by me within the City of Beacon — N/A
5. Special Assessments are outstanding on a parcel or parcels owned by me in the City of Beacon — N/A
6. ALL Special Assessments due to the City of Beacon on any parcel owned by me are current — X

Signature of Owner

Gary Joseph, President, Lori Joseph Builders, Inc.

Title if owner is corporation

Office Use Only:	NO	YES	Initial
Applicant has violations pending for ANY parcel owned within the City of Beacon (Building Dept.)	___	___	____
ALL taxes are current for properties in the City of Beacon are current (Tax Dept.)	___	___	____
ALL Special Assessments, i.e. water, sewer, fines, etc. are current (Water Billing)	___	___	____

CITY OF BEACON
SITE PLAN SPECIFICATION FORM

Name of Application: Lori Joseph Builders, Inc.

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

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

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

Applicant/Sponsor Name: Lori Joseph Builders, Inc., Gary Joseph, President

Signature: J Joseph

Date: 4/30/24

FOR OFFICE USE ONLY
Application #

CITY OF BEACON
1 Municipal Plaza, Beacon, NY
Telephone (845) 838-5000 • http://beaconny.gov/

INDIVIDUAL DISCLOSURE FORM

(This form must accompany every land use application and every application for a building permit or certificate of occupancy submitted by any person(s))

Disclosure of the names and addresses of all persons) filing a land-use application with the City is required pursuant to Section 223-62 of the City Code of the City of Beacon. Applicants shall submit supplemental sheets for any additional information that does not fit within the below sections, identifying the Section being supplemented.

SECTION A

Name of Applicant: Lori Joseph Builders, Inc.

Address of Applicant: 49 Shea Lane, Beacon, NY 12508

Telephone Contact Information: 845-416-1808

SECTION B. List all owners of record of the subject property or any part thereof.

Name	Residence or Business Address	Telephone Number	Date and Manner title was acquired	Date and place where the deed or document of conveyance was recorded or filed.
Lori Joseph Builders Inc.	49 Shea Lane Beacon, NY 12508	845-416-1808	4/29/2024 - Deed	

SECTION B. Is any owner of record an officer, elected or appointed, or employee of the City of Beacon or related, by marriage or otherwise, to a City Council member, planning board member, zoning board of appeals member or employee of the City of Beacon ?

☐ **YES** ☒ **NO**

If yes, list every Board, Department, Office, agency or other position with the City of Beacon with which a party has a position, unpaid or paid, or relationship and identify the agency, title, and date of hire.

Agency	Title	Date of Hire, Date Elected, or Date Appointed	Position or Nature of Relationship

SECTION C. If the applicant is a contract vendee, a duplicate original or photocopy of the full and complete contract of purchase, including all riders, modification and amendments thereto, shall be submitted with the application.

SECTION D. Have the present owners entered into a contract for the sale of all or any part of the subject property and, if in the affirmative, please provide a duplicate original or photocopy of the fully and complete contract of sale, including all riders, modifications and amendments thereto.

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

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

(Print) Gary Joseph, President

(Signature) J Joseph

FOR OFFICE USE ONLY
Application #

CITY OF BEACON
1 Municipal Plaza, Beacon, NY
Telephone (845) 838-5000 · http://beaconny.gov/

ENTITY DISCLOSURE FORM

(This form must accompany every land use application and every application for a building permit or certificate of occupancy submitted by any entity)

Disclosure of the names and addresses of all persons or entities owning any interest or controlling position of any Limited Liability Company, Partnership, Limited Partnership, Joint Venture, Corporation or other business entity (hereinafter referred to as the "Entity") filing a land-use application with the City is required pursuant to Section 223-61.4 of the City Code of the City of Beacon. If any Member of the Entity is not a natural person, then the names and addresses as well as all other information sought herein must be supplied about the non-natural person member of that Entity, including names, addresses and Formation filing documents. Applicants shall submit supplemental sheets for any additional information that does not fit within the below sections, identifying the Section being supplemented.

SECTION A.

IF AFFIANT IS A PARTNERSHIP, JOINT VENTURE OR OTHER BUSINESS ENTITY, EXCEPT A CORPORATION:

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

IF AFFIANT IS A CORPORATION:

Name of Entity Lori Joseph Builders, Inc.	Telephone Contact Information 845-416-1808
Principal Place of Business of Entity 49 Shea Lane Beacon, NY 12508	Place and Date of incorporation Dutchess County, 11/21/1986
Method of Incorporation S-CORP	Official place where the documents and papers of incorporation were filed New York Department of State

SECTION B. List all persons, officers, limited or general partners, directors, members, shareholders, managers, and any others with any interest, mortgage, encumbrance or other interest (recorded or unrecorded) in or with the above referenced

Entity. List all persons to whom corporate stock has been pledged, mortgaged or encumbered and with whom any agreement has been made to pledge, mortgage or encumber said stock. Use a supplemental sheet to list additional persons.

Name	Resident Address	Resident Telephone Number	Nature and Extent of Interest
Lori Joseph Builders, Inc.	49 Shea Lane Beacon, NY 12508	845-416-1808	100%

SECTION C. List all owners of record of the subject property or any part thereof.

Name	Residence or Business Address	Telephone Number	Date and Manner title was acquired	Date and place where the deed or document of conveyance was recorded or filed.
Lori Joseph Builders Inc.	49 Shea Lane Beacon, NY 12508	845-416-1808	4/29/2024 - Deed	

SECTION D. Is any owner, of record or otherwise, an officer, director, stockholder, agent or employee of any person listed in Section B-C?

☐ **YES** ☒ **NO**

Name	Employer	Position

SECTION E. Is any party identified in Sections A- C an officer, elected or appointed, or employee of the City of Beacon or related, by marriage or otherwise, to a City Council member, planning board member, zoning board of appeals member or employee of the City of Beacon ?

☐ **YES** ☒ **NO**

If yes, list every Board, Department, Office, agency or other position with the City of Beacon with which a party has a position, unpaid or paid, or relationship and identify the agency, title, and date of hire.

Agency	Title	Date of Hire, Date Elected, or Date Appointed	Position or Nature of Relationship

SECTION F. Was any person referred to in Sections A-D known by any other name within five (5) years preceding the date of the application?

☐ **YES** ☒ **NO**

Current Name	Other Names

SECTION G. List the names and addresses of each person, business entity, partnership and corporation in the chain of title of the subject premises for the five (5) years next preceding the date of the application.

Name	Address

SECTION H. If the applicant is not a record owner of the subject property, describe the applicant's interest in the subject property and the relationship the applicant has to the record owner(s) of the subject property.

SECTION I. If the applicant is a contract vendee, a duplicate original or photocopy of the full and complete contract of purchase, including all riders, modification and amendments thereto, shall be submitted with the application. Any sensitive or confidential information may be redacted from the contract prior to production.

SECTION J.

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

Name of the Corporation Lori Joseph Builders, Inc.	Telephone Contact Information 845-416-1808
Principal Business Address 49 Shea Lane Beacon, NY 12508	Place and Date of Incorporation Dutchess County, 11/21/1986
Method of Incorporation S-CORP	Official place where the documents and papers of incorporation were filed New York Department of State

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

Name	**Residence or business address**	**Telephone number**
Gary Joseph	49 Shea Lane Beacon, NY 12508	845-416-1808

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, Gary Joseph being first duly sworn, according to law, deposes and says that I am (Title) President, an active and qualified member of the Lori Joseph Builders, Inc. 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.

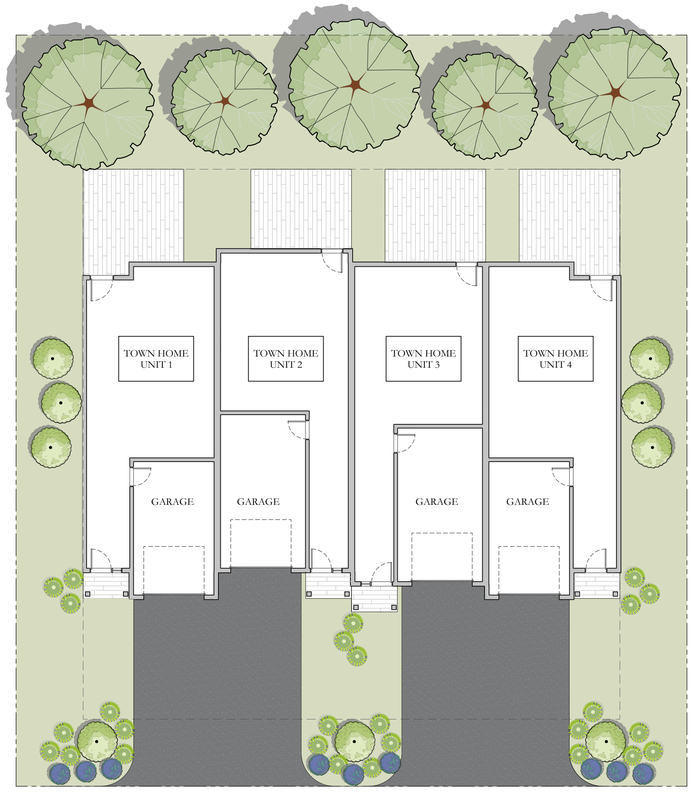
(Print) Gary Joseph, President

(Signature)

NEW 4 UNIT TOWNHOME FOR

HENRY STREET

BEACON, NEW YORK



BUILDING LAYOUT

FRONT ELEVATION

MATERIAL SELECTION

HORIZONTAL SIDING	VERTICAL SIDING	BRICK VENEER	STONE VENEER	ASPHALT SHINGLE ROOF
HORIZONTAL SIDING	WINDOW & DOOR FINISH	BRICK VENEER	STONE VENEER	METAL ROOF

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

19 HENRY STREET

SITE PLAN

19 HENRY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

PARCEL INFORMATION:
TAX ID: 5954-36-955796
TOTAL LOT AREA: ±0.258 ACRES
ZONING DISTRICT: T

SITE LOCATION MAP SCALE: 1" = 200'

ADJOINING OWNERS WITHIN 200'
PARCEL: OWNER & ADDRESS
1. HUDSON RIVER HEALTH CARE INC., 341 MAIN STREET, BEACON NY 12508
2. FISCH DEVELOPMENT CORP., 761 HUNTINGTON DRIVE, FISHKILL NY 12524
3. BEACON 355 LLC, 355 MAIN STREET, BEACON NY 12508
4. KARIMI ENTERPRISES LLC, 361 MAIN STREET, BEACON NY 12508
5. U S POST OFFICE, 369 MAIN STREET, BEACON NY 12508
6. CITY OF BEACON, 1 MUNICIPAL PLAZA, BEACON NY 12508
7. U S POST OFFICE, 369 MAIN STREET, BEACON NY 12508
8. CITY OF BEACON, 1 MUNICIPAL PLAZA, BEACON NY 12508
9. GARAGEWORKS STUDIOS LLC, 49 SHEA LANE, BEACON NY 12508
10. GARTH MARK, 7 HENRY STREET, BEACON NY 12508
11. LORRAINE KOSCAL, 17 PINE STREET, CORNWALL ON THE HUDSON NY 12520
12. MATHEW KANE, 30 WILKES STREET, BEACON NY 12508
13. MATHEW KANE, 20 MASE STREET, BEACON NY 12508
14. JOHN TAYLOR, 1115 5TH AVENUE APT 14C, NEW YORK NY 10128
15. CARL SCHAEFER JR., PO BOX 716, BEACON NY 12508
16. CALEB HONEYCHURCH, 92 CATHERINE STREET, BEACON NY 12508
17. MATHEW KEAVENEY, 94 CATHERINE STREET, BEACON NY 12508
18. ALBERTO MORA, PO BOX 1267, BEACON NY 12508
19. SEAN KRAFT, 30 WILKES STREET, BEACON NY 12508
20. PATRICK WHITE, 106 CATHERINE STREET, BEACON NY 12508
21. DWAYNE PRUITT, 110 CATHERINE STREET, BEACON NY 12508
22. DWAYNE PRUITT, 110 CATHERINE STREET, BEACON NY 12508
23. THOMAS JOSEPH LABELLA, 39 SOUTH CHESTNUT STREET, BEACON NY 12508
24. CATHERINE STREET PROPERTIES LLC., 105 CATHERINE STREET, BEACON NY 12508
25. CATHERINE STREET PROPERTIES LLC., 105 CATHERINE STREET, BEACON NY 12508

DRAWING INDEX:
SHEET 1: COVER SHEET (CV-1)
SHEET 2: EXISTING CONDITIONS & REMOVALS PLAN (XC-1)
SHEET 3: SITE PLAN (SP-1)
SHEET 4: EROSION & SEDIMENT CONTROL PLAN (ESC-1)
SHEET 5: CONSTRUCTION DETAILS (CD-1)

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

OWNER/APPLICANT:
GARY JOSEPH
LORI JOSEPH BUILDERS, INC.
49 SHEA LANE
BEACON, NEW YORK 12508
PH: 845-416-1808

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

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

_____ _____
GARY JOSEPH DATE

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

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

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STATE OF NEW YORK MICHAEL A. BOEHNKE 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

COVER SHEET

19 HENRY STREET

19 HENRY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-36-955796

JOB #:	2024:014
DATE:	4/30/2024
SCALE:	AS SHOWN
TITLE:	CV-1
SHEET:	1 OF 5

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
- EXISTING GAS LINE
- TO BE REMOVED

PROJECT INFORMATION:

PARCEL OWNER:	LORI JOSEPH BUILDERS INC. 49 SHEA LANE, BEACON NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	19 HENRY STREET, BEACON, NY 12508
TAX PARCEL ID:	5954-36-955796
PARCEL AREA:	±0.258-ACRE
WATER SUPPLY:	MUNICIPAL (EXISTING RESIDENCE), PROPOSED MUNICIPAL (FOR NEW RESIDENCE)
SEWAGE DISPOSAL:	MUNICIPAL (EXISTING RESIDENCE), PROPOSED MUNICIPAL (FOR NEW RESIDENCE)

MAP REFERENCES:

1. BOUNDARY AND TOPOGRAPHIC SURVEY PER "MAP OF A SURVEY PREPARED FOR LORI JOSEPH BUILDERS" PREPARED BY BRENDAN JOHNSON PLS, DATED APRIL 11, 2024.

SURVEY NOTES:

1. COPYRIGHT JOHNSON SURVEYING. ALL RIGHTS RESERVED. REPRODUCTION OR COPYING OF THIS DOCUMENT MAY BE A VIOLATION OF COPYRIGHT LAW UNLESS PERMISSION OF THE AUTHOR AND / OR COPYRIGHT HOLDER IS OBTAINED.
2. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
3. ONLY BOUNDARY SURVEY MAPS WITH THE SURVEYOR'S EMBOSSED OR RED INKED SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE SURVEYOR'S ORIGINAL WORK AND OPINION. A COPY OF THIS DOCUMENT WITHOUT A PROPER APPLICATION OF THE SURVEYOR'S EMBOSSED OR RED INKED SEAL SHOULD BE ASSUMED TO BE AN UNAUTHORIZED COPY.
4. CERTIFICATIONS ON THIS BOUNDARY SURVEY MAP SIGNIFY THAT THE MAP WAS PREPARED IN ACCORDANCE WITH THE CURRENT EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, INC. THE CERTIFICATION IS LIMITED TO PERSONS FOR WHOM THE BOUNDARY SURVEY MAP IS PREPARED, TO THE TITLE COMPANY, TO THE GOVERNMENTAL AGENCY, AND TO THE LENDING INSTITUTION LISTED ON THIS BOUNDARY SURVEY MAP.
5. THE CERTIFICATIONS HEREIN ARE NOT TRANSFERABLE.
6. THE LOCATION OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS ARE NOT ALWAYS KNOWN AND OFTEN MUST BE ESTIMATED. IF ANY UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS EXIST OR ARE SHOWN, THE IMPROVEMENTS OR ENCROACHMENTS ARE NOT COVERED BY THIS CERTIFICATE.
7. SUBJECT TO THE FINDINGS OF A CURRENT TITLE SEARCH.
8. SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.
9. SUBJECT TO ANY RIGHT, TITLE OR INTEREST THE PUBLIC MAY HAVE FOR HIGHWAY USE.
10. BEARINGS AND NORTH SHOWN HEREON ARE REFERENCED TO NAD 83-NY EAST USING NYSNET RTN GPS.

ENCROACHMENT NOTE:

THE APPROVAL OF THIS PLAN DOES NOT CONSTITUTE ANY ENDORSEMENT, APPROVAL OR AUTHORIZATION OF ANY KIND FOR THE CONTINUATION OR REMOVAL OF ANY EXISTING ENCROACHMENTS ON THE SUBJECT PROPERTY.

