

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

The Planning Board will meet on **Tuesday, February 9, 2016** in the Municipal Center Courtroom. A training workshop will take place at 7:00 p.m. and the regular meeting will begin at 7:30 p.m.

- **Regular Meeting**

1. 249 Main Street  
Continue review of application for Special Use Permit and Site Plan Approval, new residential/retail building, 249 Main Street, submitted by 249 Main Street, LLC
2. Public Hearing - 445 Main Street  
Public hearing on application for Subdivision Approval; and continue public hearing on application for Site Plan Approval (performance space, retail, residential), 445 Main Street, submitted by Beacon Main Street Theater, LLC
3. Public Hearing - 158 Main Street  
Continue public hearing on application for Site Plan approval, temporary retail art gallery, 158 Main Street, submitted by Carol Hearty
4. The View - Beekman Street  
Continue review of application for Special Use Permit and Site Plan Approval, new residential building, 50 units, "The View", Beekman Street (Parcel W), submitted by DMS Consolidators, Ltd.
5. 290 East Main Street  
Review application for Subdivision Approval (lot line realignment), 290 East Main Street, submitted by Gerald Bell

- **Architectural Review**

1. New Single Family House  
New single family house - Green Subdivision; Lot #3, Pocket Road

**City of Beacon Planning Board**  
**2/9/2016**

**Title:**

**249 Main Street**

**Subject:**

Continue review of application for Special Use Permit and Site Plan Approval, new residential/retail building, 249 Main Street, submitted by 249 Main Street, LLC

**Background:**

**ATTACHMENTS:**

Description	Type
Draft Resolution of Special Use Permit and Site Plan Approval	Resolution
Draft Resolution of Subdivision Approval	Resolution



**FREDERICK P. CLARK ASSOCIATES, INC.**  
PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK FAIRFIELD, CONNECTICUT

DAVID H. STOLMAN  
AICP, PP  
PRESIDENT

MICHAEL A. GALANTE  
EXECUTIVE  
VICE PRESIDENT

350 THEO. FREMD AVE.  
RYE, NEW YORK 10580  
914 967-6540  
FAX: 914 967-6615

CONNECTICUT  
203 255-3100

HUDSON VALLEY  
845 297-6056

LONG ISLAND  
516 364-4544

[www.fpclark.com](http://www.fpclark.com)

[email@fpclark.com](mailto:email@fpclark.com)

**MEMORANDUM**

---

To: Jay Sheers, Chairman, and the City of Beacon Planning Board

Date: February 5, 2016

Subject: **249 Main Street LLC Mixed Use Project**

As requested, we have prepared the attached draft **Resolution of Site Plan and Special Permit Approval** in connection with the above captioned project.

We look forward to discussing the resolution with you.

David H. Stolman, AICP, PP  
President

Sarah L. Brown  
Senior Associate/Planning

Attachments

cc: Lt. Timothy P. Dexter  
Arthur R. Tully, PE  
Jennifer L. Gray, Esq.  
Mark Day, PE

J:\DOCS2\100\Beacon\249 Main Street sp cover.slb.docx

## **RESOLUTION**

### **PLANNING BOARD BEACON, NEW YORK**

#### **SITE PLAN AND SPECIAL PERMIT APPROVAL FOR 249 MAIN STREET, LLC PROJECT**

WHEREAS, the Beacon Planning Board is entertaining an application for Site Plan and Special Permit Approval from 249 Main Street, LLC (the “Applicant”) for a multifamily, mixed use project (the “Project” or “Proposed Action”); and

WHEREAS, the Applicant is proposing to construct a multi-use, four-story building with 11,730 square feet of commercial use on the first floor and 28 residential units on the second, third and fourth floors with ten (10) percent of the units being provided as below-market rate units, as required by the Zoning Law; and

WHEREAS, the property is located at 249 Main Street within the CMS Central Main Street District and the PB Business Off-Street Parking District and is designated as parcels 5954-27-852892 and 5954-27-852906 on the City tax maps (the “Subject Property” or “Site”); and

WHEREAS, the Project is shown on the following plans generally entitled, “249 Main Street, LLC,” last revised December 22, 2015, prepared by M.A. Day Engineering, PC:

1. Sheet TS.1, 1 of 8, “Title Sheet;”
2. Sheet EC.1, 2 of 8, “Existing Conditions;”
3. Sheet DM.1, 3 of 8, “Demolition Plan;”
4. Sheet SP.1, 4 of 8, “Site Plan;”
5. Sheet CD.1, 5 of 8, “Construction Details;”
6. Sheet CD.2, 6 of 8, “Construction Details;”
7. Sheet LLP.1, 7 of 8, “Lighting/Landscaping Plan;”
8. Sheet E&SC.1, 8 of 8, “Erosion & Sediment Control Plan;”
9. Sheet Plat.1, 1 of 1, “Plat Plan.”

WHEREAS, the application also consists of application forms, the Environmental Assessment Form (EAF), and a Traffic Impact Study prepared by John Myer Consulting dated November 4, 2015, last revised December 18, 2015; and

WHEREAS, on September 15, 2015, the Zoning Board of Appeals (ZBA) granted the following variances:

**Resolution of Site Plan and Special Permit  
Approval for 249 Main Street Multifamily Project**

1. A variance from Section 223-41.18.D(5) to allow a rear setback of ten (10) feet where the required rear setback is twenty-five (25) feet; and
2. A variance from Section 223-41.18.D(12) to allow a reduction in the required landscaped area to three percent (3%) where the required landscaped area is ten percent (10%) for lots fronting on Main Street and fifteen percent (15%) for lots not fronting on Main Street; and
3. A variance from Section 223-41.18.F(1) to allow a parking area fronting on side streets to have a setback of zero (0) feet with no landscaping where a minimum setback of 5 feet in which ornamental and/or buffer landscaping is planted.

WHEREAS, the Project will be in full compliance with Article IVB, Affordable Workforce Housing, of the City's Zoning Law; and

WHEREAS, on August 11, 2015, September 9, 2015, October 15, 2015, November 10, 2015, December 8, 2015 and January 12, 2016, the Planning Board held a public hearing on the applications for Site Plan, Special Permit and Subdivision Approval, at which time all those interested were given an opportunity to be heard and the public hearing was closed on January 12, 2016; and

WHEREAS, after performing a coordinated determination of Lead Agency procedure in accordance with the New York State Environmental Quality Review Act (SEQRA) the Planning Board became the Lead Agency with respect to the Proposed Action; and

WHEREAS, on February 9, 2016, after taking a "hard look" at each relevant area of environmental impact through a review of the Full Environmental Assessment Form, all of the associated materials prepared in connection with the Proposed Action, as well as considering comments from the public and the City's staff and professional consultants, the Planning Board, as Lead Agency, adopted a Negative Declaration regarding the Proposed Action; and

WHEREAS, Section 223-41.18.G(3) of the Zoning Law allows for the number of required parking spaces to be reduced by one parking space for each proposed bike rack which holds two bicycles; and

WHEREAS, the Applicant has proposed ten (10) bike racks reducing the number of required parking spaces from 64 spaces to 54 spaces; and

**Resolution of Site Plan and Special Permit**  
**Approval for 249 Main Street Multifamily Project**

WHEREAS, the Applicant is proposing 29 off-street vehicular parking spaces and the Applicant is seeking a waiver from the Planning Board for the remaining 25 required parking spaces; and

WHEREAS, the Planning Board hereby determines that Project complies with the Special Permit standards set forth at Section 223-18.F of the City Code, and specifically finds that:

1. The location and size of the use, the nature and intensity of the operations involved in or conducted in connection with it, the size of the site in relation to it and the location of the site with respect to streets giving access to it are such that it will be in harmony with the appropriate and orderly development of the district in which it is located.
2. The location, nature and height of buildings, walls and fences and the nature and extent of the landscaping on the site are such that the use will not hinder or discourage the appropriate development use of adjacent land and buildings.
3. Operations in connection with any special use will not be more objectionable to nearby properties by reason of noise, fumes, vibration or other characteristic than would be the operations of any permitted use, not requiring a special permit.
4. The twenty-nine parking spaces to be provided by the Applicant will be sufficient for the particular use; and

WHEREAS, the Planning Board finds that the Project which has over 10,000 square feet in building footprint area and a tower of one additional story on a four-story building meets the special permit standards set forth at Sections 223-41.18.B(1)(b) and 223-41.18.D(7) of the City Code, and specifically finds that there are no substantial detrimental effects on parking, traffic, shadows, or specific views designated as important by the City Council; and

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

NOW THEREFORE BE IT RESOLVED, that the Planning Board hereby grants Site Plan and Special Permit Approval, as shown on the application materials enumerated above, subject to compliance with the following conditions set forth below and any other requirements which must be met by law; and

**Resolution of Site Plan and Special Permit**  
**Approval for 249 Main Street Multifamily Project**

BE IT FURTHER RESOLVED, that pursuant to Section 223-41.18.F(3)(d) of the City of Beacon Zoning Code, the Planning Board hereby modifies the parking requirement for the proposed development in that the Applicant shall not be required to provide the parking spaces required for the retail component because, based on the study dated September 25, 2015 from Liscum McCormack VanVoorhis, LLP, the Applicant's consultant, there is sufficient public parking available within 800 feet of the site and within the CMS or PB Districts to meet the foreseeable parking needs of the proposed use and surrounding uses for the duration of the proposed use, but the Applicant shall provide twenty- nine (29) parking spaces for the new dwelling units to be constructed.

**A. Prior to the signing of the Site Plan Drawings by the Planning Board Chairman, the following conditions shall be fulfilled to the satisfaction of the Planning Board:**

1. 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, as necessary, and shall meet all conditions contained in such approvals, as required therein.
2. The Applicant shall fund an escrow account with the City of Beacon for the construction observation and monthly storm water inspections of the proposed utilities and site improvements in an amount as determined by the City Engineer.
3. The Applicant shall submit a performance guarantee for all work proposed in the City's right-of-ways, as shown on the site plan, in an amount and form which meet the satisfaction of the City Engineer and City Attorney.

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

**B. Prior to the issuance of the first Certificate of Occupancy, the Recreation Fee shall be provided.** Based on the current and anticipated future need for park and recreational opportunities in the City of Beacon, as set forth in the analysis provided by Frederick P. Clark Associates, Inc., and the demands of the future

**Resolution of Site Plan and Special Permit  
Approval for 249 Main Street Multifamily Project**

population of the Project, the Planning Board hereby finds that additional recreation/parkland should be created as a condition of approval. The Board further determines that a suitable park of adequate size cannot be properly and practically located on the Subject Property, nor has the Applicant offered recreation/parkland of suitable size and practical location to adequately address the need for additional recreation/parkland within the City. Therefore, the Planning Board hereby requires that the Applicant shall pay a Recreation Fee for the twenty-eight (28) new dwelling units in accordance with Section 223-61.A(7) of the Zoning Law as per the City's Fee Schedule in effect at the time of payment.