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

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

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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STATE OF NEW YORK · RUSSELL A. BOSBOOM · 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

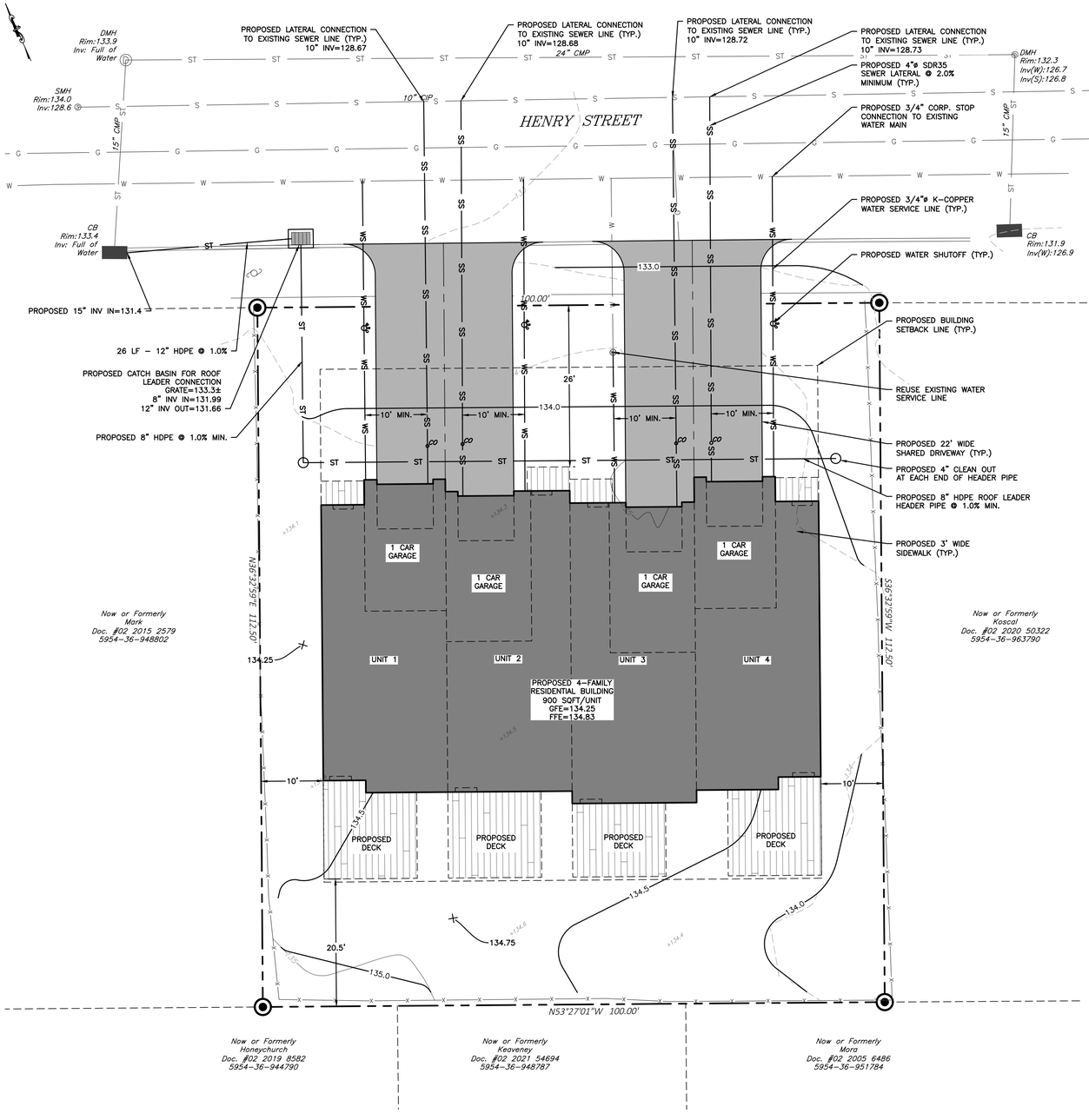
EXISTING CONDITIONS & REMOVALS PLAN

19 HENRY STREET

19 HENRY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-36-955796

JOB #:	2024:014
DATE:	4/30/2024
SCALE:	1"=10"
TITLE:	XC-1
SHEET:	2 OF 5

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



LEGEND:

- EXISTING PROPERTY LINE
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- PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

SCHEDULE OF REGULATIONS (T ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

PARAMETER	REQUIREMENT	EXISTING	PROPOSED
LOT AREA:	5,000 SQUARE FEET MIN	11,250 S.F.	11,250 S.F.
LOT WIDTH:	50 FEET MINIMUM	100 FEET	100 FEET
LOT DEPTH:	100 FEET MINIMUM	112.5 FEET	112.5 FEET
YARD SETBACKS (RESIDENTIAL USE):			
FRONT YARD:	10 FEET MINIMUM	21.5 FEET	26 FEET
SIDE YARD:	10 FEET MINIMUM	6.9 FEET	10 FEET
REAR YARD:	20 FEET MINIMUM	4.3 FEET	20.5 FEET
MAX. BUILDING HEIGHT:	MAX 35 FEET, 2.5 STORIES	≤35 FEET	≤35 FEET
MAX. BUILDING COVERAGE:	40% MAX	±15%	±32%
AREA PER UNIT:	2,500 S.F. MIN.[1]	11,250 S.F.	2,812.5 S.F.

[1] ONE HALF OF THE MINIMUM LOT SIZE AREA PER DWELLING UNIT AS THE LEAST RESTRICTIVE ADJOINING RESIDENTIAL DISTRICT

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.

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 COORDINATION 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.

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 TO EACH UNIT SHALL BE 3/4"ø K-COPPER. UNIT 3 WILL UTILIZE THE EXISTING WATER SERVICE LINE FOR THE EXISTING HOUSE.
6. THE SEWER SERVICE LINES TO EACH UNIT SHALL BE 4"ø SDR 35 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN (MINIMUM OF ¼" PER FOOT SHALL BE MAINTAINED). UNIT 3 WILL USE THE EXISTING SEWER SERVICE LINE FOR THE EXISTING HOUSE.
7. A ROAD OPENING PERMIT SHALL BE REQUIRED FOR THE INSTALLATION OF THE PROPOSED WATER AND SEWER SERVICES FOR THE NEW BUILDING. 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 LOCATION ON PLAN.
10. SUMP PUMP TO BE PROVIDED FOR FOOTING DRAINS. THE TYPE OF PUMP AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT. BACKFLOW PREVENTION DEVICES SHALL BE PLACED ON THE FOOTING DRAINS TO PREVENT BACKFLOW INTO THE FOOTING DRAIN.
11. THE PROPOSED DRIVEWAY SIGHT DISTANCE SHALL BE IN COMPLIANCE WITH THE CITY OF BEACON'S 192-9(B) CODE AND THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS. THE STATE UTILIZES THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) GUIDELINES FOR INTERSECTION SIGHT DISTANCES. FOR ROADS WITH A SPEED LIMIT OF 30 MPH, AASHTO DESIGN TABLES CALL FOR A SIGHT DISTANCE OF 290 FEET TO THE LEFT AND 335 FEET TO THE RIGHT. THE MEASURED SIGHT DISTANCE IS AS FOLLOWS:

    UNITS 1 & 2: SLSD LEFT = ±270 FEET TO THE INTERSECTION WITH SOUTH CHESTNUT STREET. SLSD RIGHT = ±621 FEET TO THE INTERSECTION WITH TELLER AVENUE. STOPPING SIGHT DISTANCE (SSD) WAS OBSERVED TO BE ±250 FEET WHEN APPROACHING THE PROPOSED DRIVEWAY FROM THE INTERSECTION WITH SOUTH CHESTNUT STREET, AND ±601 FEET WHEN APPROACHING THE DRIVEWAY FROM THE INTERSECTION WITH TELLER AVENUE.

    UNITS 3 & 4: SLSD LEFT = ±310 FEET TO THE INTERSECTION WITH SOUTH CHESTNUT STREET. SLSD RIGHT = ±581 FEET TO THE INTERSECTION WITH TELLER AVENUE. STOPPING SIGHT DISTANCE (SSD) WAS OBSERVED TO BE ±290 FEET WHEN APPROACHING THE PROPOSED DRIVEWAY FROM THE INTERSECTION WITH SOUTH CHESTNUT STREET, AND ±561 FEET WHEN APPROACHING THE DRIVEWAY FROM THE INTERSECTION WITH TELLER AVENUE.

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. BEDROCK SHALL REMOVED BY MECHANICAL MEANS. NO BLASTING SHALL BE PERMITTED WITHOUT APPROVAL FROM THE BUILDING DEPARTMENT.
14. THE APPLICANT/APPLICANT'S PLUMBER SHALL ACQUIRE WATER METERS AND MXU UNITS (SIGNAL SENDING AND RECEIVING UNIT) FOR THE AMI SYSTEM (ADVANCED METERING INFRASTRUCTURE) FROM THE CITY OF BEACON WATER DEPARTMENT. THE MXU UNIT SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING AND SHALL BE LOCATED 2 TO 3 FEET ABOVE THE EXTERIOR GROUND ELEVATION.

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

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

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

Dig Safely. New York Call 811 before you dig

STATE OF NEW YORK MICHAEL A. BOSENKO 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

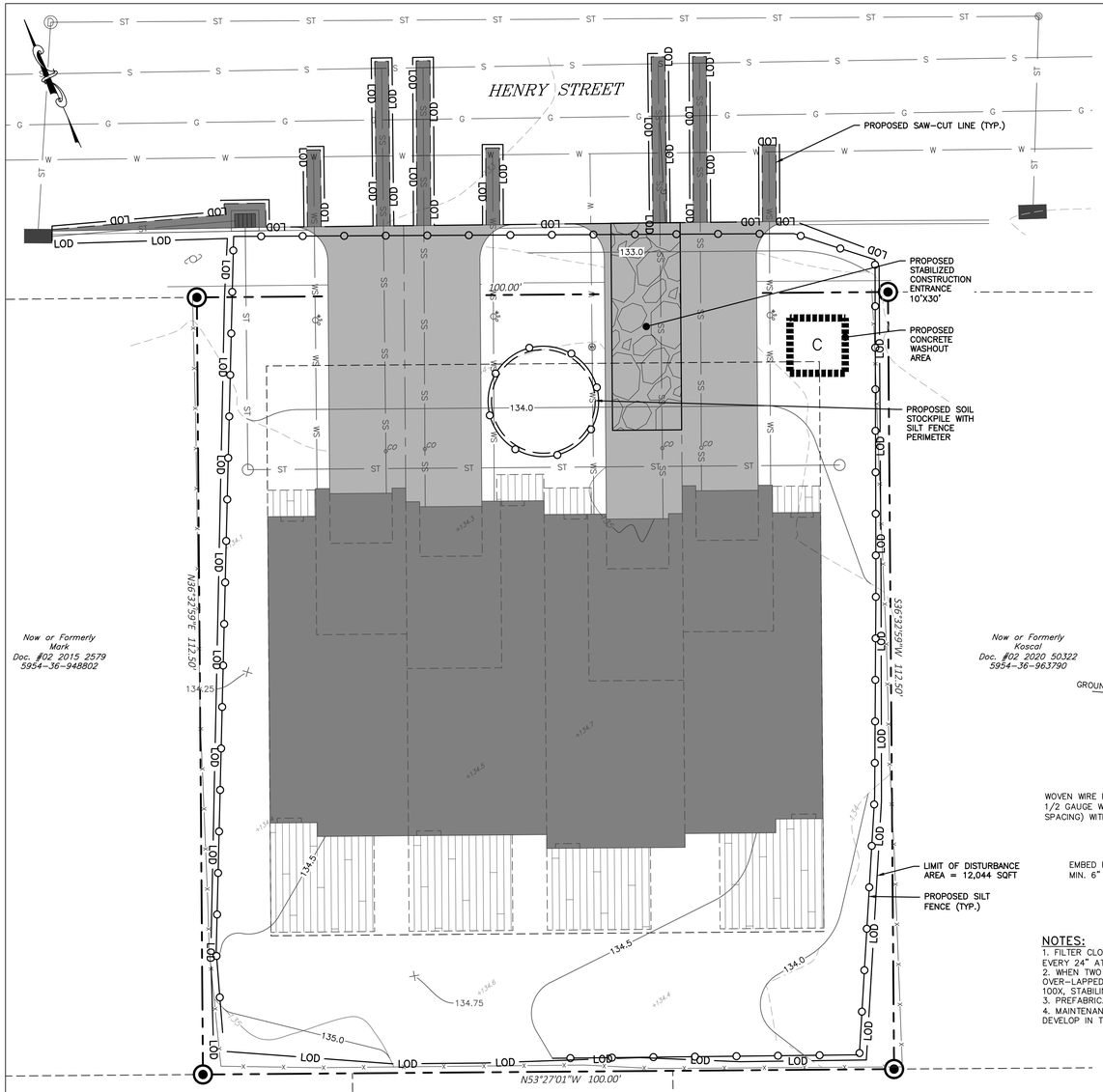
SITE PLAN

19 HENRY STREET

19 HENRY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-36-955796

JOB #:	2024:014
DATE:	4/30/2024
SCALE:	1"=10"
TITLE:	SP-1
SHEET:	3 OF 5

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



LEGEND:

- EXISTING PROPERTY LINE
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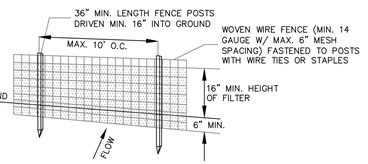
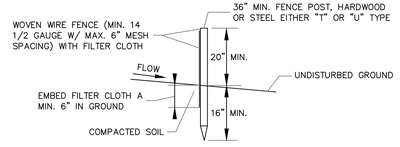
- PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED STORM WATER LINE
- PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE
- PROPOSED SILT FENCE
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CATCH BASIN INLET PROTECTION
- PROPOSED CONSTRUCTION ENTRANCE



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

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.

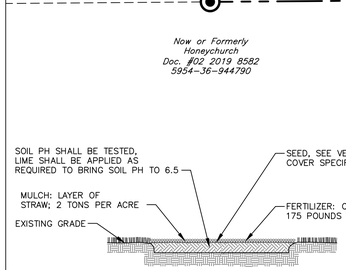
SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE FENCE. IF FENCE FABRIC 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.

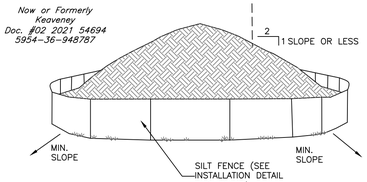
DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORKS. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS 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.

INDIANA BAT PROTECTION NOTES:

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

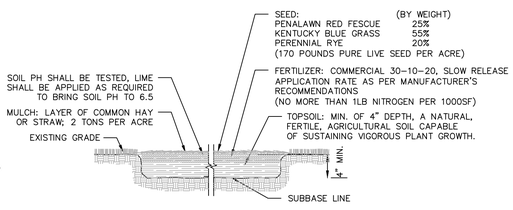


TEMPORARY SEEDING DETAIL
NOT TO SCALE

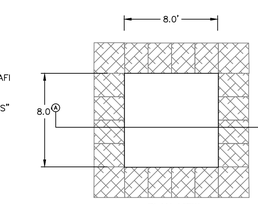


NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

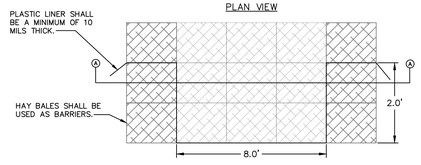
TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE



TOPSOIL SEED, FERTILIZER AND MULCH DETAIL
NOT TO SCALE



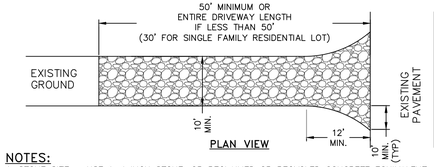
PLAN VIEW



SECTION VIEW

NOTES:
1. WASHOUT STATION SHALL BE LOCATED 100' FROM ANY STORMWATER FEATURE ON SITE OR NATURAL WATERWAYS OR WETLANDS.
2. INSPECT WASHOUT STATION DAILY AND REPLACE PLASTIC LINER WHEN ANY RIPS OR TEARS ARE OBSERVED.
3. REPLACE WASHOUT STATION WHEN IT IS AT 75% OF ITS CAPACITY WITH HARDENED MATERIAL.
4. WATER ACCUMULATION IN WASHOUT AREA FROM RAINWATER SHALL BE PUMPED FROM THE STATION INTO A GRASSED AREA.

CONCRETE WASHOUT STATION DETAIL
NOT TO SCALE



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 LARGE COMMERCIAL OF RESIDENTIAL 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

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

DRAWN BY: CMB	CHECKED BY: MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY

REVISIONS:

NO.	DATE	DESCRIPTION	BY

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

Dig Safely. New York. Call 811 before you dig

STATE OF NEW YORK MICHAEL A. ROSENKRANZ 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

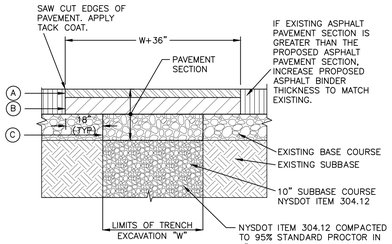
EROSION & SEDIMENT CONTROL PLAN

19 HENRY STREET

19 HENRY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-36-955796

JOB #:	2024:014
DATE:	4/30/2024
SCALE:	1"=10"
TITLE:	ESC-1
SHEET:	4 OF 5

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



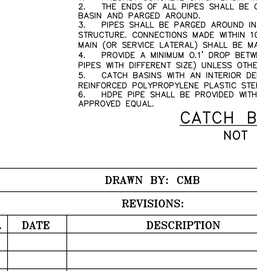
LEGEND

(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.

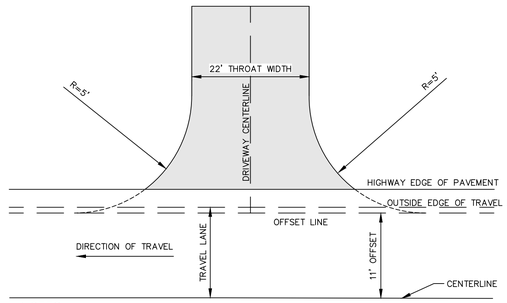
PAVEMENT RESTORATION DETAIL
NOT TO SCALE



NOTES:

1. 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.

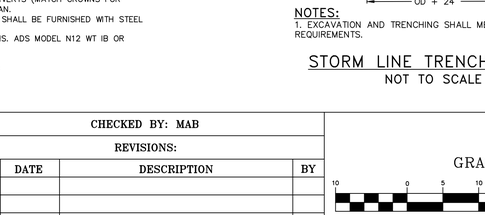
WATER SHUT–OFF VALVE DETAIL
NOT TO SCALE



NOTES:

1. REFER TO PAVEMENT SECTION DETAIL FOR PAVEMENT REQUIREMENTS.
2. GRADE DRIVEWAY AWAY FROM CITY STREET AT SAME PITCH AS EXISTING PAVED SHOULDER FOR A MINIMUM DISTANCE OF 10'.
3. CUT/FILL SLOPES SHALL BE CONSTRUCTED NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL (2:1).

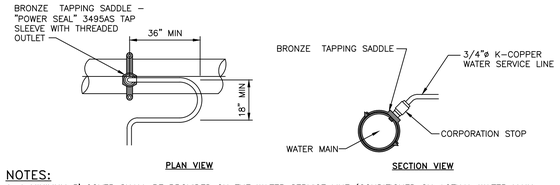
RESIDENTIAL DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE



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.

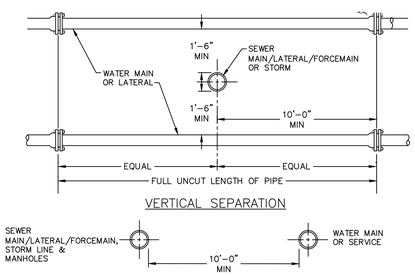
SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE



NOTES:

1. A MINIMUM 5' COVER SHALL BE PROVIDED ON THE WATER SERVICE LINE (CONDITIONED ON ACTUAL 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.

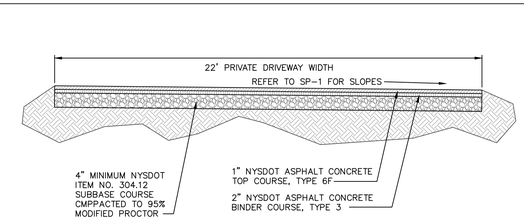
WATER SERVICE CONNECTION DETAIL
NOT TO SCALE



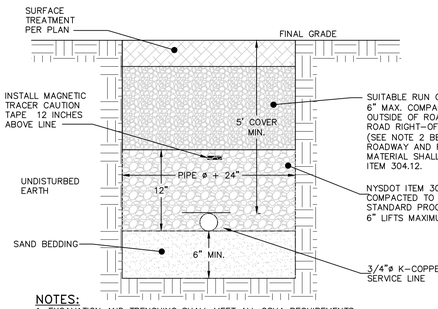
NOTE:

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



PAVED DRIVEWAY SECTION DETAIL
NOT TO SCALE



NOTES:

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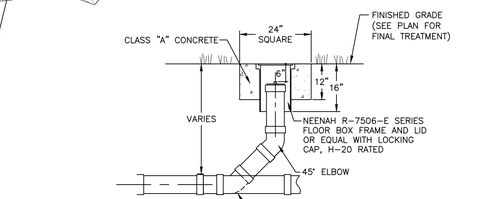
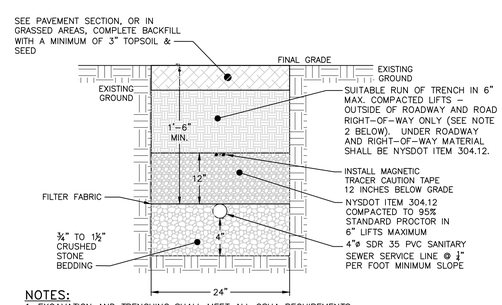
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT 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



CLEANOUT DETAIL
NOT TO SCALE



NOTES:

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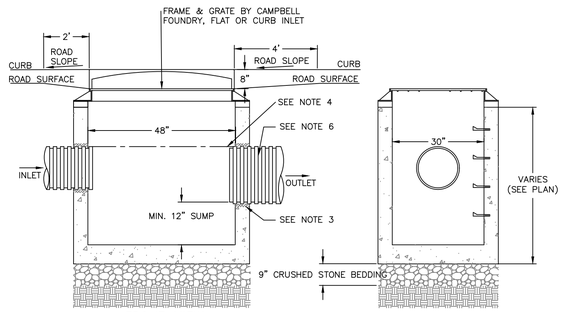
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

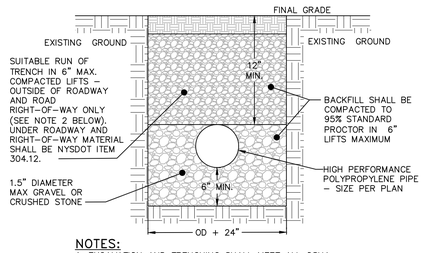
SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



NOTES:

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

CATCH BASIN DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

STORM LINE TRENCH DETAIL
NOT TO SCALE

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

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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

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

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

Dig Safely. New York. Call 811 before you dig

SEAL

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

CONSTRUCTION DETAILS

19 HENRY STREET

19 HENRY STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954–36–955796

JOB #:	2024:014
DATE:	4/30/2024
SCALE:	AS SHOWN
TITLE:	CD–1
SHEET:	5 OF 5

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

LANC & TULLY
Engineering and Surveying, P.C.

May 13, 2024

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

RE: 19 Henry Street
Proposed Townhomes
Tax Nos. 5954-36-955796
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding a townhouse building to be located at 19 Henry Street:

- Correspondence dated April 30, 2024, from Cuddy & Feder.
- Short Environmental Assessment Form dated April 30, 2024.
- Application for site plan approval, dated April 30, 2024.
- Plan set titled "19 Henry Street", dated April 30, 2024, and consisting of the following drawings:
  - Sheet 1 of 5 – Cover Sheet
  - Sheet 2 of 5 – Existing Conditions & Removal Plan
  - Sheet 3 of 5 – Site Plan
  - Sheet 4 of 5 – Erosion & Sediment Control Plan
  - Sheet 5 of 5 – Construction Details

The proposed project entails the demolition of the existing 1-story residential building and accessory structures, and the construction of four 2-story townhomes on the parcel located at 19 Henry Street. The 0.258± acre parcel is located in the "T" (Transitional) Zone, which does allow for multifamily dwellings.

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

<u>General Comments:</u>

1. What type of ownership is proposed for the townhomes? Will each of the units be owned/rented individually? Will there be a Homeowners Association, or a Condominium Association formed?

2. The applicant's consultant shall conduct an Inflow & Infiltration (I&I) Study of the existing site and building and provide a certified written report to the City of Beacon of the findings. Possible cross-connections to the City's sanitary sewer collection system include roof-leaders, sump pumps, existing site drains, etc. shall be identified. If any cross-connections are found, the report shall include these findings along with the volume of I&I being introduced into the sanitary sewer collection system, and the proposed remediation for the cross-connection(s) found.

3. As the driveways appear to be shared between two of the units to either side of the building, it is recommended that a maintenance agreement be provided for review by the Planning Board Attorney.

4. A landscaping plan shall be prepared for the project and included in the plan set.

Sheet 2 of 5:

1. The plan shall be updated to reflect the size and material of the water main running along Henry Street.

2. The plan shall be revised to call out the existing concrete sidewalk running along the front of the site.

3. The plan shall be revised to show the existing driveway aprons that service the existing site.

4. The plan shall show the location and size of existing trees across the site, as well as those to be removed.

5. The chain link fence around the perimeter of the parcel is shown to encroach on the neighboring parcels to the right and left of the parcel. How will the applicant handle these encroachments?

6. The plan shall note the size of the existing water service that services the current site.

7. The plan shall show the location of the existing sewer lateral (and size) that provides service to the site.

8. The applicant shall contact the highway department to have the catch basins to the west of the site cleaned so that the inverts of the piping within these structures can be obtained.

9. Based upon the amount of disturbance to the sidewalk with the new driveway aprons and installation of utilities, the plans should show the removal and replacement of the sidewalk along the entire front of the project site.

Sheet 3 of 5:

1. The plan currently shows the paved driveways to extend from the site to the road. This should be revised so that a continuous concrete sidewalk is located along the front of the site with concrete driveway aprons to service the paved driveways.

2. Will the townhomes be slab on grade or will they have a basement? This shall be noted on the plans.

3. The lowest sewerable elevation (LSE) for each townhome shall be provided on the plan, along with the garage floor and first floor elevations.

4. The plan shall show the connection of roof leaders to the header pipe proposed across the front of the building.

5. If roof leaders are proposed along the back of the building, how are they to be handled? Will they be connected to a collection system, or will they drain to daylight?

6. The plan should include the elevations of the decks, as well as showing whether any stairs will be required from the deck to access the rear yard.

7. Although a drainage system is proposed to connect to the catch basins to the west of the site, consideration should be given to connecting the drainage system to the catch basin to the east of the site which is down gradient of the site.

8. If a new catch basin is to be installed within the roadway as currently shown, the minimum pipe size from this new catch basin to the existing catch basin shall be 15 inches in diameter.

9. Elevations shall be provided for the storm header pipe across the front of the building and shall be appropriately sized to handle the runoff from the roof area to be drained.

Sheet 4 of 5:

1. The silt fence along the front of the site should be shifted back to allow for continued pedestrian access across the front of the site. When the sidewalk along the front of the project site is to be replaced, safety fencing shall be installed around the area to protect pedestrians, and signs should be installed directing pedestrians to use the sidewalk on the opposite side of the road.

Sheet 5 of 5:

1. A concrete driveway apron detail be added to the plans, and the residential driveway entrance detail removed.

2. A monolithic concrete curb and sidewalk detail shall be added to the plan.

This completes our review at this time. Further comments may be provided based on future submissions when more detailed plans are prepared for the project. **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: Natalie Quinn, Planner
Jennifer Gray, Esq.
Bruce Flower, Building Inspector

KARC
PLANNING CONSULTANTS, INC.

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

FR: KARC Planning Consultants, Inc.

DATE: May 13, 2024

RE: 19 Henry Street Site Plan, Lori Joseph Builders, Inc.

I have reviewed the following materials regarding the proposed construction of a townhouse development at 19 Henry Street:

- Cover letter by Taylor Palmer of Cuddy + Feder, dated April 30, 2024
- Site Plan Application, dated April 30, 2024
- Image of Premises and Surrounding Area (5 pages)
- Short EAF Part 1, dated April 30, 2024
- Site Plan Set (5 sheets) by Hudson Land Design, dated April 30, 2024
- Color Front Elevations (1 sheet) by Day Stokosa Engineering, undated

Project Description:
The applicant is proposing to develop four (4) attached two (2)-story townhouses with a total of four (4) residential units. Each unit comprises 900 sq. ft. of living space and a one-car garage. The 0.26-acre site is currently improved with a single-family residence. The parcel is located in the Transitional (T) District and abuts properties in the R 1-5 and CMS Zoning Districts. The action as described appears to be an Unlisted Action with regards to SEQR.

Comments & Recommendations:

1. **Lot Area**
   According to the Schedule of Dimensional Regulations, the residential capacity of a site in the T district is one-half the minimum lot size area per dwelling unit as the least restrictive adjoining residential district. The adjoining residential district is R1-5 with a 5,000 square foot requirement for each unit, so the proposed development requires 2,500 square feet per unit. The proposal for 4 units on a lot of 11,325 sq. ft. meets this requirement.

2. **Missing Elements from Site Plan Set**
   Additional details should be added to the site plan set to assist with the Planning Board's review of the proposed project. The following additions and clarifications are required:
   I. The proposed pedestrian connection from the sidewalk to the front entrance of each residential unit is unclear. Additional notes and details should be provided.
   II. The plans will also need a Landscaping Plan with a detailed planting schedule

III. The plans will also need an exterior Lighting Plan with fixture illustrations and specifications that are consistent with Section 223-14B.

IV. The location of residential structures on adjacent parcels should be shown on Sheet SP-1. This information will assist the board in reviewing the siting of the proposed development within the context of adjacent parcels and structures.

3. **Required Parking**
The site plan proposes four (4) parking spaces to be located within four separate single-car garages. Pursuant to Section 223-26, 1- and 2- family dwellings require 2 parking spaces per dwelling unit. Unlike the adjacent CMS district, the T district does not have lower parking requirements or similar waiver options, except under Section 223-26 C(6) for potential deductions when two or more uses on the lot have different peak parking times. The applicant may request a parking variance or indicate where the remaining 4 required parking spaces will be located onsite.

4. **Parking Layout and Design**
Section 223-26(C)(2)(b) requires that each parking space which is bordered by walls or columns on two or more sides shall be not less than 10 feet wide nor less than 18 feet long. Enclosed or garaged parking areas shall not contain any columns, walls or other obstacles which would prevent or obstruct the use of any parking space. Additional details and dimensions of the proposed garages should be provided to confirm compliance with the requirement.

5. **Architectural Elevations**
The T district has a 2½ story and 35-foot height limit. The provided front elevation drawing appears to comply but dimensions are not show. Elevations of all sides of the proposed structure with dimensions and material callouts should be provided.

6. **Ownership and Subdivision**
The T Zoning District permits both single-family attached dwellings and multifamily dwellings. A townhouse development of this nature could be organized as single-family dwelling units on separate fee simple lots, condominium dwelling units on a shared lot, or multifamily rental units on a single lot. The applicant should identify the intended approach for property ownership to be reviewed by the Board's legal counsel.

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

Natalie Quinn
Beacon Planning Consultant

KARC
PLANNING CONSULTANTS, INC.

Cc: Bruce Flower, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer
Taylor M. Palmer, Applicant Attorney

City of Beacon Planning Board Agenda
05/14/2024

Title:

Consider request for a six (6) month extension of Special Use Permit, 16 West Main Street, submitted by JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC.

ATTACHMENTS

16 West Main PB 5.14.24 SUP exp request.pdf

April 16, 2024

Honorable Chairman John Gunn and Members of the Board
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

Approval Extension

Dear Chairman Gunn and Members of the Board:

On behalf of Farrell Communities Beacon, LLC, we are respectfully requesting an extension of the Special Permit received as part of the Planning Board Preliminary & Final Subdivision Plat Approvals, Special Permit and Site Plan Approval Resolution, dated November 9, 2022. An extension was received on November 9, 2023, set to expire on May 9, 2024. The Site Plans and Architectural Drawings have been signed and the Subdivision Plat was filed with the County Clerk.

Per City Code Section 223-18F(1)(b)[1], the Special Permit shall expire within 1 year of the issuance of a building permit. The applicant has been working with the construction team and design team on finalizing the construction details and logistics. We appreciate your cooperation and look forward to the next steps in the process. Thank you.

Sincerely,

JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC

Stephen Spina, PE
Senior Project Manager

cc: Mr. John Russo, PE
Jennifer Gray, Esq.
Mr. Brian Desesa
Mr. Aryeh Siegel, AIA
Mr. John Clarke, AICP
Mr. Bruce Flower
Mr. Greg Pancost

p:\2018\18119\admin\2024-04-16 ltgunn.docx

City of Beacon Planning Board Agenda
05/14/2024

Title:

Certificate of Appropriateness – 1201 North Avenue; Facade

ATTACHMENTS

1201 North PB 5.14.24 ARB app.pdf

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: 04/29/24

Project Address: 1201 North Avenue

Project Architect/Engineer: VO Homes LLC

Owner/Builder: Maggie Fay & Sara Kathryn Tucker

Contact Phone No.: 608-770-7607 Email: maggiep.fay@gmail.com

Approval Requested: X Certificate of Appropriateness _____New Single-Family House
(sign or façade change)

Color/Materials:

Siding: Mascarpone Benjamin Moore AF-20

Roofing: _____

Windows: Color: Mascarpone Benjamin Moore AF-20 Type: _____

Trim: Mascarpone Benjamin Moore AF-20

Garage Door: Mascarpone Benjamin Moore AF-20

Stone/Brick: _____

RECEIVED
APR 29 2024
By MF

M. Fay S K
Signature of Owner

Applications for sign approval must also submit a sign permit application & supporting documents

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

_____

_____

FEE: $100.00

VO Homes LLC
845-518-1642
Info.voconstruction@gmail.com
Rame Osmani

1201 North Ave, Beacon, NY 12508

1. Description of work:

- Power wash the exterior to clean the surface of the house and garage
- Scrap off any loose or peeling paint.
- Sand rough areas to create a smooth surface.
- Remove and fill holes caused by window shutters — REMOVING SHUTTERS
- Apply wood patch and caulking to seal and patch all siding boards.
- Prime any bare wood or areas with exposed wood.
- Applying two coats of paint to the siding and trim.
- Clean up and disposal of debris.
- Supply and install a simonton window above the front door.