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

1. The Building Inspector and the City Engineer shall have the right to direct the Applicant to cause the placement, cleaning and/or repair of sedimentation and erosion control devices wherever and whenever deemed necessary during construction.
2. The Applicant shall be responsible for the payment of all application review costs incurred by the City in its review and approval of this project. Such fees shall be paid by the Applicant within thirty (30) days of each notification by the City that such fees are due. If such fees are not paid within said thirty (30) day period, and an extension therefore has not been granted by the City, this resolution shall be rendered null and void.
3. As used herein, the term "Applicant" shall include its heirs, successors and assigns, and where applicable its contractors and employees.
4. 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.
5. The approvals granted by this resolution do not supersede the authority of any other entity.
6. In accordance with Section 223-18.F(1) of the Zoning Law, this Special Permit Approval authorizes only the particular uses specified in the permit and shall expire if:
  - a. A bona fide application for a Building Permit is not filed within one (1) year of the issuance of this Special Permit Approval; or



**Resolution of Site Plan and Special Permit**  
**Approval for 249 Main Street Multifamily Project**

- b. If all required improvements are not made within two (2) years from the date of issuance of the Building Permit; or
  - c. If said uses cease for more than six (6) months for any reason.
7. In accordance with Section 223-18.F(2) of the Zoning Law, one (1) or more extensions, of up to six (6) months each, to complete construction of the improvements, upon a finding that the Applicant is prosecuting construction with due diligence and has offered a reasonable explanation of its inability to complete the project may be granted. The Planning Board may impose such conditions as it deems appropriate upon the grant of any extension. The granting of an extension of time under this section shall not require a public hearing.
8. Any proposed revision to this approved Special Permit Approval shall be submitted to the Planning Board. The Planning Board, in its discretion, shall determine the appropriate procedures for consideration of the proposed revision, and whether such revision is material enough to require further environmental analysis, further project review and/or a further hearing, as it may deem appropriate.
9. The Building Inspector may revoke this Special Permit Approval where it is found that the use of the premises does not conform with the limitations and conditions contained in the Special Permit Approval.
10. Any proposed revision to the approved Site Plan Drawings, except revisions determined by the Building Inspector and City Engineer to be field changes, shall be submitted to the Planning Board. The Planning Board, in its discretion, shall determine the appropriate procedures for consideration of the proposed revision, and whether such revision is material enough to require further environmental analysis and/or further project review, as the Board may deem appropriate.

Resolution Adopted:  
Beacon, New York

---

Jay Sheers, Chairman

---

Date



**FREDERICK P. CLARK ASSOCIATES, INC.**  
PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK FAIRFIELD, CONNECTICUT

DAVID H. STOLMAN  
AICP, PP  
PRESIDENT

MICHAEL A. GALANTE  
EXECUTIVE  
VICE PRESIDENT

350 THEO. FREMD AVE.  
RYE, NEW YORK 10580  
914 967-6540  
FAX: 914 967-6615

CONNECTICUT  
203 255-3100

HUDSON VALLEY  
845 297-6056

LONG ISLAND  
516 364-4544

[www.fpclark.com](http://www.fpclark.com)

[email@fpclark.com](mailto:email@fpclark.com)

**MEMORANDUM**

---

To: Jay Sheers, Chairman, and the City of Beacon Planning Board

Date: February 5, 2016

Subject: **249 Main Street, LLC Mixed Use Project**

As requested, we have prepared the attached draft **Resolution of Subdivision Approval** in connection with the above captioned project.

We look forward to discussing the resolution with you.

David H. Stolman, AICP, PP  
President

Sarah L. Brown  
Senior Associate/Planning

Attachments

cc: Lt. Timothy P. Dexter  
Arthur R. Tully, PE  
Jennifer L. Gray, Esq.  
Mark Day, PE

J:\DOCS2\100\Beacon\249 Main Street sub cover.slb.docx

## **RESOLUTION**

### **PLANNING BOARD BEACON, NEW YORK**

#### **PRELIMINARY AND FINAL SUBDIVISION PLAT APPROVALS FOR 249 MAIN STREET, LLC PROJECT**

WHEREAS, the Beacon Planning Board received applications for Preliminary and Final Subdivision Plat Approvals from 249 Main Street, LLC (the “Applicant”) for a multifamily, mixed use project (the “Project” or “Proposed Action”); and

WHEREAS, the property is located at 249 Main Street within the CMS Central Main Street District and the PB Business Off-Street Parking District and is designated as parcels 5954-27-852892 and 5954-27-852906 on the City tax maps (the “Subject Property” or “Site”); and

WHEREAS, the Applicant is proposing to resubdivide the above mentioned parcels which total 0.70 acres in size into one (1) parcel; and

WHEREAS, the subdivision is shown on the drawing, entitled, “249 Main Street, LLC, Plat Plan” dated June 30, 2015, prepared by M.A. Day Engineering, PC; and

WHEREAS, the application also consists of application forms, the Environmental Assessment Form (EAF), and a Traffic Impact Study prepared by John Myer Consulting dated November 4, 2015, last revised December 18, 2015; and

WHEREAS, the Proposed Action also includes applications for Site Plan Approval and Special Use Permit Approval to construct a multi-use, four-story building with 11,730 square feet of commercial use on the first floor and 28 residential units on the second, third and fourth floors; and

WHEREAS, on September 15, 2015, the Zoning Board of Appeals (ZBA) granted the following variances:

1. A variance from Section 223-41.18.D(5) to allow a rear setback of ten (10) feet where the required rear setback is twenty-five (25) feet; and
2. A variance from Section 223-41.18.D(12) to allow a reduction in the required landscaped area to three percent (3%) where the required landscaped area is ten percent (10%) for lots fronting on Main Street and fifteen percent (15%) for lots not fronting on Main Street; and

**Resolution of Preliminary & Final Subdivision  
Approval for 249 Main Street Multifamily Project**

3. A variance from Section 223-41.18.F(1) to allow a parking area fronting on side streets to have a setback of zero (0) feet with no landscaping where a minimum setback of 5 feet in which ornamental and/or buffer landscaping is planted; and

WHEREAS, on August 11, 2015, September 9, 2015, October 15, 2015, November 10, 2015, December 8, 2015 and January 12, 2016, the Planning Board held a public hearing on the applications for Site Plan, Special Permit and Subdivision Approval, at which time all those interested were given an opportunity to be heard and the public hearing was closed on January 12, 2016; and

WHEREAS, after circulating its Notice of Intent to Declare Lead Agency to all other known Involved Agencies in accordance with the New York State Environmental Quality Review Act (SEQRA) the Planning Board became the Lead Agency with respect to the Proposed Action; and

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

NOW THEREFORE BE IT RESOLVED, that after taking a “hard look” at each relevant area of environmental impact through a review of the Full Environmental Assessment Form, all of the associated materials prepared in connection with the Proposed Action, as well as considering comments from the public and the City’s staff and professional consultants, the Planning Board hereby adopts a Negative Declaration regarding the Proposed Action on the grounds that the Proposed Action will not result in any significant adverse environmental impacts since any construction and land disturbance associated with the development of the Subject Property will be controlled and mitigated through proper drainage and erosion controls to the satisfaction of the City consultants; and because the Traffic Impact Analysis shows that the surrounding City streets can accommodate the traffic generated by the Project; and because the Proposed Action will not impact the contiguous Lower Main Street Historic District which is listed on the National Register of Historic Places; and

BE IT FURTHER RESOLVED, that the Planning Board hereby grants Preliminary Subdivision Plat Approval to the Project, as shown on the application materials enumerated above; and

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

**Resolution of Preliminary & Final Subdivision  
Approval for 249 Main Street Multifamily Project**

BE IT FURTHER RESOLVED, that the Planning Board hereby grants Final Subdivision Plat Approval to the Project, as shown on the application materials enumerated above, subject to the following conditions and modifications:

**A. The following conditions shall be fulfilled prior to the signing of the Final Subdivision Plat by the Chairman of the Planning Board:**

1. All application review fees shall be paid in full.
2. The Applicant shall seek and obtain all required permits and/or approvals from the appropriate agencies for the Project, including but not necessarily limited to approval from the Dutchess County Department of Health, and shall meet all conditions contained in such approvals, as required therein.

**B. The following are general conditions which shall be fulfilled:**

1. This approval is conditioned upon compliance with all of the mitigation measures specified in the Applicant's Full Environmental Assessment Form. The Applicant shall be responsible for the funding and/or implementation of all such identified mitigation measures. Where the terms of this resolution may be inconsistent with the EAF, the terms of this resolution shall be controlling.
2. The Applicant shall be responsible for the payment of all application review costs incurred by the City in its review and approval of this project. Such fees shall be paid by the Applicants within thirty (30) days of each notification by the City that such fees are due. If such fees are not paid within the thirty (30) day period, and an extension therefor has not been granted by the City, this resolution shall be rendered null and void.
3. As used herein, the term "Applicant" shall include their heirs, successors and assigns, and where applicable its contractors and employees.
4. 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.
5. The approvals granted by this resolution do not supersede the authority of any other entity.

**Resolution of Preliminary & Final Subdivision  
Approval for 249 Main Street Multifamily Project**

6. Conditional approval of the Final Subdivision Plat shall expire one hundred eighty (180) days from the date of the adoption of this resolution unless all items in Condition A above have been certified as completed and the Final Plat has been submitted for endorsement by the Planning Board Chairman, or unless a written request for an extension of Final Subdivision Plat Approval is granted. The Planning Board may grant ninety (90) day extensions to said time period.
7. Once the Final Subdivision Plat has been endorsed by the Planning Board Chairman, said plat must be filed in the Dutchess County Clerk's Office within sixty-two (62) days. After said filing, two (2) copies of the Final Plat certified by Dutchess County shall be submitted to the Planning Board Secretary. One (1) certified copy of the Final Plat shall be retained by the Planning Board and the other certified copy shall be transmitted to the City Clerk along with a signed copy of this resolution.
8. 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.

Resolution Adopted:  
Beacon, New York

\_\_\_\_\_  
Jay Sheers, Chairman

\_\_\_\_\_  
Date

**City of Beacon Planning Board**  
**2/9/2016**

**Title:**

**Public Hearing - 445 Main Street**

**Subject:**

Public hearing on application for Subdivision Approval; and continue public hearing on application for Site Plan Approval (performance space, retail, residential), 445 Main Street, submitted by Beacon Main Street Theater, LLC

**Background:**

**ATTACHMENTS:**

Description	Type
Response Letter and Site Plan	Plans
Engineer Review Letter	Consultant Comment
Planner Review Letter	Consultant Comment

January 26, 2016

Mr. Jay Sheers, Chairman  
and Members of the Planning Board  
City of Beacon  
One Municipal Plaza  
Beacon, NY 12508

Re: Response to Engineer and Consultant Comments

Dear Chairman Sheers and Members of the Planning Board:

This letter is submitted to respond to comments at the last public hearing session, and to provide information requested by the Planning Board and its consultants. We believe that this submission fully responds to all pending comments and creates a record upon which the Planning Board can move forward to authorize conclusion of the SEQR process and the preparation of a Resolution for consideration at the March meeting.