2. Materials needed (provided by the contractor):

- Exterior- grade benjamin moore paint for siding and trim in the desired colors.
- Primer suitable for wood surfaces.
- Wood Patch, Paint Brushes,rollers and other application tools.

Total Cost Materials & Labor $[redacted]

VO HOMES LLC

3. Replacement of old broken and missing trim

- Remove old deteriorating exterior trim.
- Measure and cut new trim to fit existing dimensions
- Caulk and seal all the replacement trim to ensure weatherproofing.
- Supply exterior- grade trim boards (wood, PVC.)

Total sum of materials & Labor costs is [redacted]

Pricing based on walkthroughs and consultation with owners. Any changes to the original estimate will be assed and billed accordingly. These prices are based on no involvement from Beacon Historic Society. Permits and Licenses might slightly alter the price.

Benjamin Moore
affinity | affinité
Mascarpone AF-20
Mascarpone
Mascarpone
Color chip may differ slightly from actual paint.
El chip de color puede diferir ligeramente de la pintura real.
La couleur de l'échantillon peut différer légèrement de la peinture en contenant.
benjaminmoore.com | benjaminmoore.ca
©2015, 2016 Benjamin Moore & Co. M1600004TL
0 23906 30004 3
Printed in the USA.
Impreso en los EE.UU./Imprimé aux É.-U.

509

510

511

City of Beacon Planning Board Agenda
05/14/2024

Title:

New Single-Family House – 144 Spring Valley Street; Facade

ATTACHMENTS

144 Spring Valley PB 5.14.24 ARB app.pdf

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: April 16, 2024

Project Address: 144 Spring Valley Street

Project Architect/Engineer: Sandra Arndt / Mike Carr. P.C.

Owner/Builder: Paula Dowd

Contact Phone No.: 617-688-6998(688) Email: paulamdowd@gmail.com

Approval Requested: ____ Certificate of Appropriateness (sign or façade change) ✓ New Single-Family House

Color/Materials:

Siding: Natural wood Clapboard

Roofing: 3 TAB Shingles Asphalt

Windows: Color: BLACK SASH Type: Casement

Trim: Natural wood

Garage Door: Black

Stone/Brick: Natural Stone

Signature of Owner

Applications for sign approval must also submit a sign permit application & supporting documents

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

_____

_____

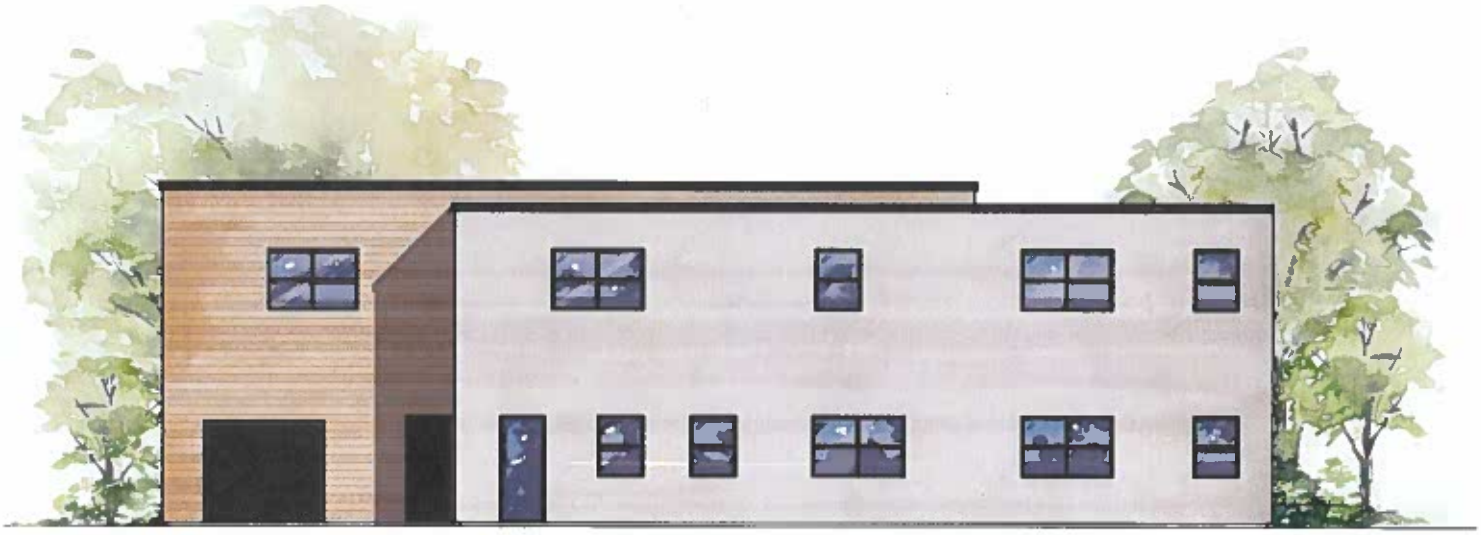
FEE: $100.00

144 Spring Valley - Existing Street View

Existing Houses on the Street

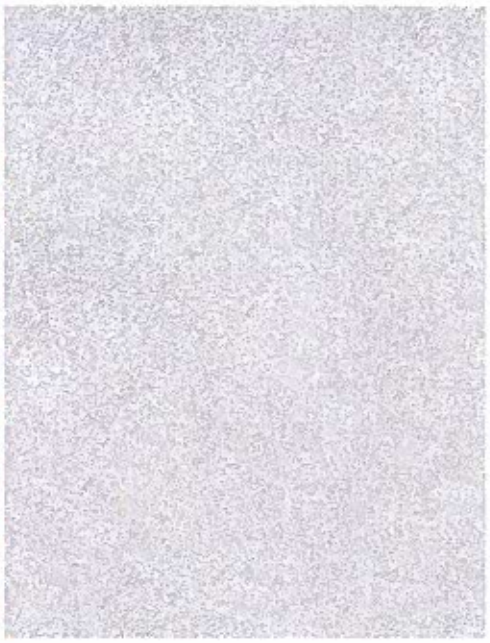
Existing Houses on the Street

144 Spring Valley - Proposed Street View



144 Spring Valley - Proposed Materials/Colors

Volume 1:
4" Tongue & Groove Horizontal Clear Cedar Siding



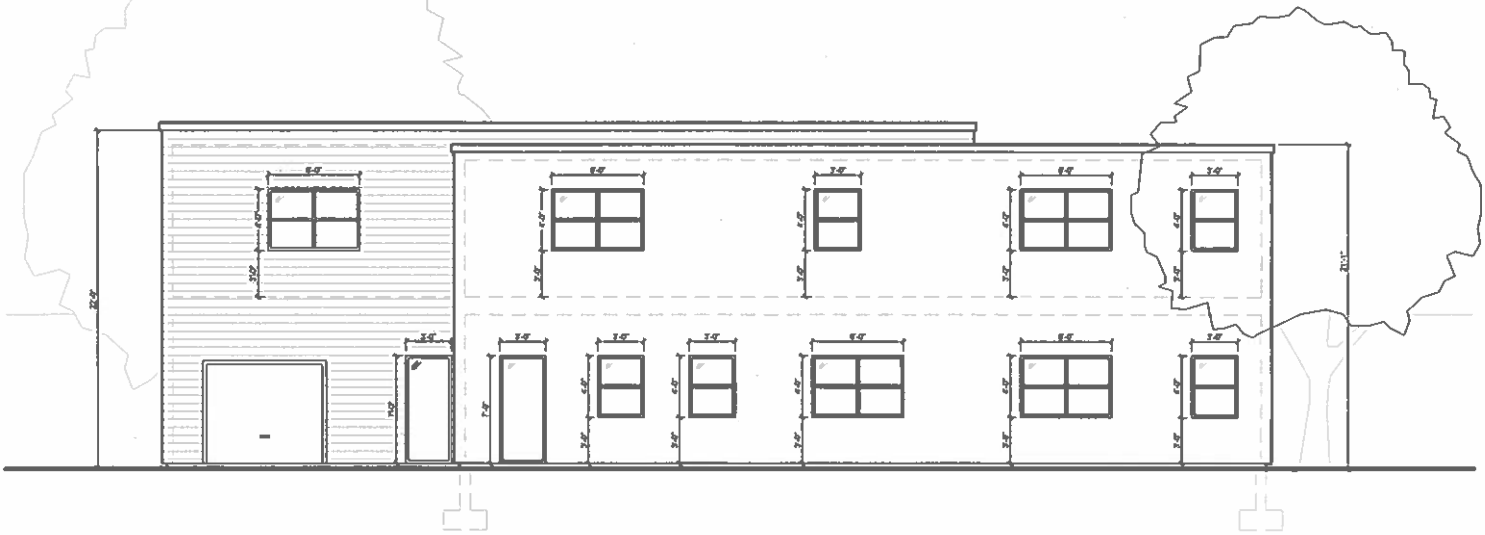
Volume 2:
Fine Stucco Wall Texture in Medium Warm Grey Siding

Flat Roof Edging:
Black Aluminum
(Same as Window Frames)

144 Spring Valley - Proposed Elevation

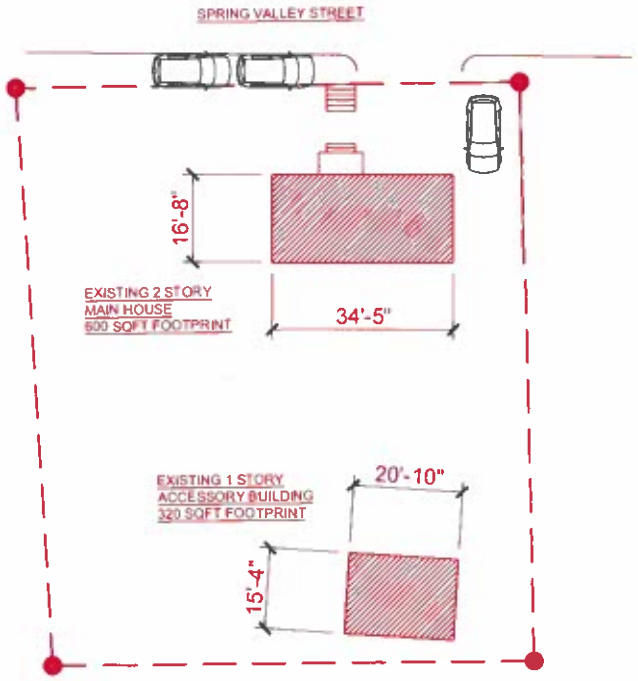
Concept - 2 Shifting Volumes
(1) Front Volume Height = 21'-1"
Fine Medium Grey Siding w/ Black Flat Roof Trim & Black Windows

(2) Back Volume Height = 22'-0"
4" T&G Clear Horizontal Cedar Siding w/ Black Flat Roof Trim & Black Windows

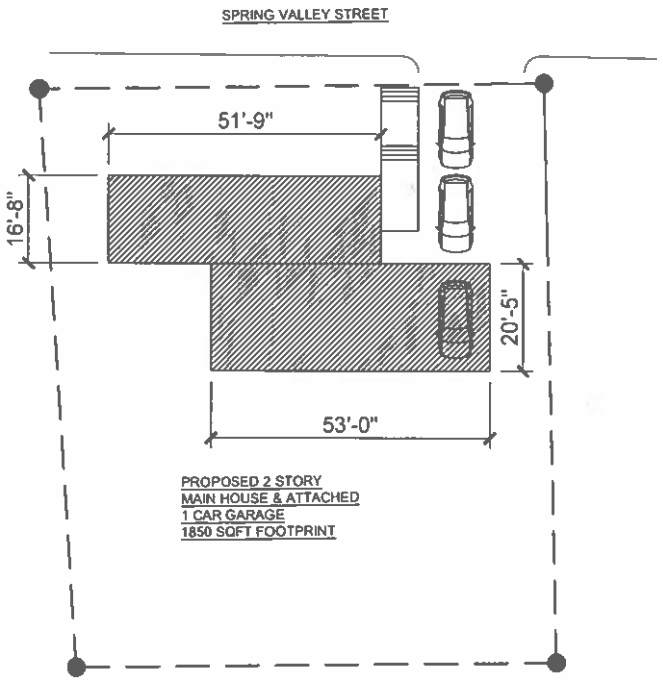


144 Spring Valley - Proposed Site

BEFORE (EXISTING)



AFTER (PROPOSED)



125

City of Beacon Planning Board Agenda
05/14/2024

Title:

Certificate of Appropriateness – 265 Main Street; Sign

ATTACHMENTS

265 Main Long Cha PB 5.14.24 ARB app.pdf

$100.—

531

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: 4/26/24

Project Address: 265 Main st, Beacon, NY 12508

Project Architect/Engineer: _____

Owner/Builder: Thaweesak Thongyoo

Contact Phone No.: 929-823-2266 Email: longchathaicafe@gmail.com

Approval Requested: ✓ Certificate of Appropriateness (sign or façade change) _____ New Single-Family House

Color/Materials:

Siding: _____

Roofing: _____

Windows: Color: _____ Type: _____

Trim: _____

Garage Door: _____

Stone/Brick: _____

T. Mj

Signature of Owner

Applications for sign approval must also submit a sign permit application & supporting documents

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____ (Date)

Plan Approved _____ (Date)

Subject to the following:

_____

_____

FEE: $100.00

HANGING SIGN
FOR LONG CHA THAI CAFE
At 265 main St , Beacon NY

4 SQUARE Feet.

BUILDING DEPARTMENT
City of Beacon

One Municipal Plaza - Suite 1 - Beacon, New York 12508

Application for Sign Permit

INSTRUCTIONS

a. ***This application must be completely filled in and submitted to the Building Inspector.***

b. ***This application must be accompanied by two copies of colored rendering of proposed sign.***

c. ***The plan must include dimensions and square foot calculations.***

d. ***The work covered by this application may not be commenced before the issuance of a sign permit.***

e. ***Upon approval of this application, the Building Department will issue a sign permit to the applicant together with approved, duplicate copy of drawings. Such permit and approved drawings shall be kept on the premises available for inspection throughout the progress of the work.***

f. ***All electrical work to be done by an electrician licensed to work in the City of Beacon and shall comply with the City of Beacon Electrical Code.***

g. ***All work to be done in accordance with the plans and specification and no person shall make any change in said plans and specifications without the written consent of the Building Department.***

534

BUILDING DEPARTMENT
City of Beacon

Approved: _____ 20 ____
Disapproved: _____ 20 ____

_____
Building Inspector

Application for Sign Permit

Date 4/26/24

Address of Sign 265 Main St, Beacon, NY 12508

PROPERTY OWNER

Name 26 EAST main street LLC Phone 845-549-4278
Address 265 Main St, Beacon, NY 12508

BUSINESS OWNER

Name of Owner Thaweesak Thongyoo Phone 929-823-2266
Name of Business: Long Cha Thai Cafe
Type of Business: Cafe (Tea Shop)
Address 265 Main St, Beacon, NY 12508

SIGN COMPANY

Name SUPERIOR SIGN Service Phone 845-227-5928
Address 818 MAIN ST.
Hopewell JCT. NY 12533

ELECTRICIAN – (For Illuminated Signs)

Name _____ Phone _____
Address _____

TYPE OF SIGN:

_____ Ground ($25) X Wall ($15) _____ Temporary Sign ($10)

Sign Content: (HANGING SIGN) LONG CHA THAI CAFE
Height of sign (if applicable) 13' Sign Dimensions 2' x 2' ROUND
Type of materials to be used: DURA BOND ALUMINUM COMPOSITE MATERIAL
Means of anchoring: LAG SHIELDS + GALVENIZED 3" LAG BOLTS

APPLICATION IS HEREBY MADE to the Building Department for the issuance of a Sign permit pursuant to the City of Beacon Code of Ordinances. The applicant agrees to comply with all applicable laws, ordinances and regulations.

T. m

(Signature of Owner)

APPLICATION PROCESSING RESTRICTION LAW

Affidavit of Property Owner

Property Owner: *26 EAST MAIN STREET LLC
(Applicant)
If owned by a corporation, partnership or organization please list names of persons holding over 5% interest in business.

n/a

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

None

Applicant Address: _____
Project Address: _____
Project Tax Grid #: _____
Type of Application: _____

*** Please note that the property owner is the applicant. "Applicant" is defined as any individual who owns at least five percent interest in a corporation or partnership or other business.**

I, Vincent Sapriano/mbr*, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true. (Check statements that are **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 in 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. _____

845-549-4278
Signature of Owner

Title if owner is corporation

City of Beacon Planning Board Agenda
05/14/2024

Title:

Certificate of Appropriateness – 512 Main Street; Sign

ATTACHMENTS

512 Main KAIGHT PB 5.14.24 ARB app.pdf

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: 4/24/2024

Project Address: 512 Main Street, Beacon, NY 12508

Project Architect/Engineer: _____

Owner/Builder: Simon Fox Properties I, LLC

Contact Phone No.: 845-202-7787 Email: kate@kaightnyc.com

Approval Requested: __x__ Certificate of Appropriateness _____ New Single-Family House
(sign or façade change)

Color/Materials:

Siding: _____

Roofing: _____

Windows: Color: _____ Type: _____

Trim: _____

Garage Door: _____

Stone/Brick: _____

RECEIVED
APR 26 2024
By JH

_____
Signature of Owner

Applications for sign approval must also submit a sign permit application & supporting documents

FOR OFFICE USE ONLY

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

_____

_____

FEE: $100.00

BUILDING DEPARTMENT
City of Beacon

One Municipal Plaza - Suite 1 - Beacon, New York 12508

Application for Sign Permit

INSTRUCTIONS

a. ***This application must be completely filled in and submitted to the Building Inspector.***

b. ***This application must be accompanied by two copies of colored rendering of proposed sign.***

c. ***The plan must include dimensions and square foot calculations.***

d. ***The work covered by this application may not be commenced before the issuance of a sign permit.***

e. ***Upon approval of this application, the Building Department will issue a sign permit to the applicant together with approved, duplicate copy of drawings. Such permit and approved drawings shall be kept on the premises available for inspection throughout the progress of the work.***

f. ***All electrical work to be done by an electrician licensed to work in the City of Beacon and shall comply with the City of Beacon Electrical Code.***

g. ***All work to be done in accordance with the plans and specification and no person shall make any change in said plans and specifications without the written consent of the Building Department.***

BUILDING DEPARTMENT
City of Beacon

Approved: _____ 20 ___
Disapproved: _____ 20 ___

_____
Building Inspector

Application for Sign Permit

Date 04/24/2024

Address of Sign 512 Main Street, Beacon, NY 12508

PROPERTY OWNER

Name Simon Fox Properties I, LLC Phone 914-648-7660
Address PO Box 247, Port Chester, NY 10573

BUSINESS OWNER

Name of Owner Kate McGregor Phone 646-812-2753
Name of Business: KAIGHT, INC.
Type of Business: Clothing Retail
Address 512 Main Street, Beacon, NY 12508

SIGN COMPANY

Name KING STREET SIGN CO. Phone 845 565 8337
Address 1 Colden St. Suite 100, Newburgh, NY 12550

ELECTRICIAN – (For Illuminated Signs)

Name _____ Phone _____
Address _____

TYPE OF SIGN:

_____ Ground ($25) ___x___ Wall ($15) _____ Temporary Sign ($10)

Sign Content: Business Name/Logo
Height of sign (if applicable) _____ Sign Dimensions 22" x 13"
Type of materials to be used: Aluminum composite
Means of anchoring: Steel bar with s-hooks

APPLICATION IS HEREBY MADE to the Building Department for the issuance of a Sign permit pursuant to the City of Beacon Code of Ordinances. The applicant agrees to comply with all applicable laws, ordinances and regulations.

_____
(Signature of Owner)

APPLICATION PROCESSING RESTRICTION LAW
Affidavit of Property Owner

Property Owner: Simon Fox Properties I, LLC
(Applicant)
If owned by a corporation, partnership or organization please list names of persons holding over 5% interest in business.

List all properties in the City of Beacon that you hold a 5% interest in.
475 BEACON MAIN, LLC

Applicant Address: PO Box 247, Port Chester, NY 10573
Project Address: 512 Main Street, Beacon, NY 12508
Project Tax Grid #: 121755
Type of Application:

*** Please note that the property owner is the applicant. "Applicant" is defined as any individual who owns at least five percent interest in a corporation or partnership or other business.**

I, Michael Bensimon, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true. (Check statements that are **true**)

1. No violations are pending for ANY parcel owned by me situated within the City of Beacon. X
2. Violations are pending on a parcel or parcels owned by me situated within the City of Beacon. ____
3. ALL tax payments due to the City of Beacon are current. X
4. Tax delinquencies exist on a parcel or parcels owned by me in the City of Beacon. ____
5. Special Assessments are outstanding on a parcel or parcels owned by me in the City of Beacon ____
6. ALL Special Assessments due to the City of Beacon on any parcel owned by me are current. X

Signature of Owner

Managing Member
Title if owner is corporation

22” BAR LENGTH

13”

22” SIGN LENGTH

City of Beacon Planning Board Agenda
05/14/2024

Title:

New Single-Family House – 290 South Avenue; Facade

ATTACHMENTS

290 South PB 5.14.24 ARB app.pdf

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: 05/02/2024

Project Address: 290 South Avenue

Project Architect/Engineer: Belal F Salim

Owner/Builder: Priscille Voekler

Contact Phone No.: 6464040248 Email: Priscille@voekler.org

Approval Requested: _____Certificate of Appropriateness (sign or façade change) X New Single-Family House

Color/Materials:

Siding: 22 Gauge Steel (Granite)

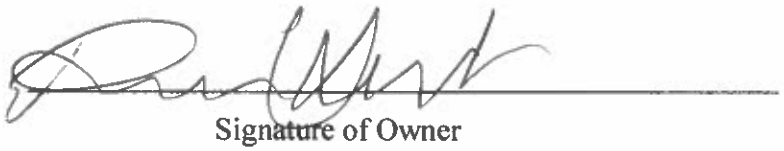
Roofing: 22 Gauge Steel (Slate Gray)

Windows: Color: Black Type: Casement (Aluminum Clad-wood)

Trim: N/A

Garage Door: Steel/Glass (Black)

Stone/Brick: Stone veneer (Multi-color)



Signature of Owner

Applications for sign approval must also submit a sign permit application & supporting documents

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

_____

_____

FEE: $100.00

Standard Colors

PAC-CLAD
PETERSEN
A CARLISLE COMPANY

PAC-CLAD.COM

IL: 800 PAC CLAD TX: 800 441 8661 MD: 800 344 1400
AZ: 833 750 1935 GA: 800 272 4482 WA: 253 501 2450

FLUSH WALL PANELS

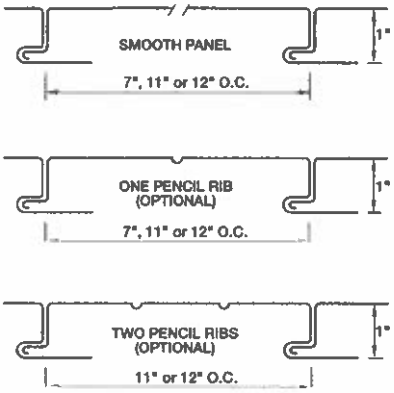
MATERIALS

.032 aluminum	24 gauge steel
.040 aluminum*	22 gauge steel*

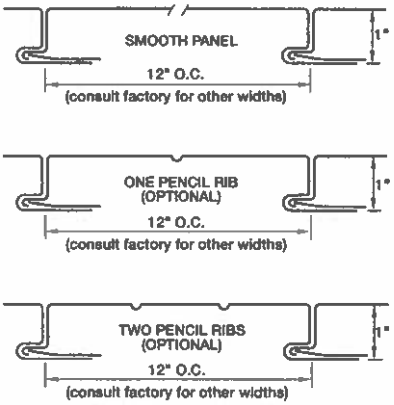
SPECS

7", 11" or 12" O.C.	1" High

FLUSH PANEL

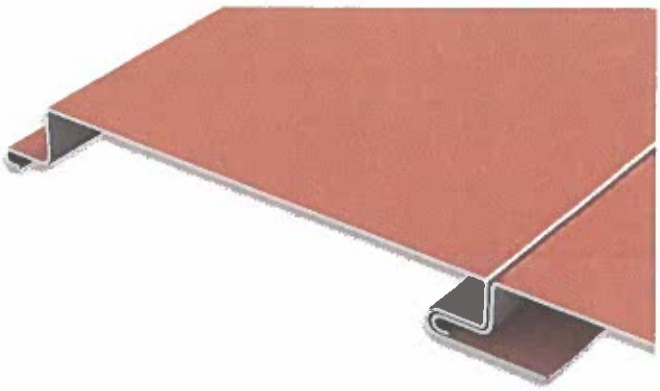


FLUSH PANEL W/ CLIP (OPTIONAL)

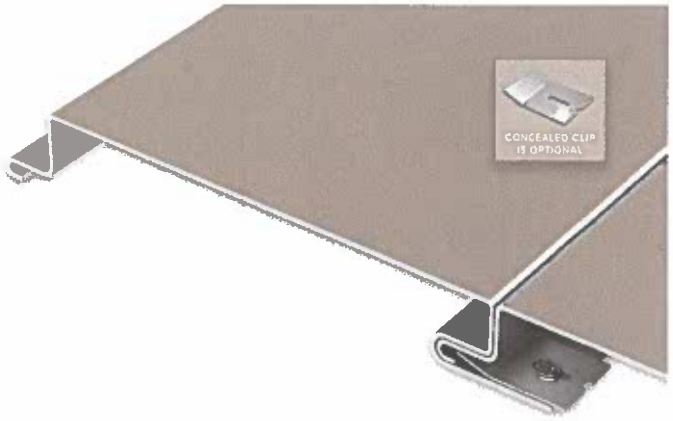


*Limited color availability. 12" O.C. has reduced fastening flange. A complete specification is available online at pac-clad.com.

**Optional concealed clips are available for added wind resistance when needed.



FLUSH PANEL



FLUSH PANEL W / CLIP (OPTIONAL)**

PRODUCT FEATURES

- Leveled for flatness
- Available with up to two pencil ribs
- Rounded interlock leg provides improved flush fit
- 30-year non-prorated finish warranty
- Panel lengths from 4' to 25'

MATERIAL

- 43 stocked colors (24 gauge steel)
- 16 Stocked colors (22 gauge steel)
- 36 stocked colors (.032 aluminum)
- 22 stocked colors (.040 aluminum)
- Galvalume Plus available

ASTM TESTS - FLUSH

- ASTM E330 tested - 12" only
- ASTM 1592
- ASTM E283
- ASTM E331
- AAMA 501.1-05

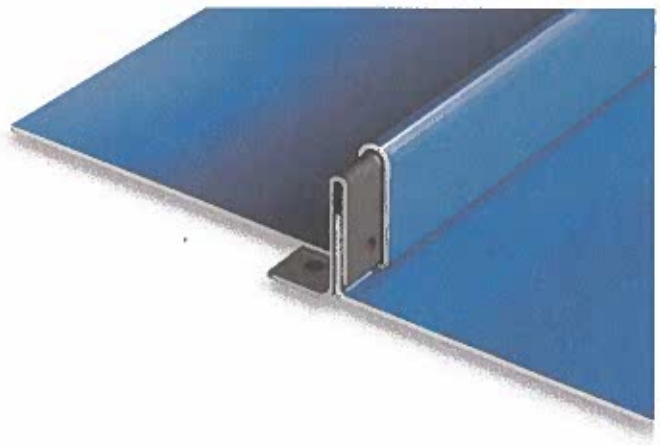
FLORIDA BUILDING PRODUCT APPROVALS

Please refer to pac-clad.com or your local factory for specific product approval numbers for Flush panels.

PAC-CLAD PETERSEN A CARLISLE COMPANY

©2024 Petersen Aluminum

REDI-ROOF STANDING SEAM WITHOUT OFFSETS



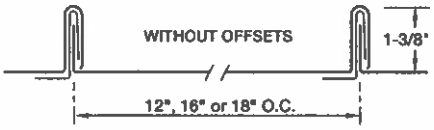
MATERIALS

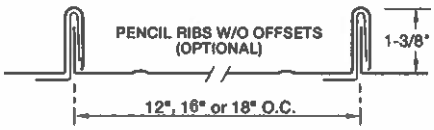
.032 aluminum — 24 gauge steel*
22 gauge steel

SPECS

12", 16" or 18" O.C. — 1-3/8" High

UL-90





PRODUCT FEATURES

- Available with or without offsets
- Factory eave notching available
- Labor-saving one-piece design
- Pencil ribs available
- 30-year non-prorated finish warranty
- Panel lengths up to 45'

MATERIAL

- 43 stocked colors (24 gauge steel)
- 36 stocked colors (.032 aluminum)
- 16 Stocked colors (22 gauge steel)
- Galvalume Plus available

UL CLASSIFICATION

- UL-580 Class 90 wind uplift (steel only)
- UL-790 Class A fire rated
- UL-263 fire resistance rated
- UL-2218 impact resistance rated

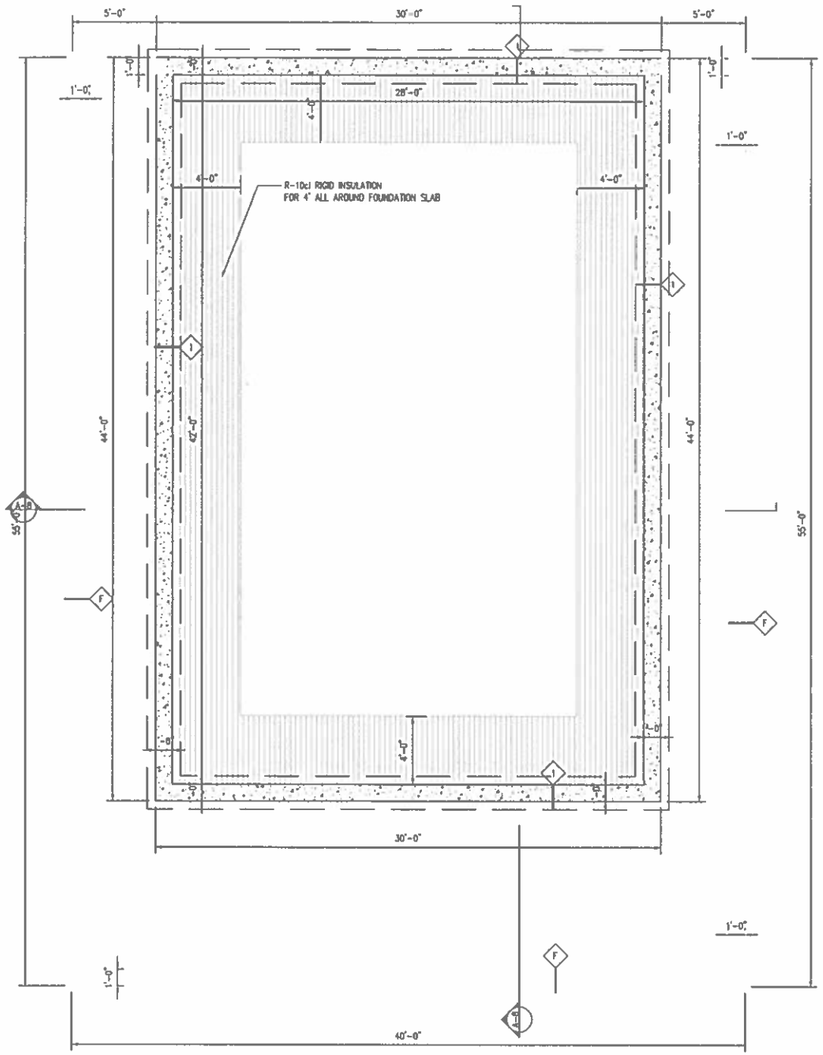
ASTM TESTS

- ASTM E283/1680 tested
- ASTM E331/1646 tested

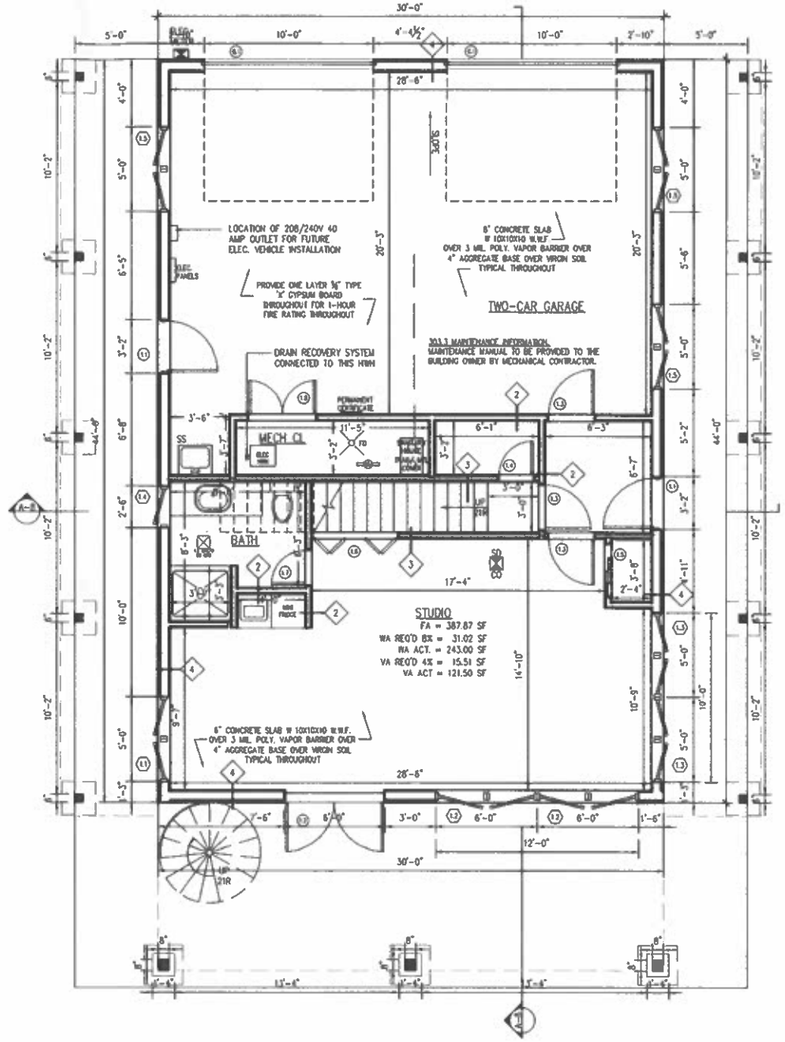
*24 gauge steel, in all O.C.'s, is UL-90 Classified over solid substrate. See roof deck construction in Underwriter Laboratories roofing materials and systems directory.