**FREDERICK P. CLARK MEMO DATED JANUARY 8, 2016:**

**Analysis and Recommendations**

1. **Comment:** In 1988, a use variance was granted for the property to allow 32 residential units. Therefore, the residential use is permitted. The project is a Type I action with regard to SEQR. On October 19, 2015, the Planning Board circulated its Notice of Intent to Declare Lead Agency to the Dutchess County Department of Health the only other Involved Agency. Since no objections were received, the Planning Board declared itself as Lead Agency on December 8, 2015.

**Response:** Comment noted

2. **Comment:** In accordance with Section 223-61.A(7) of the Zoning Law, a Recreation Fee for the proposed 32 units will be required.

**Response:** Comment noted

3. **Comment:** The overall site area is comprised of two separate parcels. The Applicant has submitted a subdivision application proposing to combine the lots into one parcel. A public hearing will need to be scheduled for the subdivision application.



January 26, 2016

Page -2-

**Response:** The public hearing has been scheduled for the February Planning Board meeting.

4. **Comment:** A landscaped area is now being proposed to the rear of the building. The plans should be revised to note the size of all proposed plants at time of planting and the species of tree proposed (T1).

**Response:** Planting and tree information has been added to the plans.

5. **Comment:** Based on our review of the submitted revised Traffic Study, all of our previous comments have been addressed. It is our opinion that the Study methodology is consistent with industry standards and will not have an adverse impact on the study area.

**Response:** Comment noted

**LANC & TULLY COMMENTS DATED JANUARY 7, 2016:**

*Subdivision Plat:*

1. **Comment:** The applicant has submitted a subdivision application to remove the existing property line that runs from the westerly side of the lot to the easterly side of the lot thru the existing building. Based upon our review of this plan, our office has no comment, and finds the plan to be acceptable.

**Response:** Comment noted

*Site Plans:*

1. **Comment:** Sheet 1 of 8 should show the location of the 5 proposed parallel, parking stalls to be striped along Van Nydeck.

**Response:** Proposed striping is shown on the site plan for a total of 4 spaces along the property line.

2. **Comment:** Sheet 6 of 8, the "Landscape, Lighting Details, Marquee" plan should be updated to provide construction details for the proposed plantings in the rear of the building, as shown on Sheet 1.

**Response:** Construction details for the proposed planting has been provided on Sheet 6 of 8.

January 26, 2016

Page -3-

**CONCLUSION:**

The applicant has worked for many months with the Planning Board and with the community in developing a mixed use project that will bring additional diversity to the housing mix in Beacon, and provide a vibrant performance space. We believe that the record that has been developed provides sufficient basis for the Planning Board to authorize preparation of a SEQR Negative Declaration and Resolution of Site Plan and Subdivision approval for consideration at the March meeting.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. Van Tuyl", written in a cursive style.

Jennifer. L. Van Tuyl

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

SIGNED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_, BY \_\_\_\_\_

CHAIRMAN

SECRETARY

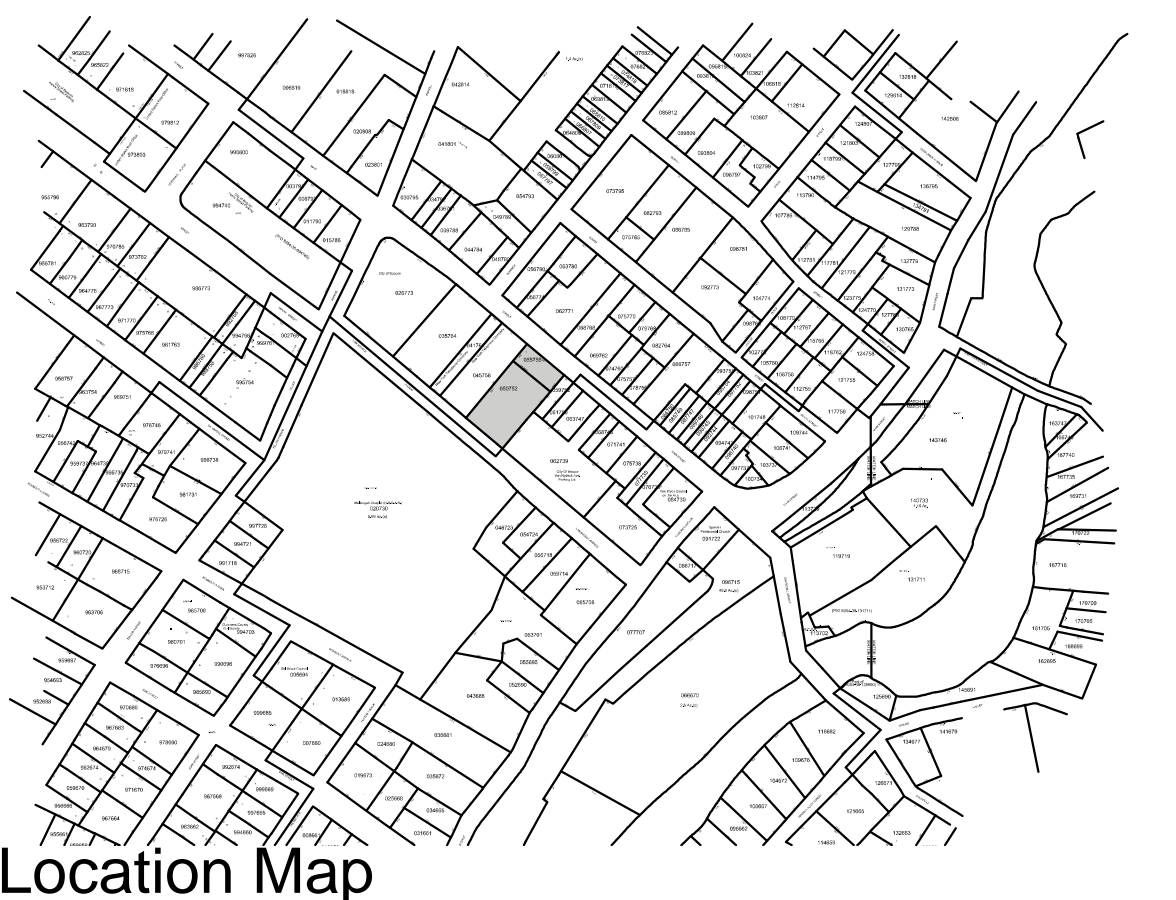
IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

LEGEND	
	FIRE HYDRANT
	GAS VALVE
	POLE
	WATER VALVE

Zoning District	Required Setbacks			Proposed Setbacks			Maximum Building Coverage	Proposed Building Coverage	Allowable Building Height	Proposed Building Height	Zoning District Area	Allowable FAR	Allowable Floor Area	Proposed Floor Area
	Front	Side	Rear	Front	Side	Rear								
CB	0'	20'	25'	9'-6"	10'	18.2'	NA	NA	35'	56'-8" Existing	19,994 sf	2	39,988 sf	37,811
PB	**	**	**	9'-6"	10'	18.2'	NA	NA	**	56'-8" Existing		**		

\* Existing Condition  
 \*\* The Zoning Code states that a permitted use other than off-street parking or a hotel shall meet the lot area, dimension, yard, off-street parking and other requirements as indicated in this schedule. The building pre-dates the Zoning Code.

HATCHING LEGEND	
	CONCRETE SIDEWALK
	ASPHALT PAVING
	GRASS



Location Map  
 Scale: 1" = 400'

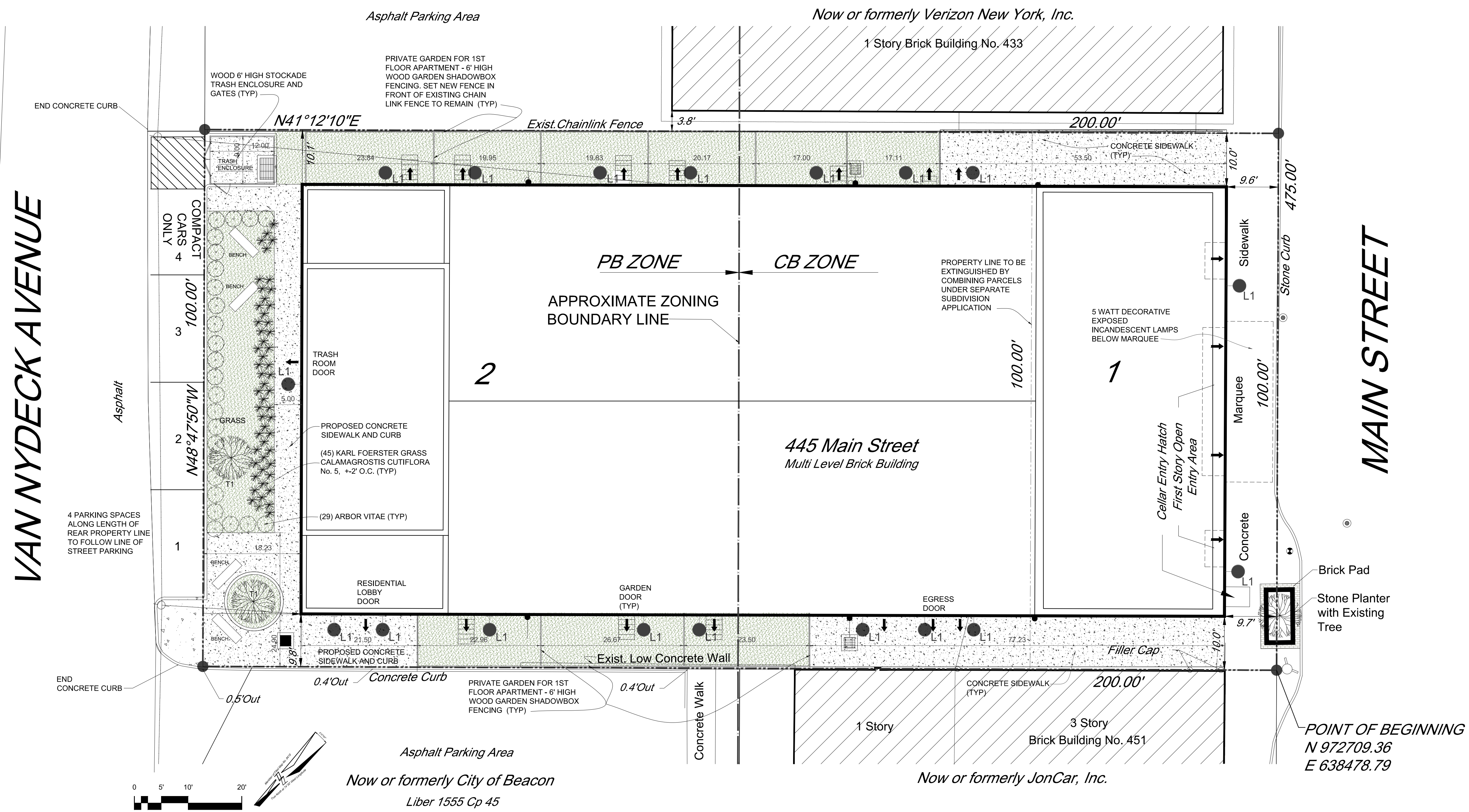
Zoning Summary	
Zoning District:	CB & PB
Tax Map No.:	6054-29-055758 & 6054-29-050752
Lot Area:	0.459 Acres
Building Footprint:	11,996 square feet
Historical Overlay District:	Yes
Parking Overlay District:	Yes
Existing Use:	Theater / Office / Storage / Retail
Proposed Use:	Theater / Multi Family Residential / Retail