A complete specification is available online at pac-clad.com.

©2020 Petersen Aluminum



PROPOSED FOUNDATION
SCALE: 1/4" = 1'-0"



PROPOSED FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

WALL LEGEND

- F — NEW POURED CONCRETE FOUNDATION WALL AND FOOTING (4000 PSI MIN.)
- 1 — NEW POURED CONCRETE FOUNDATION WALL AND FOOTING (4000 PSI MIN.) R-10 SLAB EDGE INSULATION AT 4 FEET
- 2 — NEW NON-RATED LOAD-BEARING INTERIOR PARTITION WITH 2"x4" WOOD STUDS @ 16" O.C. WITH ½" GYPSUM BOARD ON BOTH SIDES
- 3 — NEW NON-RATED LOAD-BEARING INTERIOR PARTITION WITH 2"x4" WOOD STUDS @ 12" O.C. WITH ½" GYPSUM BOARD ON BOTH SIDES
- 4 — NEW 1-HOUR RATED EXTERIOR WALL. METAL CLADDING FLUSH PANEL FINISH, 1" R-5ci INSULATION , PAC-CLAD HT UNDERLAYMENT ⅜" CDX PLYWOOD, 2"x6" WOOD STUDS @ 16" O.C. WITH R-20 BATT INSULATION IN CAVITY, ⅝" TYPE 'X' GYPSUM BOARD ON INTERIOR SIDE

FENESTRATION NOTE (RC R402.1.2):
FENESTRATION TO HAVE A MAXIMUM U-FACTOR OF 0.27
FENESTRATION SHGC NOT REQUIRED BUT TO HAVE A MAXIMUM OF 0.19 TO COMPLY WITH RESCHECK COMPLIANCE.

DRAIN WATER HEAT RECOVERY SYSTEM
MAKE: RENEWABILITY ENERGY INC.
MODEL: R3-48
EF: 68.82X
3" DIAMETER | 48" LENGTH

LIGHTING NOTE (R404.1 LIGHTING EQUIPMENT (MANDATORY))
NOT LESS THAN 90 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS OF AT LEAST 65 LUMENS PER WATT OR HAVE A TOTAL LUMINAIRE EFFICAY OF AT LEAST 45 LUMENS PER WATT

R403.5.4 SUPPLY OF HEATED WATER
IN NEW BUILDINGS HEATED WATER SUPPLY PIPING SHALL BE IN ACCORDANCE WITH DRAIN WATER HEAT RECOVERY UNITS. NEW BUILDINGS SHALL INCLUDE A DRAIN WATER HEAT RECOVERY UNIT THAT CAPTURES HEAT FROM AT LEAST ONE SHOWER PER DWELLING UNIT, AND SUCH DRAIN WATER HEAT RECOVERY UNIT MUST HAVE A MINIMUM EFFICIENCY OF 40 PERCENT IF INSTALLED FOR EQUAL FLOW OR A MINIMUM EFFICIENCY OF 52 PERCENT IF INSTALLED FOR UNEQUAL FLOW.

PERMANENT CERTIFICATE:
- LOCATED IN BOILER ROOM

THE CERTIFICATE SHALL LIST THE FOLLOWING:
- R-VALUES OF INSULATION INSTALLED IN CEILING/ROOF, WALLS, FOUNDATION (SLAB, BASEMENT WALL, CRAWLSPACE WALL AND FLOOR) AND DUCTS OUTSIDE CONDITIONED SPACES.
- U-FACTORS FOR FENESTRATION AND THE SOLAR HEAT GAIN COEFFICIENT (SHGC) OF FENESTRATION
- RESULTS FROM ANY REQUIRED DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING
- TYPES AND EFFICIENCIES OF HEATING, COOLING AND SERVICE WATER HEATING EQUIPMENT

BFS Architect PC
150-55C 14th Ave 1st Floor
Whitestone, NY 11357
Tel: (718) 701-5959
Architecture Consulting Expediting

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SEAL

REGISTERED ARCHITECT BILAL F. SALIM 031445 STATE OF NEW YORK

PROJECT LOCATION
290 South Avenue
Beacon, NY 12508

OWNER INFORMATION
Priscille Voekler

DRAWING TITLE
Proposed Plans
(Foundation - 1st Floor)

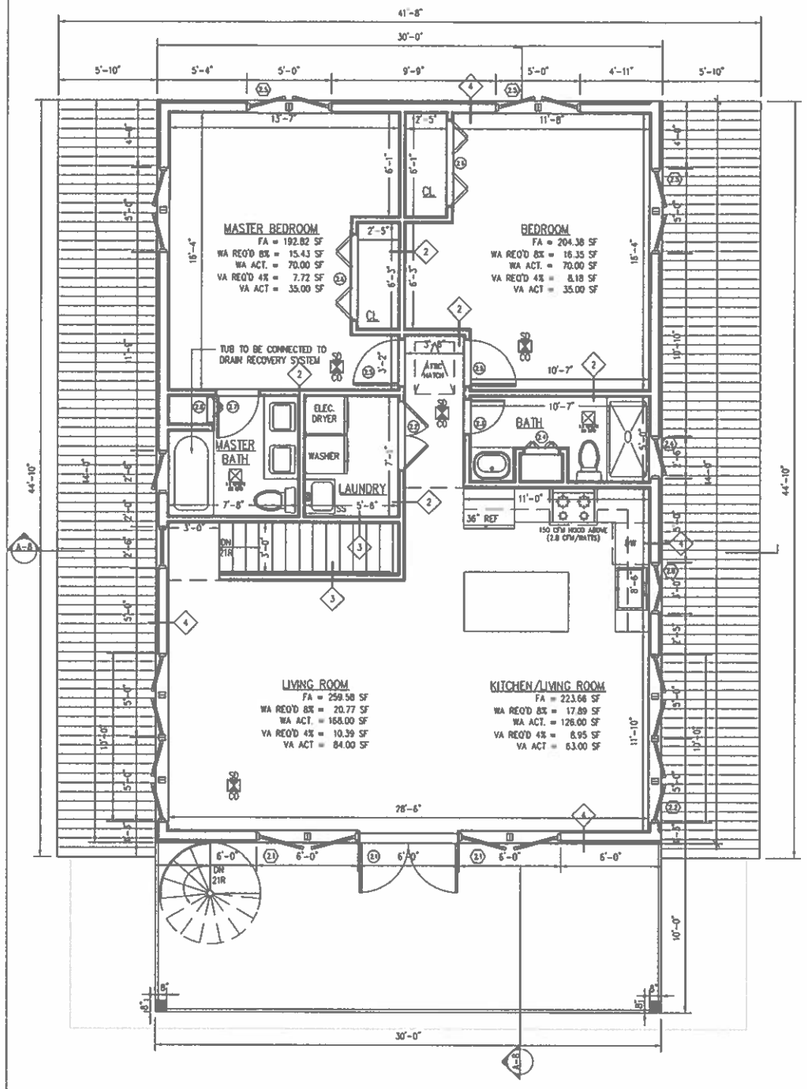
DRAWN BY	CHECKED BY	JOB NO.	SCALE	DATE
B. SALIM	B. SALIM	24-002	AS SHOWN	04/16/2024

NO.	DATE	REVISION

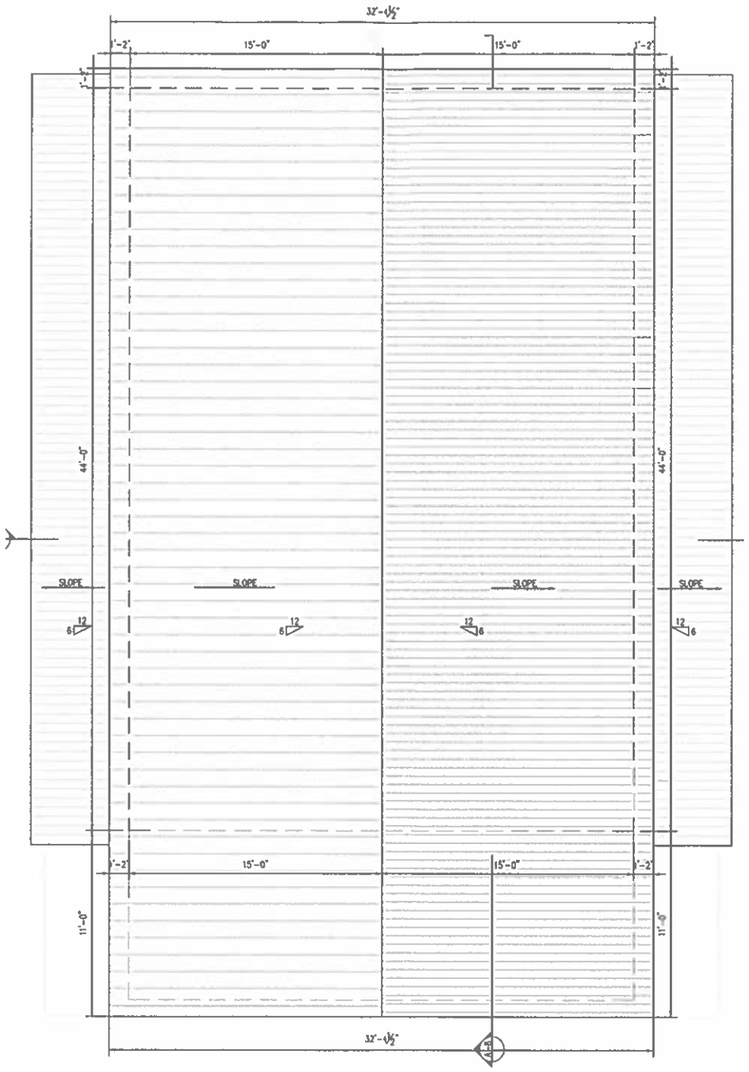
APPROVAL STAMPS

APPLICATION NO.
APPLICATION_NO.

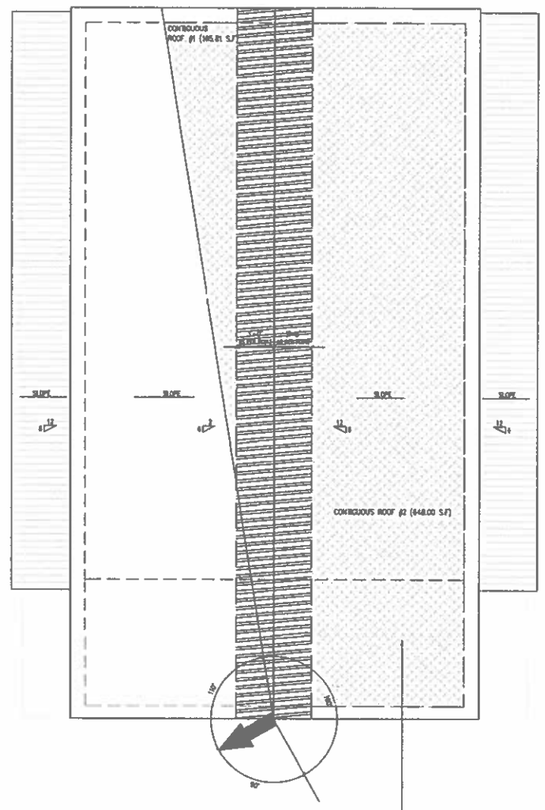
DRAWING NO.
A-4



PROPOSED SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"



PROPOSED ROOF PLAN
SCALE: 1/4" = 1'-0"



NEW BUILDING TO PROVIDE A SOLAR-READY ZONE AREA AS PER 2020 RESIDENTIAL CODE OF NEW YORK STATE SECTION T103 (RA103)

SOLAR-READY ZONE AREA
SCALE: 3/16" = 1'-0"

ROOF AREA BETWEEN 110° & 270° OF TRUE NORTH

WALL LEGEND

- F — NEW POURED CONCRETE FOUNDATION WALL AND FOOTING (4000 PSI MIN.)
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- 2 — NEW NON-RATED LOAD-BEARING INTERIOR PARTITION WITH 2"x4" WOOD STUDS @ 16" O.C. WITH ½" GYPSUM BOARD ON BOTH SIDES
- 3 — NEW NON-RATED LOAD-BEARING INTERIOR PARTITION WITH 2"x4" WOOD STUDS @ 12" O.C. WITH ½" GYPSUM BOARD ON BOTH SIDES
- 4 — NEW 1-HOUR RATED EXTERIOR WALL, METAL CLADDING FLUSH PANEL FINISH, 1" R-5ci INSULATION , PAC-CLAD HT UNDERLAYMENT ⅜" CDX PLYWOOD, 2"x6" WOOD STUDS @ 16" O.C. WITH R-20 BATT INSULATION IN CAVITY, ⅝" TYPE 'X' GYPSUM BOARD ON INTERIOR SIDE

FENESTRATION NOTE (BC R402.1.2):
FENESTRATION TO HAVE A MAXIMUM U-FACTOR OF 0.27
FENESTRATION SHGC NOT REQUIRED BUT TO HAVE A MAXIMUM OF 0.19 TO COMPLY WITH RESCHECK COMPLIANCE.

DRAIN WATER HEAT RECOVERY SYSTEM
MAKE: RENEWABILITY ENERGY INC.
MODEL: R3-48
EF: 66.6%
3" DIAMETER | 48" LENGTH

LIGHTING NOTE: R404.1 LIGHTING EQUIPMENT (MANDATORY)
NOT LESS THAN 90 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS OF AT LEAST 65 LUMENS PER WATT OR HAVE A TOTAL LUMINAIRE EFFICAY OF AT LEAST 45 LUMENS PER WATT

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BFS Architect PC
150-55C 14th Ave 1st Floor
Whitestone, NY 11357
Tel: (718) 701-5959
Architecture Consulting Expediting

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SEAL

REGISTERED ARCHITECT BASIL F. SALIM 026442 STATE OF NEW YORK

PROJECT LOCATION
290 South Avenue
Beacon, NY 12508

OWNER INFORMATION
Priscille Voekler

DRAWING TITLE
Proposed Plans
(2nd Floor - Roof)
& Solar Diagram

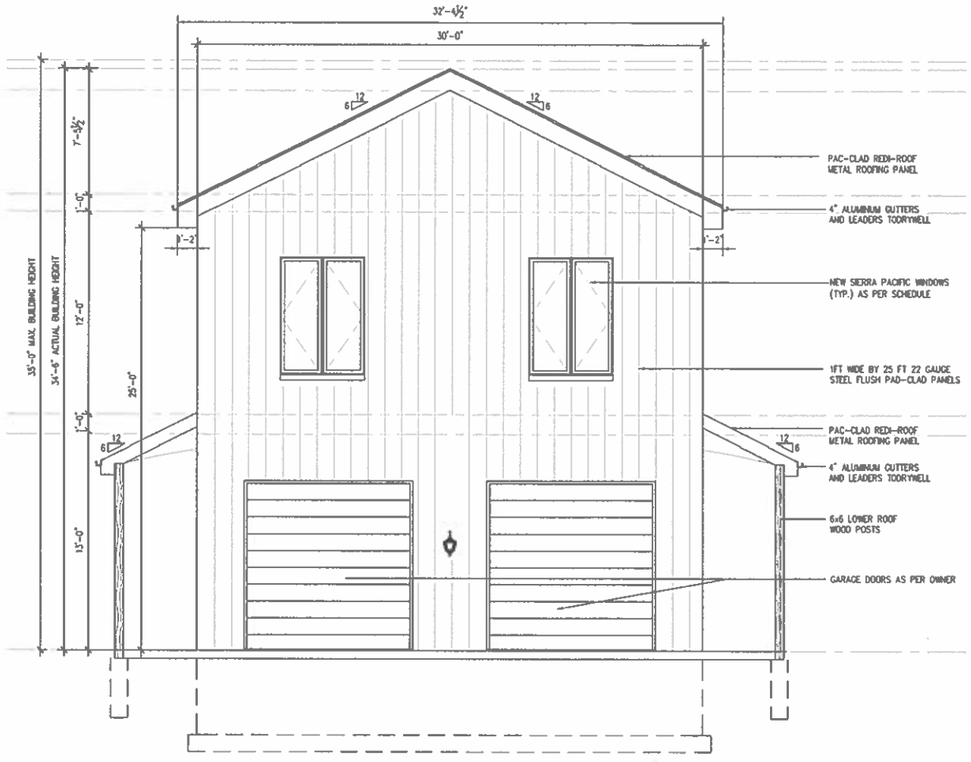
DRAWN BY	CHECKED BY	JOB NO.	SCALE	DATE
B. SALIM	B. SALIM	24-002	AS SHOWN	04/16/2024

NO.	DATE	REVISION

APPROVAL STAMPS

APPLICATION NO.
APPLICATION_NO.