Use & Parking Requirements	1964 Area	1964 Parking Requirement	Proposed Area	Current Parking Requirement
<b>Theater</b>				
1964 - 1 space per 5 seats	625 seats (Note 3)	185 parking spaces		
Present - 1 space per 4 seats			195 Seats	49 parking spaces
<b>Multi-Family Residential</b>				
Present - 1 space per apartment plus 1/4 space per bedroom			32 Apartments with 34 total bedrooms: (2) 2 bedroom (15) 1 bedroom (15) studio	41 parking spaces
<b>Retail</b>				
1964 - 1 space per 200 sf gross area excluding basement and utility areas	1,475 sf	8 parking spaces		
Present - 1 space per 200 sf gross area, excluding utility areas			2,722 gsf	14 parking spaces
<b>Total Required Parking Spaces</b>		<b>193 Parking Spaces</b>		<b>104 Parking Spaces</b>
<b>Total Proposed Parking Spaces</b>				<b>0 Parking Spaces (Note 2)</b>

- Notes:
- No parking is required per Beacon Zoning Code Section 223-26 (B 2). The building was in existence on April 20, 1964, and was used as a theater. The new use is less than 25% greater intensity than the use existing in 1964.
  - The Applicant will work with the City of Beacon to allow the construction of 4 parking spaces behind the building, where no parking is currently permitted.
  - The number of seats in the theater in 1964 is based on available documentation from a newspaper article researched at the Beacon Historical Society, among other sources. This determination was reviewed and accepted as accurate by the Planning Board for a previous approval in 2010 of the dance studio use.
  - A Certificate of Appropriateness was granted by the Architectural Review Board on August 10, 2010, which excluded the marquee. The Applicant is requesting a review by the Architectural Review Board for the proposed marquee design shown in the current application.
  - Note that the project will comply with Section 223-41.9 of the Beacon Zoning Code regarding below market rate units. 10% of the 32 new residential units will be comprised of below market rate units for a total of 3 BMR units. The Below Market Rate (BMR) units shall have exterior finishes and general amenities comparable to the market-rate units within the development. BMR units shall be reasonably distributed throughout the project and the timing of the construction of the BMR units shall be in conjunction with the phased construction of the market rate units in the project. The BMR units shall be provided in a mix of unit types in the same proportion as all other units in the development.

Index of Drawings	
Sheet 1 of 8	Site Plan
Sheet 2 of 8	Existing Conditions Survey
Sheet 3 of 8	Building Plans
Sheet 4 of 8	Building Elevations
Sheet 5 of 8	Renderings
Sheet 6 of 8	Landscaping, Lighting Details, Marquee,
Sheet 7 of 8	Stormwater Plan
Sheet 8 of 8	Construction Details

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	10/27/15	REVISED PER PLANNING BOARD COMMENTS	AJS
2	11/24/15	REVISED PER PLANNING BOARD COMMENTS	AJS
3	12/29/15	REVISED PER PLANNING BOARD COMMENTS	AJS
4	1/26/16	REVISED PER PLANNING BOARD COMMENTS	AJS



Site Plan  
 Scale: 1" = 10'

# Site Plan Application

## Sheet 1 of 8 - Site Plan

Owner:  
**Beacon Main Street Theater LLC**  
 484 Main Street  
 Beacon, New York 12508

Architect:  
**Aryeh Siegel, Architect**  
 514 Main Street  
 Beacon, New York 12508

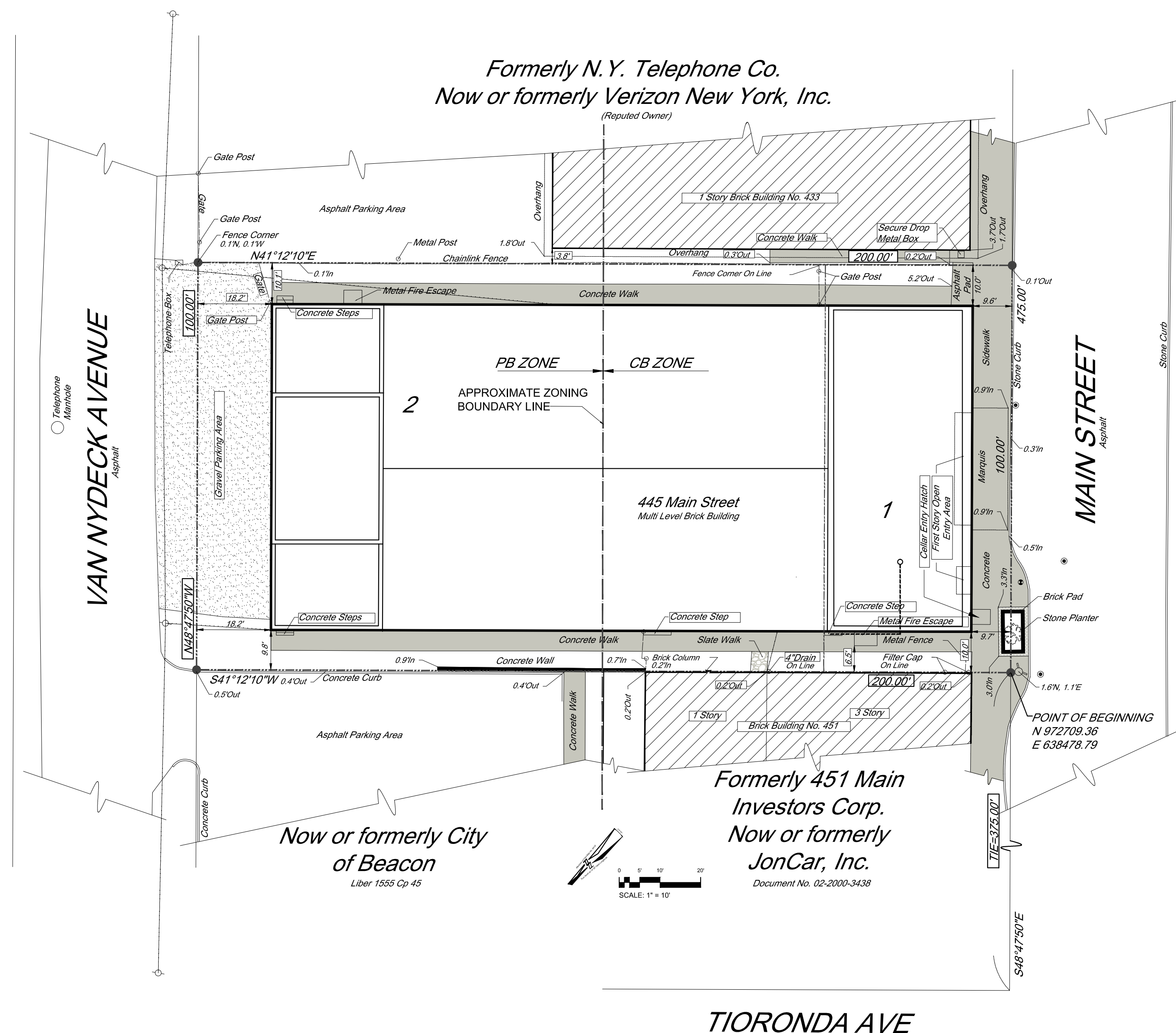
Site / Civil Engineer:  
**Hudson Land Design**  
 174 Main Street  
 Beacon, New York 12508

Surveyor:  
**Badey & Watson**  
 3063 Route 9  
 Cold Spring, New York 10516

**Beacon Theater Apartments - 445 Main Street**  
 Beacon, New York  
 Scale: 1" = 10'  
 September 29, 2015

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	10/27/15	NO CHANGE	AJS
2	11/24/15	NO CHANGE	AJS
3	12/29/15	NO CHANGE	AJS
4	1/26/15	NO CHANGE	AJS

LEGEND	
	FIRE HYDRANT
	GAS VALVE
	POLE
	WATER VALVE



SURVEY OF PROPERTY  
 PREPARED FOR  
**4TH WALL PRODUCTIONS, INC.**  
 SITUATE IN THE  
**CITY OF BEACON  
 DUTCHESS COUNTY  
 NEW YORK**  
 SCALE 1 in. = 20 ft. JULY 27, 2010

We hereby certify that the survey shown hereon was completed by us on July 27, 2010 that this map was completed on July 30, 2010 and that this survey has been prepared in accordance with the existing Code of Practice for Land Surveys adopted by The New York State Association of Professional Land Surveyors, Inc. Revised on August 3, 2010. See Note 8.

**BADEY & WATSON**  
 SURVEYING & ENGINEERING, P.C.

by  
 NEW YORK STATE LICENSED LAND SURVEYOR  
 LICENSE No. 48167

FILE No. 87-9342

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.