DRAWING NO.
A-5



PROPOSED FRONT ELEVATION
SCALE: 1/4" = 1'-0"

PROPOSED SIDE ELEVATION A
SCALE: 1/4" = 1'-0"

BFS
Architect PC
150-55C 14th Ave 1st Floor
Whitestone, NY 11357
Tel: (718) 701-5959
Architecture Consulting Expediting

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SEAL

PROJECT LOCATION
290 South Avenue
Beacon, NY 12508

OWNER INFORMATION
Priscille Voekler

DRAWING TITLE
Elevations

DRAWN BY	CHECKED BY	JOB NO.	SCALE	DATE
B. SALIM	B. SALIM	24-002	AS SHOWN	04/16/2024

NO.	DATE	REVISION

APPROVAL STAMPS

APPLICATION NO.
APPLICATION_NO.

DRAWING NO.
A-6

PROPOSED REAR ELEVATION
SCALE: 1/4" = 1'-0"

PROPOSED SIDE ELEVATION B
SCALE: 1/4" = 1'-0"

BFS Architect PC
150-55C 14th Ave 1st Floor
Whitestone, NY 11357
Tel: (718) 701-5959
Architecture Consulting Expediting

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SEAL

REGISTERED ARCHITECT BILAL F. SALIM 026425 STATE OF NEW YORK

PROJECT LOCATION
290 South Avenue
Beacon, NY 12508

OWNER INFORMATION
Priscille Voekler

DRAWING TITLE
Elevations

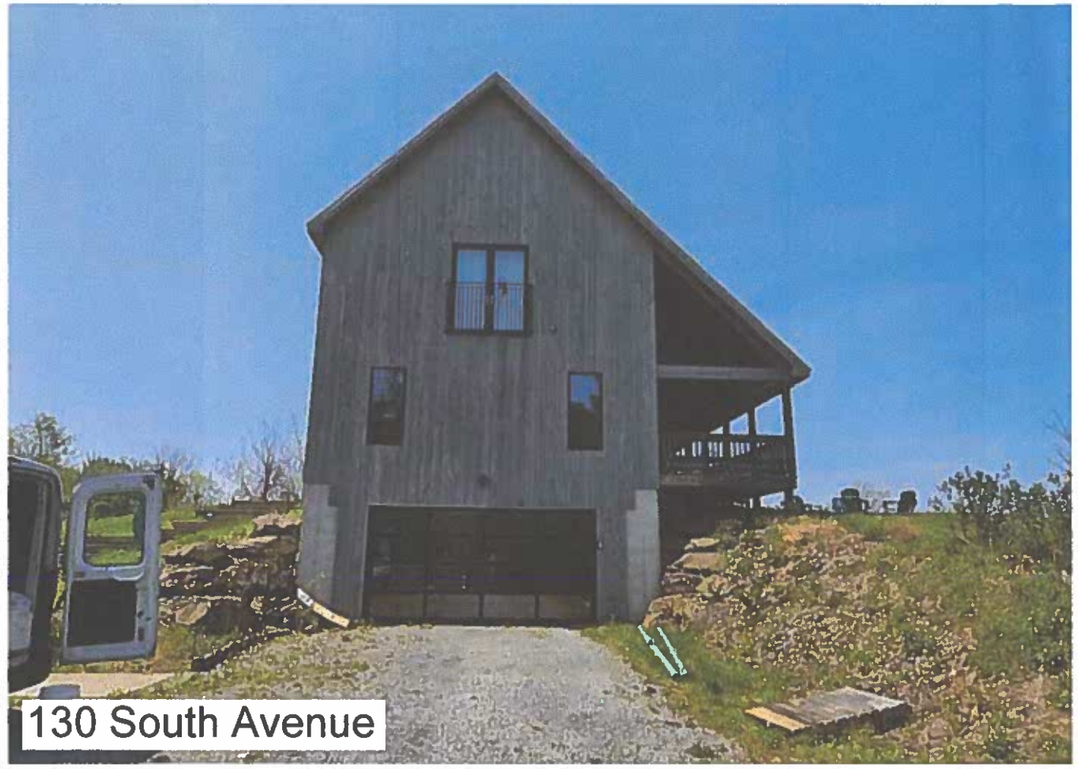
DRAWN BY	CHECKED BY	JOB NO.	SCALE	DATE
B. SALIM	B. SALIM	24-002	AS SHOWN	04/16/2024

NO.	DATE	REVISION

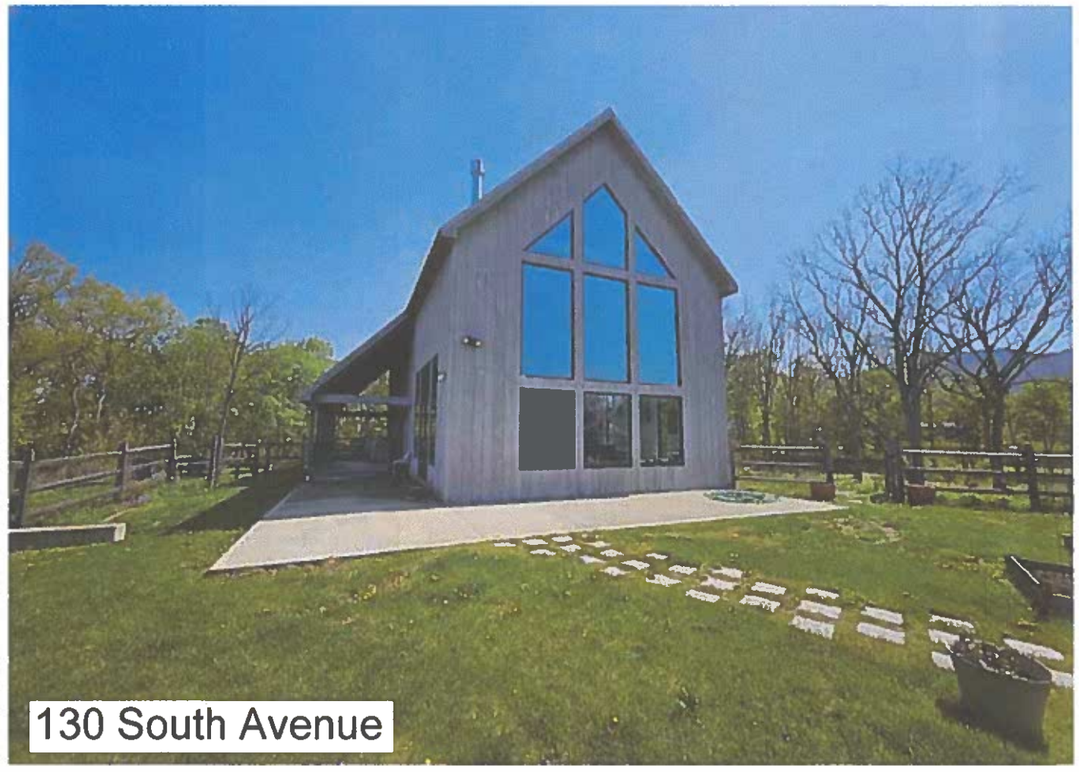
APPROVAL STAMPS

APPLICATION NO.
APPLICATION_NO.

DRAWING NO.
A-7
7 of 22


130 South Avenue

300 South Avenue


130 South Avenue

300 South Avenue

City of Beacon Planning Board Agenda
05/14/2024

Title:

Certificate of Appropriateness – 246 Main Street; Facade

ATTACHMENTS

246 Main PB 5.14.24 PB ARB app.pdf

DocuSign Envelope ID: 1B48EDDC-57A5-4C61-A9F7-9F9924670C71

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: 04 | 30 | 2024

Project Address: 246 Main St Beacon, NY 12508

Project Architect/Engineer: 917.415.6914

Owner/Builder: Mercaders Holdings, LLC Bud Schmeling

Contact Phone No.: _____ Email: Bud.Schmeling@gmail

Approval Requested: ✓ Certificate of Appropriateness (sign or façade change) _____ New Single-Family House

Color/Materials:

Siding: Board siding for the back addition only

Roofing: _____

Windows: Color: Dark Navy blue Type: Andersen 400

Trim: Repair all damaged trim

Garage Door: _____

Stone/Brick: Lime wash exterior brick

DocuSigned by:
64FA4745B5B14B2...

Signature of Owner

Applications for sign approval must also submit a sign permit application & supporting documents

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____ (Date)

Plan Approved _____ (Date)

Subject to the following:

_____

_____

FEE: $100.00

We are writing to submit a proposal for the renovation of 246 main st. Our aim is to enhance the aesthetic appeal, functionality, and longevity of the building through several improvements outlined below:

Exterior Painting:

1. Currently, 80% of the building is painted red, leaving the brickwork unfinished. We propose to white lime wash all exposed brick surfaces for a fresh and uniform appearance.

Trim Repairs and Painting:

2. The trim of the building is in need of repairs. We plan to address these issues and paint the trim a benjamin moore hale color, to complement the white lime washed brick.

Window Replacement:

3. The existing windows are at the end of their lifespan. We intend to replace them with Andersen 400 series windows on the first floor. Additionally, we will paint and match the windows on the second and third floors to the new windows for a cohesive look. In the not so long future all the second and third floor windows will be replaced with the Andersen 400 series.

Siding Replacement:

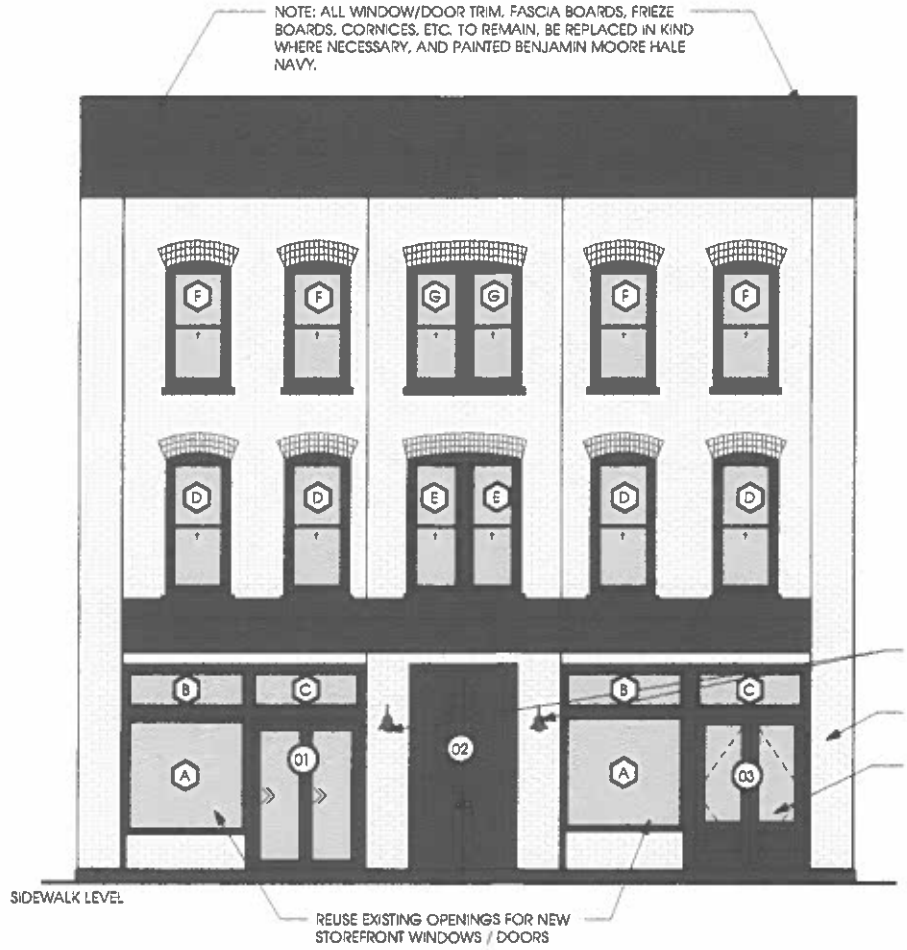
4. The siding in the back of the building is old shingles that are no longer good and require an update. We propose replacing it with boral siding, which offer durability and a modern aesthetic.

Roof Replacement:

5. Both flat roofs will be replaced to match the existing roofing material, ensuring consistency and structural integrity.

These renovations are essential for maintaining the integrity and attractiveness of 246 main st. We are committed to adhering to all building codes and regulations throughout the renovation process.

Thank you for considering our proposal. We are open to any feedback or suggestions you may have and look forward to the opportunity to enhance 246 Main.



DOOR SCHEDULE

TAG	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL / FINISH
01	5' - 0"	6' - 11 11/16"	PREMIUM COLLECTION 2-PANEL BIFOLD PATIO DOOR	WEATHER SHIELD	CUSTOM	WOOD / PAINTED HALE NAVY
02	4' - 6"	8' - 11"	SOLID WOOD DOUBLE DOORS	SIMPSON	CUSTOM	WOOD / PAINTED HALE NAVY
03	5' - 1 5/8"	7' - 2"	OUTSWING WOOD PANEL FRENCH DOORS	SIMPSON	CUSTOM	WOOD / PAINTED HALE NAVY

WINDOW SCHEDULE

TAG	WINDOW SIZE WIDTH	WINDOW SIZE HEIGHT	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL / FINISH
A	5' - 6"	5' - 3"	PREMIUM SERIES DIRECT SET	WEATHER SHIELD		WOOD / PAINTED HALE NAVY
B	5' - 6"	1' - 9"	PREMIUM SERIES DIRECT SET TRANSOM	WEATHER SHIELD		WOOD / PAINTED HALE NAVY
C	5' - 0"	1' - 9"	PREMIUM SERIES DIRECT SET TRANSOM	WEATHER SHIELD		WOOD / PAINTED HALE NAVY
D	2' - 8"	6' - 0 1/2"	400 SERIES DOUBLE HUNG	ANDERSEN	TW26510	VINYL CLAD WOOD / CUSTOM NAVY TO MATCH
E	2' - 4"	6' - 0 1/2"	400 SERIES DOUBLE HUNG	ANDERSEN	TW24510	VINYL CLAD WOOD / CUSTOM NAVY TO MATCH
F	2' - 8"	5' - 3 1/2"	400 SERIES DOUBLE HUNG	ANDERSEN	TW2652	VINYL CLAD WOOD / CUSTOM NAVY TO MATCH
G	2' - 4"	5' - 3 1/2"	400 SERIES DOUBLE HUNG	ANDERSEN	TW2452	VINYL CLAD WOOD / CUSTOM NAVY TO MATCH

246 MAIN STREET

RESTAURANT RENOVATION

PROPOSED ELEVATION

Project number Proj. #24-001
Date 2 MAY 2024

A1

Hale Navy
Azul Marino de Hale
Bleu Marine

HC-154

Benjamin Moore®

United States/Estados Unidos:
For assistance 1-855-PAINT-02 Para asistencia

Canada:
For assistance 1-855-PAINT-02 Pour obtenir de l'aide

Color chip may differ slightly from actual paint. El chip de color puede diferir ligeramente de la pintura real. La couleur de l'échantillon peut différer légèrement de la peinture en contenant.