### Survey: Existing Conditions

Scale: 1" = 20'

# Site Plan Application

Sheet 2 of 8 - Existing Conditions Survey

Owner:  
**Beacon Main Street Theater LLC**  
 484 Main Street  
 Beacon, New York 12508

Architect:  
**Aryeh Siegel, Architect**  
 514 Main Street  
 Beacon, New York 12508

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

Surveyor:  
**Badey & Watson**  
 3063 Route 9  
 Cold Spring, New York 10516

## Beacon Theater Apartments - 445 Main Street

Beacon, New York  
 Scale: 1" = 20'  
 September 29, 2015

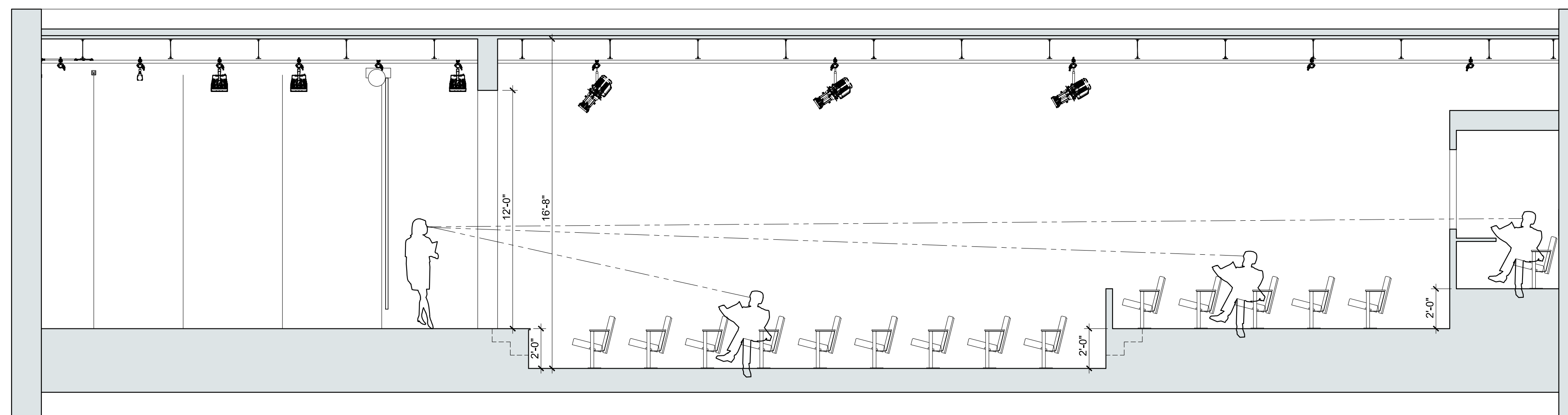
APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_ BY \_\_\_\_\_

\_\_\_\_\_  
CHAIRMAN

\_\_\_\_\_  
SECRETARY

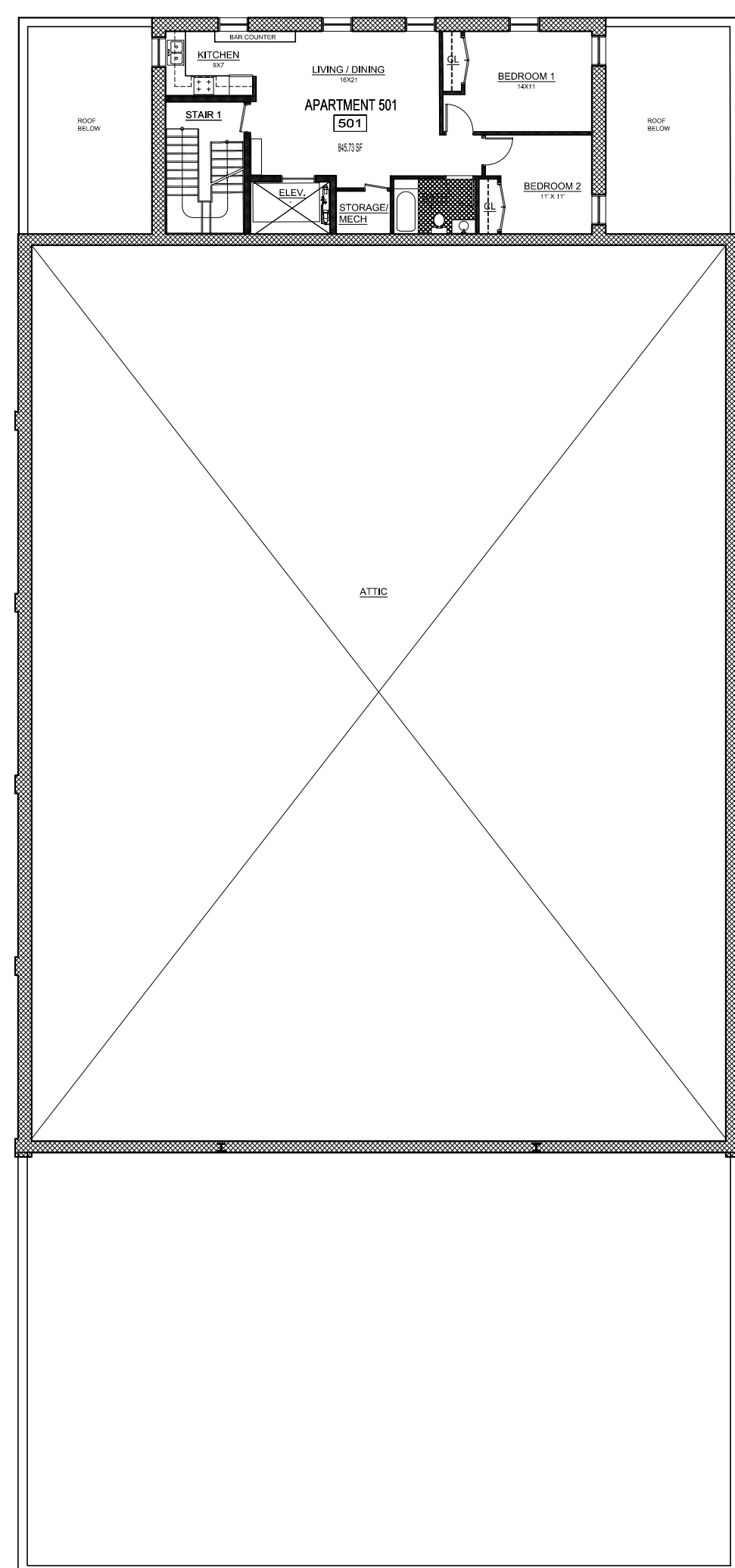
IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.



**Diagrammatic Section Through Theater**

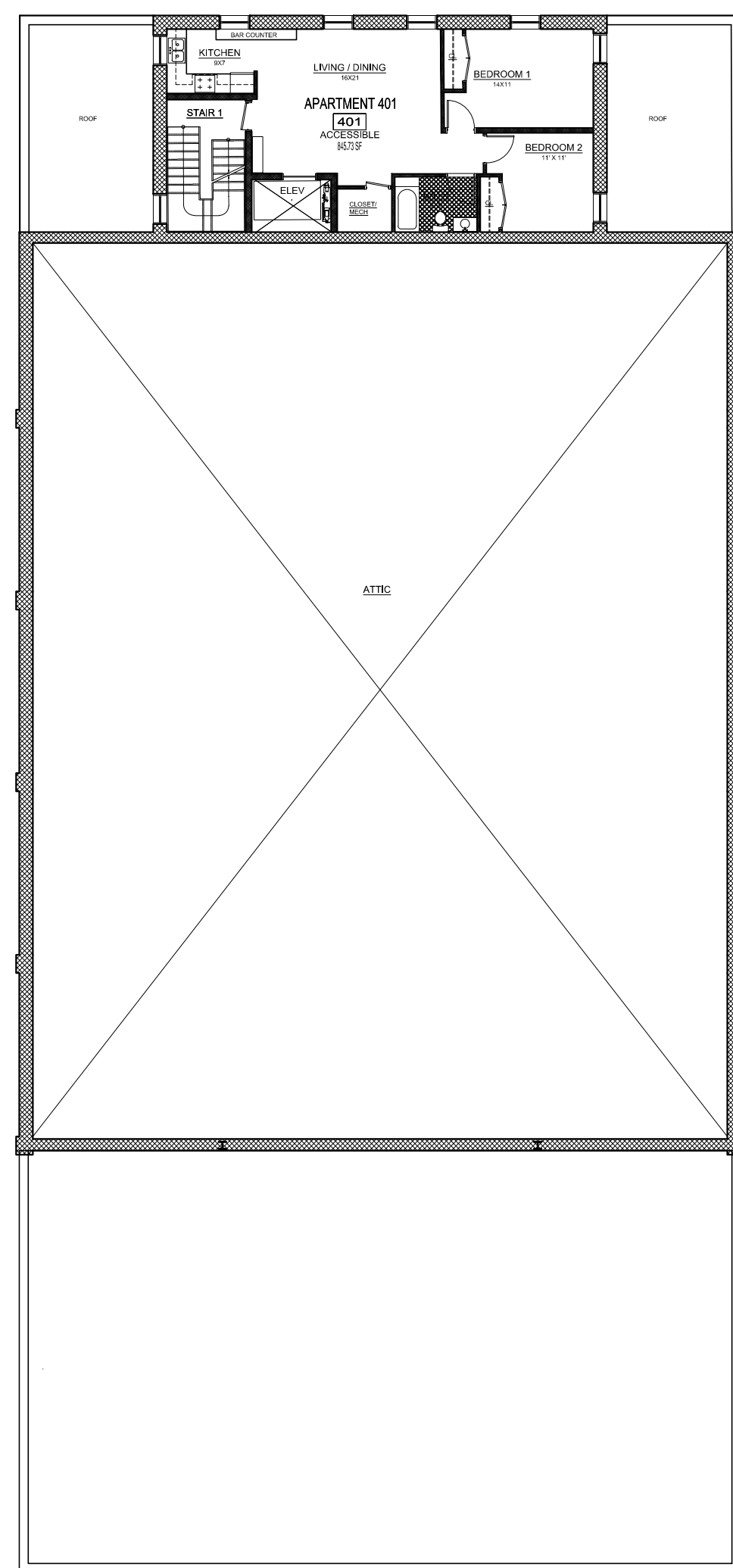
1/8" = 1'-0"

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	10/27/15	REVISED PER PLANNING BOARD COMMENTS	AJS
2	11/24/15	REVISED PER PLANNING BOARD COMMENTS	AJS
3	12/29/15	NO CHANGE	AJS
4	1/26/15	NO CHANGE	AJS