DUH 09/2022
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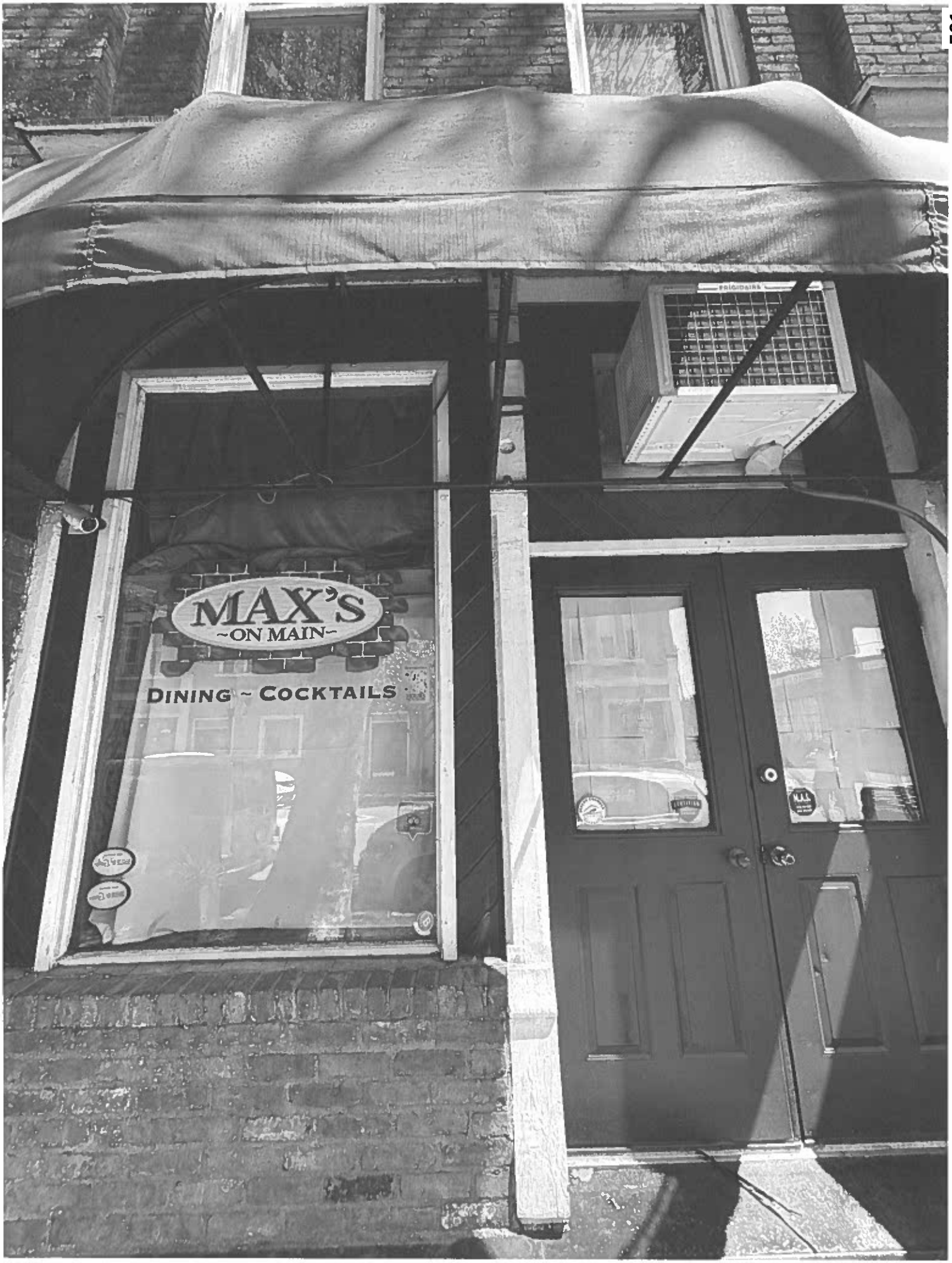
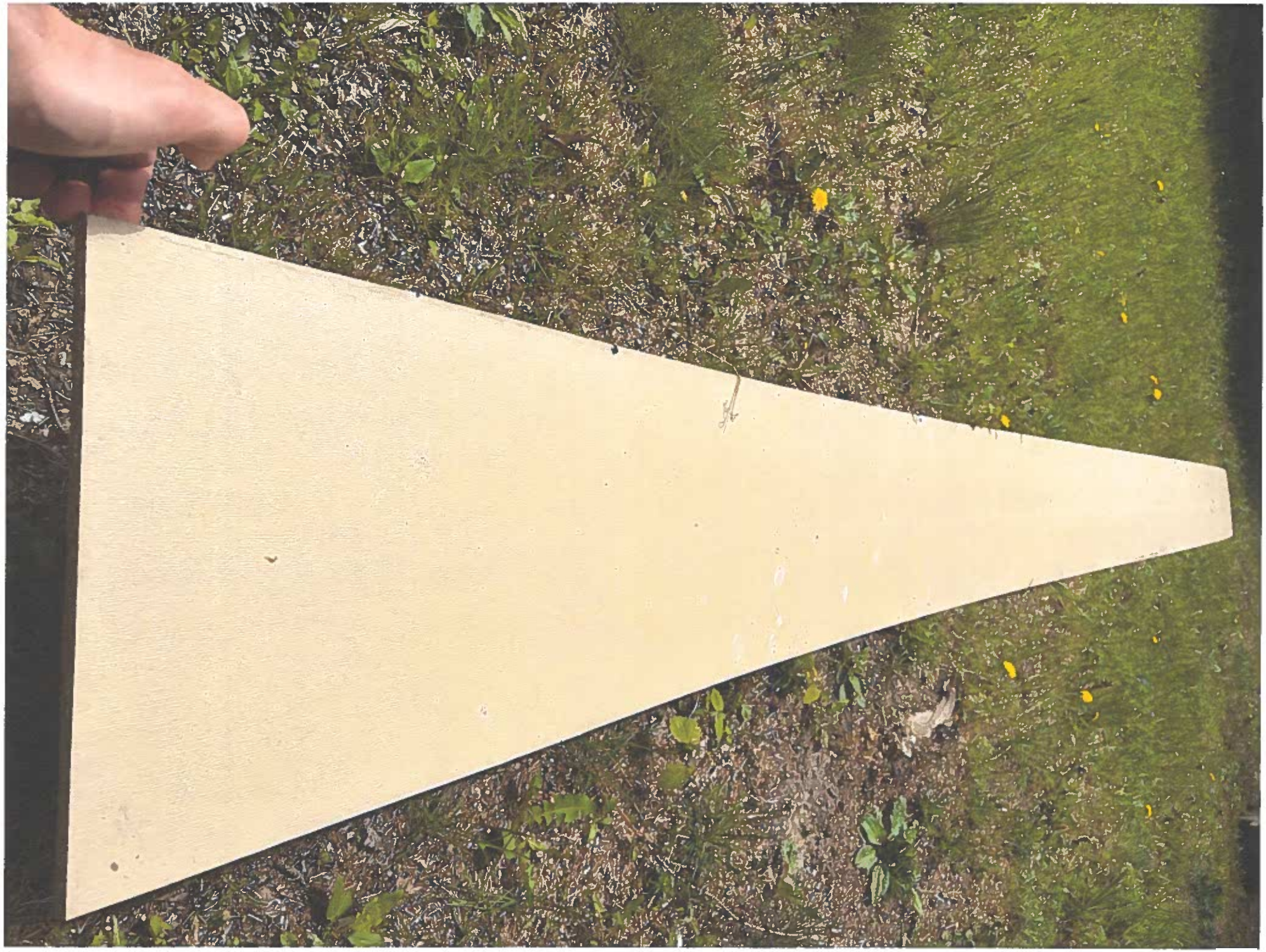
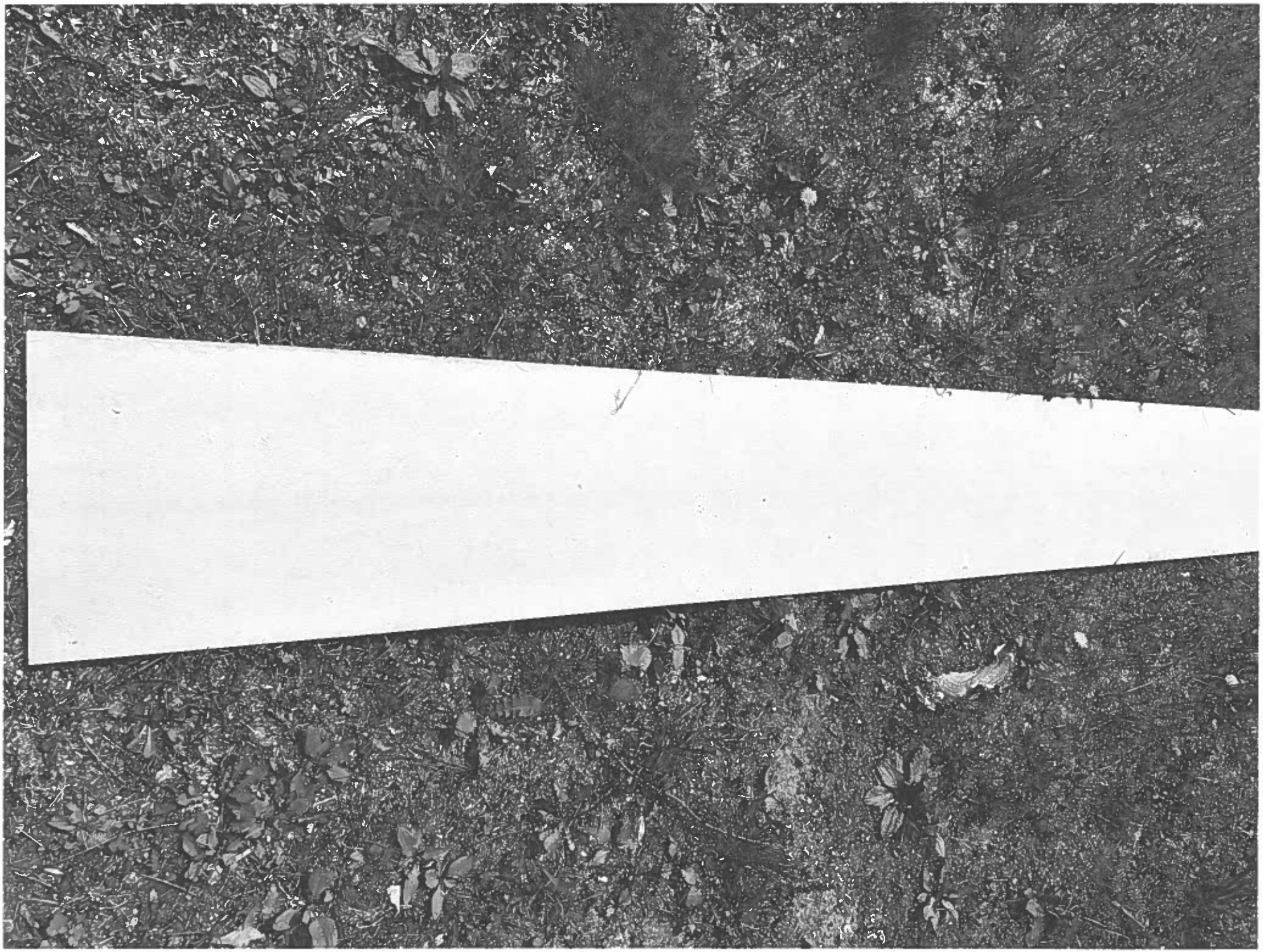

MAX'S
~ON MAIN~
DINING ~ COCKTAILS

MAX'S
MAX'S





City of Beacon Planning Board Agenda
05/14/2024

Title:

Certificate of Appropriateness – 508 Main Street; Sign

ATTACHMENTS

508 Main PB 5.14.24 ARB app.pdf

ARCHITECTURAL REVIEW BOARD APPLICATION

Date: 4/30/2024

Project Address: 508 Main St. Beacon NY 12508

Project Architect/Engineer: KING STREET SIGN CO. (this is only sign painting)

Owner/Builder: Simon Fox Properties

Contact Phone No.: 914-648-7660 Email: michael@simonfoxproperties.com

Approval Requested: X Certificate of Appropriateness (sign or façade change) _____New Single-Family House

Color/Materials:

Siding: _____

Roofing: _____

Windows: Color: Paint: Benjamin Moore Black HC-190, Benjamin Moore Bryant Gold HC-8 Type: _____

Trim: _____

Garage Door: _____

Stone/Brick: _____

_____

Signature of Owner

Applications for sign approval must also submit a sign permit application & supporting documents

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied _____
(Date)

Plan Approved _____
(Date)

Subject to the following:

_____

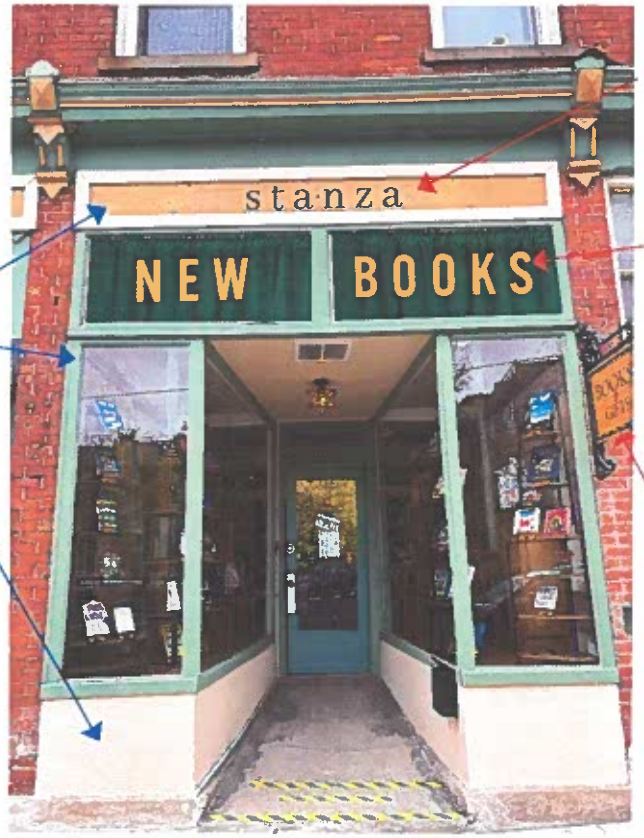
_____

FEE: $100.00

Current
508 Main st

Existing colors on building

Proposed additions
508 Main st



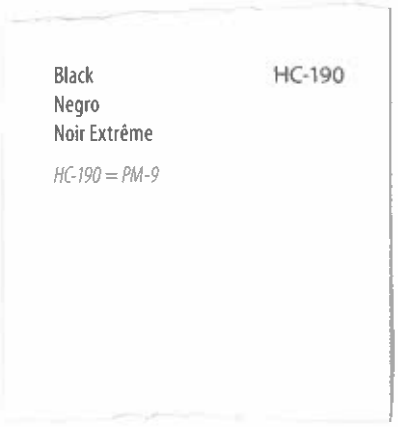
Existing colors on building

Added
41.5"x 4" painted letters on existing wood(Benjamin Moore Black HC-190)

Added
12" high painted letters on existing glass (Benjamin Moore Dorset Gold HC-8)

Emerald Green velvet curtains inside.

Added
Wooden sign in existing sign holder, attached U-bolts


Black
Negro
Noir Extrême
HC-190
HC-190 = PM-9

Bryant Gold
Oro de Bryant
Dahlia
HC-7
Benjamin Moore
United States/Estados Unidos:
For assistance 1-800-6-PAINT-6 Para asistencia
Canada:
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COL 5/2017
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BUILDING DEPARTMENT
City of Beacon

One Municipal Plaza - Suite 1 - Beacon, New York 12508

Application for Sign Permit

INSTRUCTIONS

a. ***This application must be completely filled in and submitted to the Building Inspector.***

b. ***This application must be accompanied by two copies of colored rendering of proposed sign.***

c. ***The plan must include dimensions and square foot calculations.***

d. ***The work covered by this application may not be commenced before the issuance of a sign permit.***

e. ***Upon approval of this application, the Building Department will issue a sign permit to the applicant together with approved, duplicate copy of drawings. Such permit and approved drawings shall be kept on the premises available for inspection throughout the progress of the work.***

f. ***All electrical work to be done by an electrician licensed to work in the City of Beacon and shall comply with the City of Beacon Electrical Code.***

g. ***All work to be done in accordance with the plans and specification and no person shall make any change in said plans and specifications without the written consent of the Building Department.***

BUILDING DEPARTMENT
City of Beacon

Approved: _____ 20 ____
Disapproved: _____ 20 ____

_____
Building Inspector

Application for Sign Permit

Date _____

Address of Sign 508 Main St. Beacon, NY 12508

PROPERTY OWNER

Name Simon Fox Properties Phone 914-648-7660
Address 245 Westchester Ave, #247 Port Chester, NY 10573

BUSINESS OWNER

Name of Owner Mark Harris & Andrea Talarico Phone 917-765-5831
Name of Business: Stanza Books L.L.C.
Type of Business: Bookstore
Address 508 Main st. Beacon, NY 12508

SIGN COMPANY

Name King St. Sign Co Phone _____
Address 1 COLDEN ST. SUITE 100 NEWBURGH, NY 12550

ELECTRICIAN – (For Illuminated Signs)

Name N/A - paint only, no lighting Phone _____
Address _____

TYPE OF SIGN:

_____ Ground ($25) X Wall ($15) _____ Temporary Sign ($10)

Sign Content: STANZA, NEW BOOKS, Books & Gifts
Height of sign (if applicable) _____ Sign Dimensions 41.5"x6" + 12" high painted letters + 24"x18" painted sign - see attached drawings
Type of materials to be used: Paint, wood
Means of anchoring: Paint, U-bolts for wood sign on existing sign holder

APPLICATION IS HEREBY MADE to the Building Department for the issuance of a Sign permit pursuant to the City of Beacon Code of Ordinances. The applicant agrees to comply with all applicable laws, ordinances and regulations.

_____
(Signature of Owner)

APPLICATION PROCESSING RESTRICTION LAW
Affidavit of Property Owner

Property Owner: Simon Fox Properties I, LLC
(Applicant)
If owned by a corporation, partnership or organization please list names of persons holding over 5% interest in business.
Michael Bensimon

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

475 Main Street

Applicant Address: PO Box 247, Port Chester, NY 10573
Project Address: 508 Main Street, Beacon, NY 12508
Project Tax Grid #:
Type of Application:

*** Please note that the property owner is the applicant. "Applicant" is defined as any individual who owns at least five percent interest in a corporation or partnership or other business.**

I, Simon Fox Properties I, LLC, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true. (Check statements that are **true**)

1. No violations are pending for ANY parcel owned by me situated within the City of Beacon. TRUE
2. Violations are pending on a parcel or parcels owned by me situated within the City of Beacon. FALSE
3. ALL tax payments due to the City of Beacon are current. TRUE
4. Tax delinquencies exist on a parcel or parcels owned by me in the City of Beacon. FALSE
5. Special Assessments are outstanding on a parcel or parcels owned by me in the City of Beacon FALSE
6. ALL Special Assessments due to the City of Beacon on any parcel owned by me are current. TRUE

Signature of Owner

MANAGING MEMBER

Title if owner is corporation