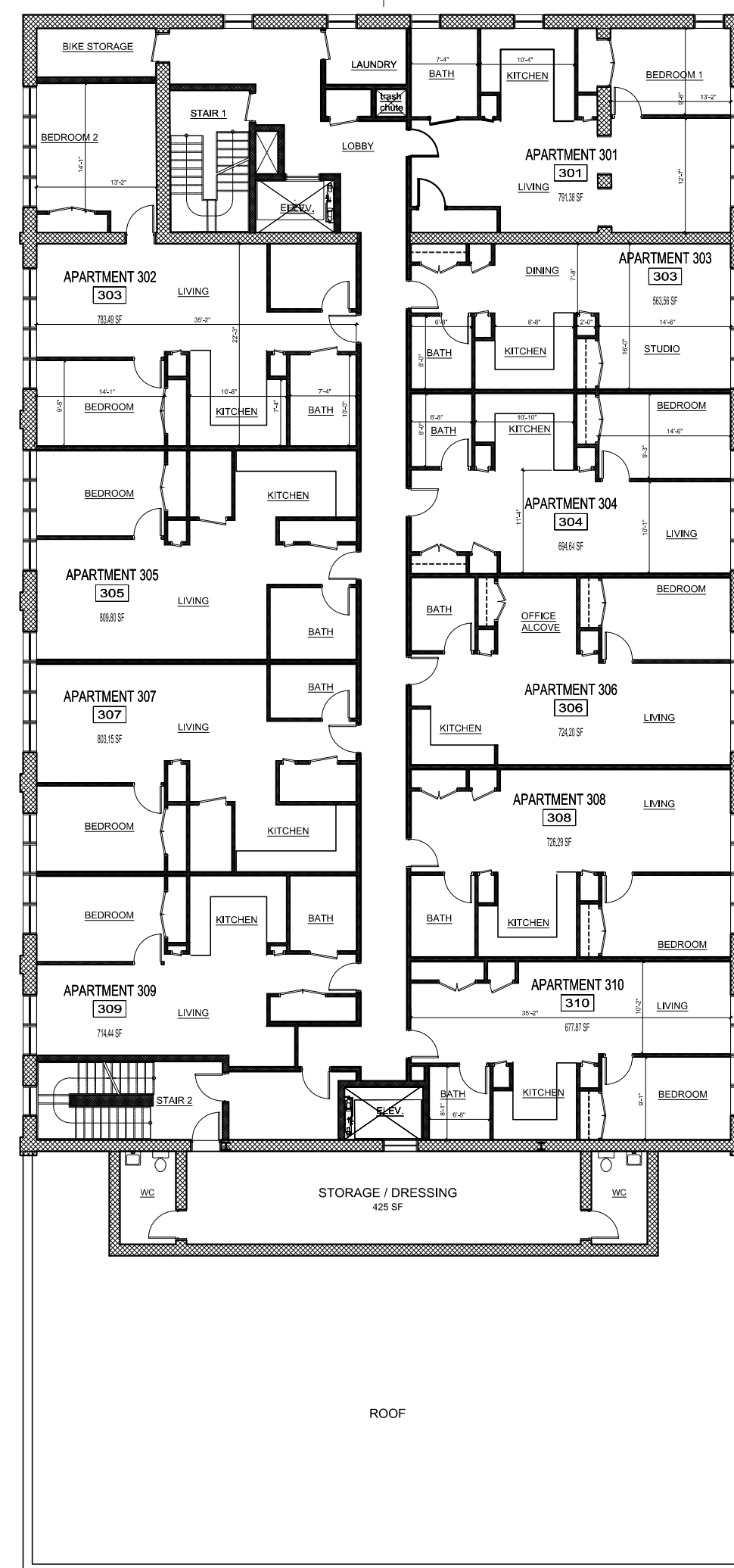
**5th Floor Plan**

1/8" = 1'-0"



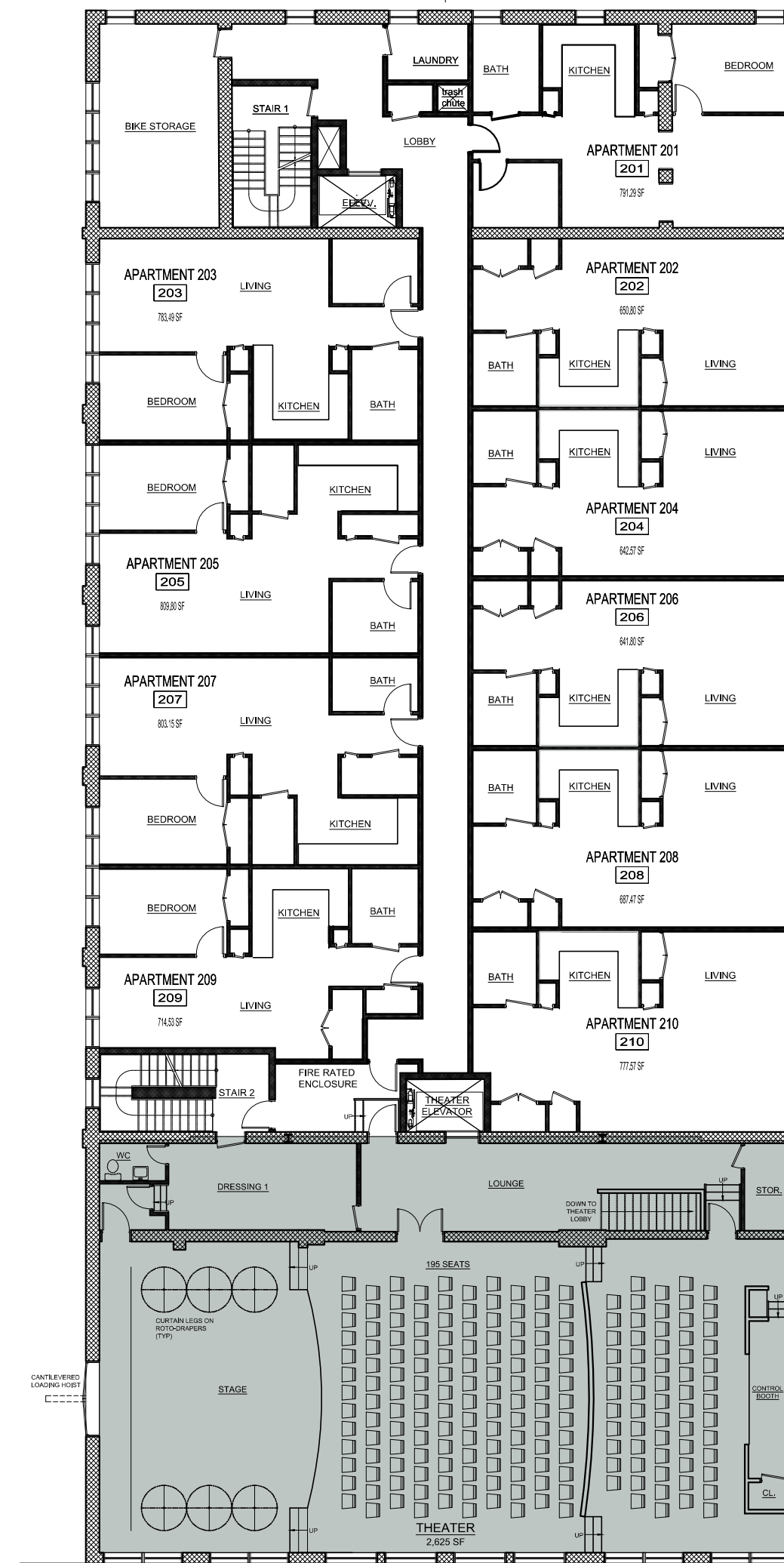
**4th Floor Plan**

1/8" = 1'-0"



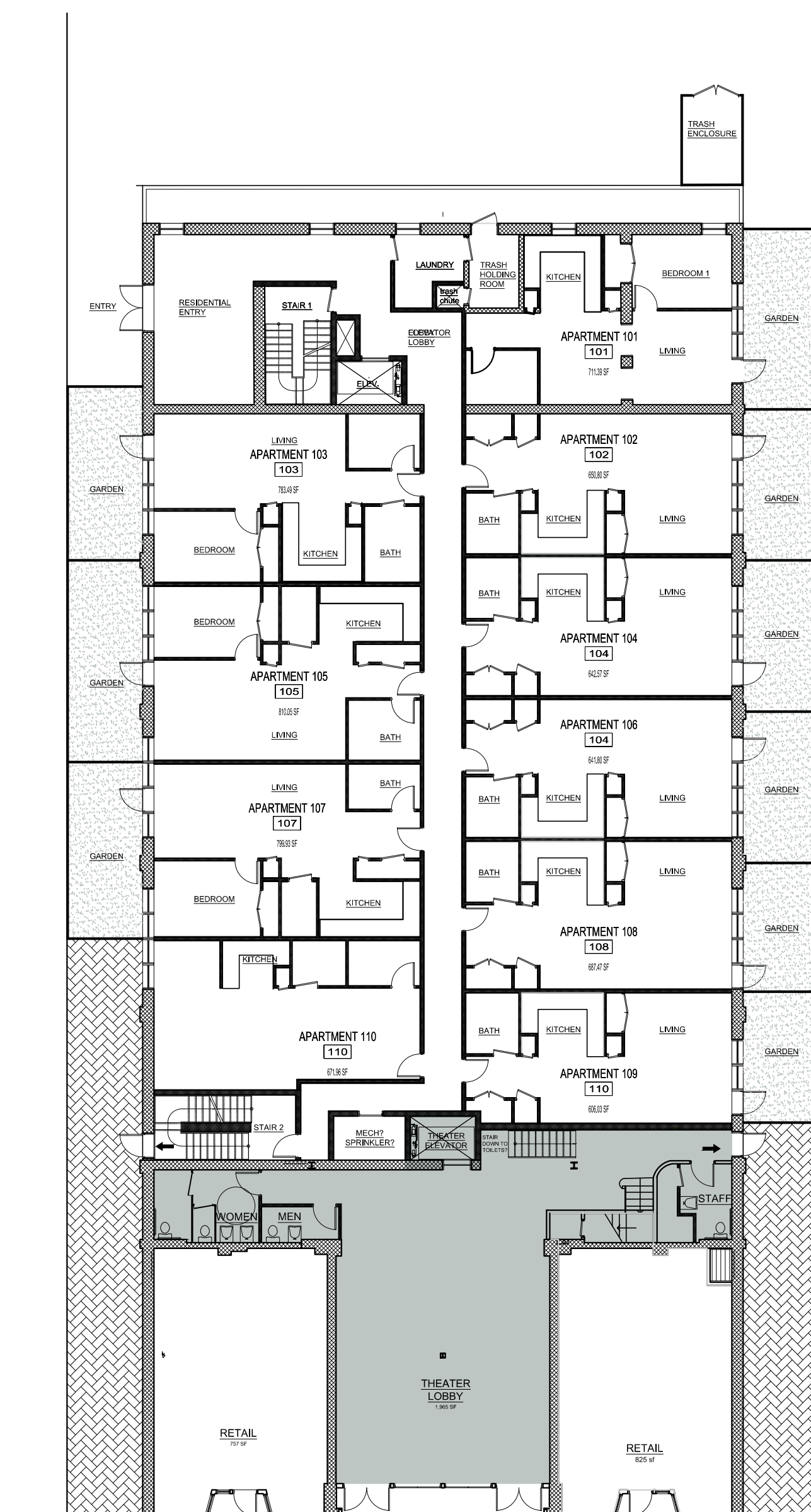
**3rd Floor Plan**

1/8" = 1'-0"



**2nd Floor Plan**

1/8" = 1'-0"



**1st Floor Plan**

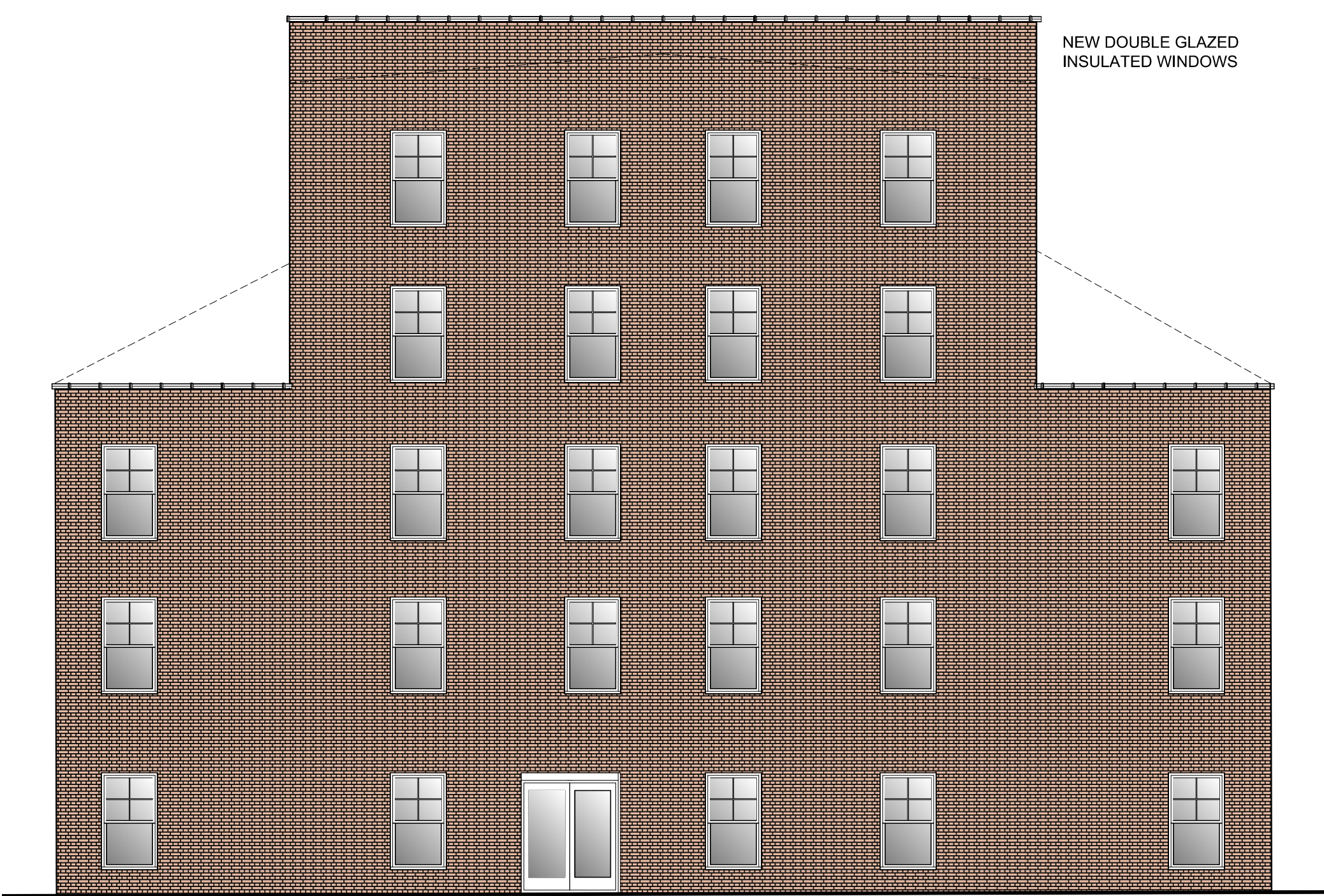
1/8" = 1'-0"

# Site Plan Application

Sheet 3 of 8 - Floor Plans

EXISTING BRICK WITH  
TERRA COTTA CAP

NEW DOUBLE GLAZED  
INSULATED WINDOWS



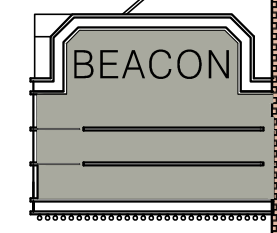
**Rear Elevation**

1/8" = 1'-0"

EXISTING FLAG POLE

EXISTING BRICK WITH  
TERRA COTTA CAP

NEW DOUBLE GLAZED  
INSULATED WINDOWS



NEW MARQUEE ON  
EXISTING  
STRUCTURE



**Side Elevation**

1/8" = 1'-0"

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	10/27/15	NO CHANGE	AJS
2	11/24/15	REVISED PER PLANNING BOARD COMMENTS	AJS
3	12/29/15	NO CHANGE	AJS
4	1/26/15	NO CHANGE	AJS

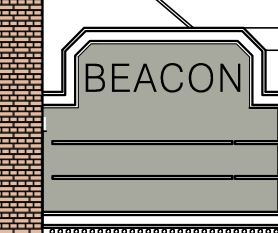


**Side Elevation**

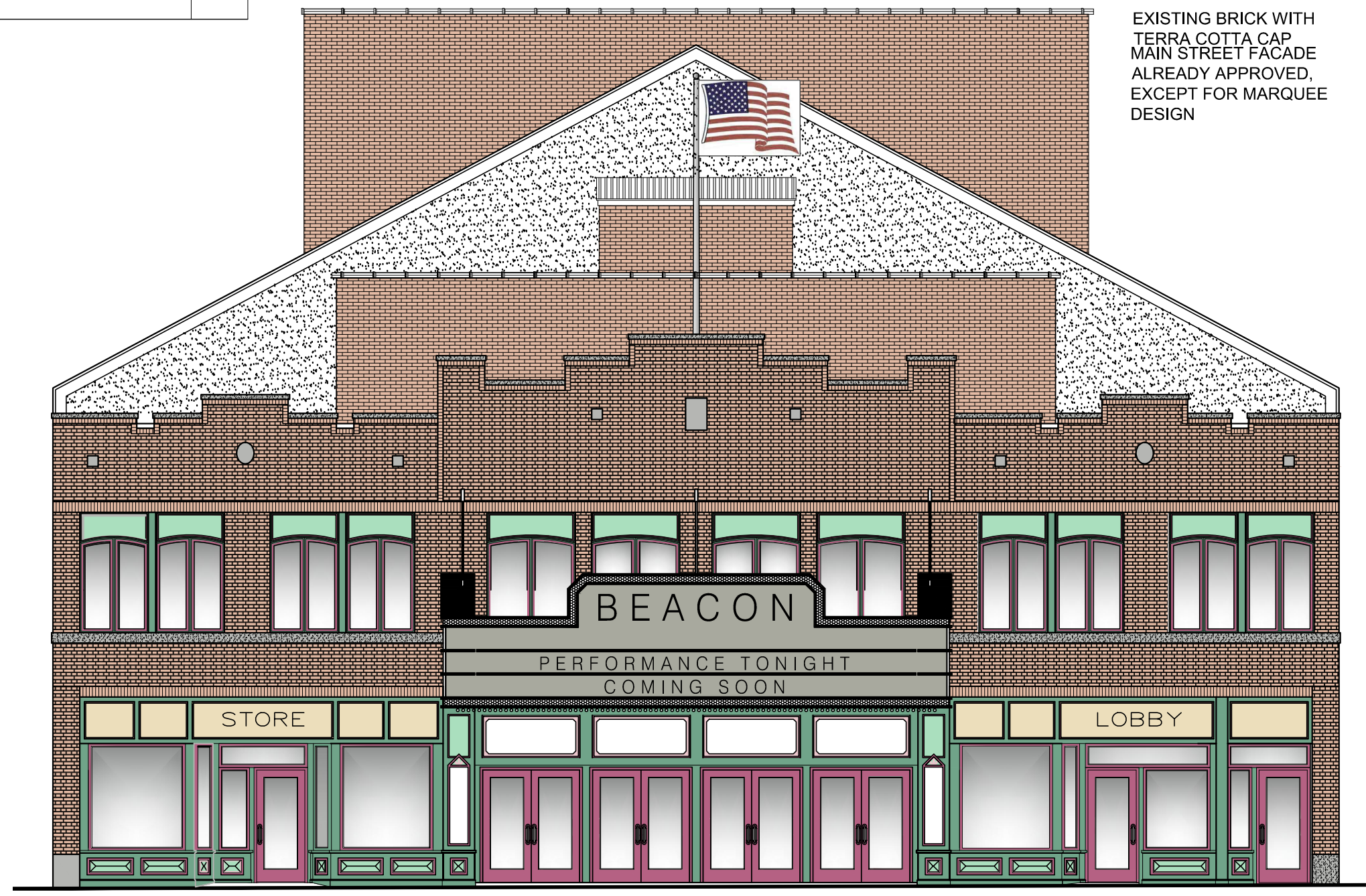
1/8" = 1'-0"

EXISTING BRICK WITH  
TERRA COTTA CAP

SLATE SHINGLE WALL  
NEW DOUBLE GLAZED  
INSULATED WINDOWS



NEW MARQUEE ON  
EXISTING  
STRUCTURE



**Main Street Elevation**

1/8" = 1'-0"

EXISTING BRICK WITH  
TERRA COTTA CAP  
MAIN STREET FACADE  
ALREADY APPROVED,  
EXCEPT FOR MARQUEE  
DESIGN

# Site Plan Application

Sheet 4 of 8 - Elevations



View from VanNydeck Avenue



View from Main Street

# Site Plan Application

Sheet 5 of 8 - Renderings

## Beacon Theater Apartments - 445 Main Street

Beacon, New York  
Scale: NTS  
September 29, 2015

Owner:  
**Beacon Main Street Theater LLC**  
484 Main Street  
Beacon, New York 12508

Architect:  
**Aryeh Siegel, Architect**  
514 Main Street  
Beacon, New York 12508

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

Surveyor:  
**Badey & Watson**  
3063 Route 9  
Cold Spring, New York 10516



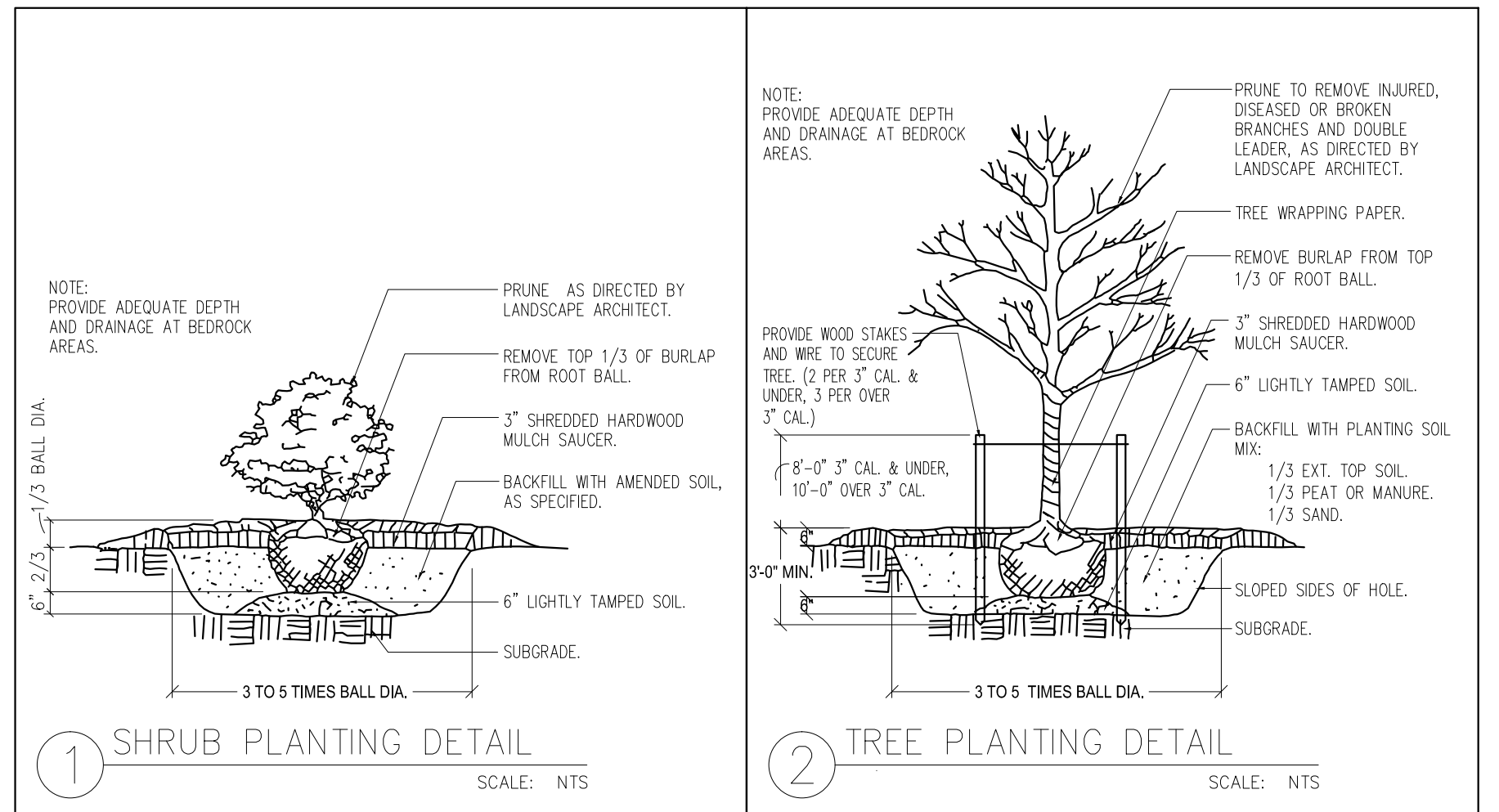
WALL MOUNTED HOUSE LIGHT (L1) ARK LIGHTING - WALL MOUNTED FIXTURE, MODEL #AW1002, 100W, COLOR: STAINLESS STEEL, FROSTED GLASS GLOBE OPTION, OR APPROVED EQUAL. MOUNTING HEIGHT = 8 FEET

NOTE THAT THE MANUFACTURER DOES NOT PROVIDE FOOTCANDLE DIAGRAMS FOR THIS FIXTURE

NOTE: ALL EXTERIOR LIGHTING ON THE SITE SHALL BE DIRECTED AND/OR SHIELDED SO AS NOT TO CAUSE ANY OBJECTIONABLE GLARE OBSERVABLE FROM NEIGHBORING STREETS AND PROPERTIES. THE SOURCE (BULBS) OF SUCH LIGHTING SHALL NOT BE VISIBLE FROM SAID NEIGHBORING STREETS AND PROPERTIES. PHOTOMETRIC DIAGRAMS ARE SHOWN WITH SHIELDED CONDITIONS.

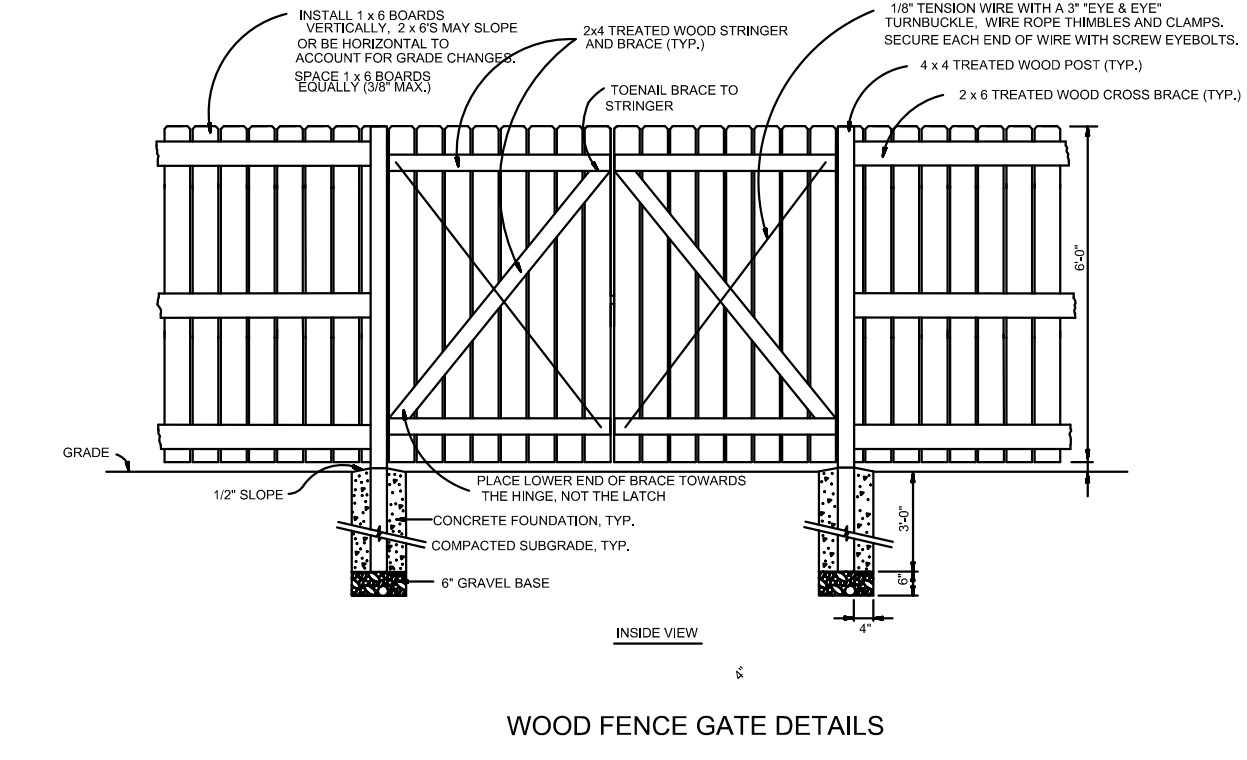
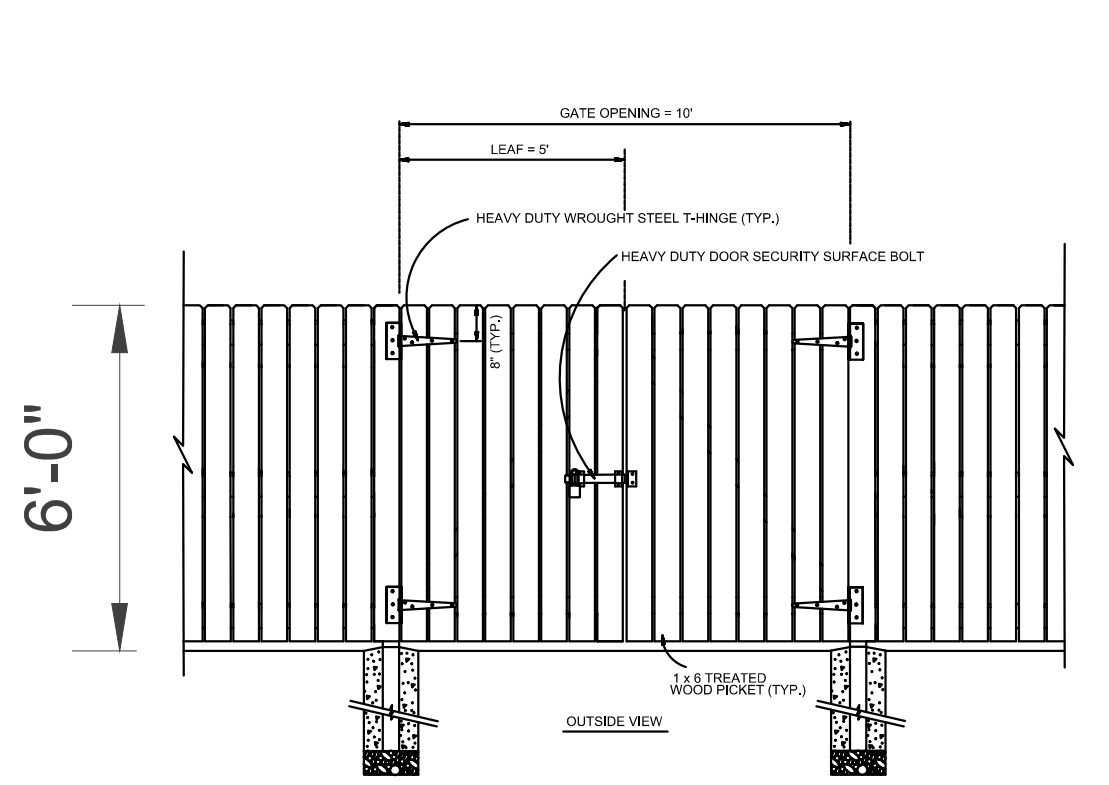
**Planting Schedule**

KEY	SPECIES	SIZE	ROOT	SPACING	QUANTITY
TREES					
T1	Amelanchier (Serviceberry)	0'-4"	B&B	See drawing	2 Required
SHRUBS					
	Arbor Vitae (tuja occidentalis)	5 Gal (24" min)		24" min. See drawing	25 Required
OTHER					
	Karl Foerster Grass (calamagrostis cutiflora)	Plugs /1 Gal			45 required



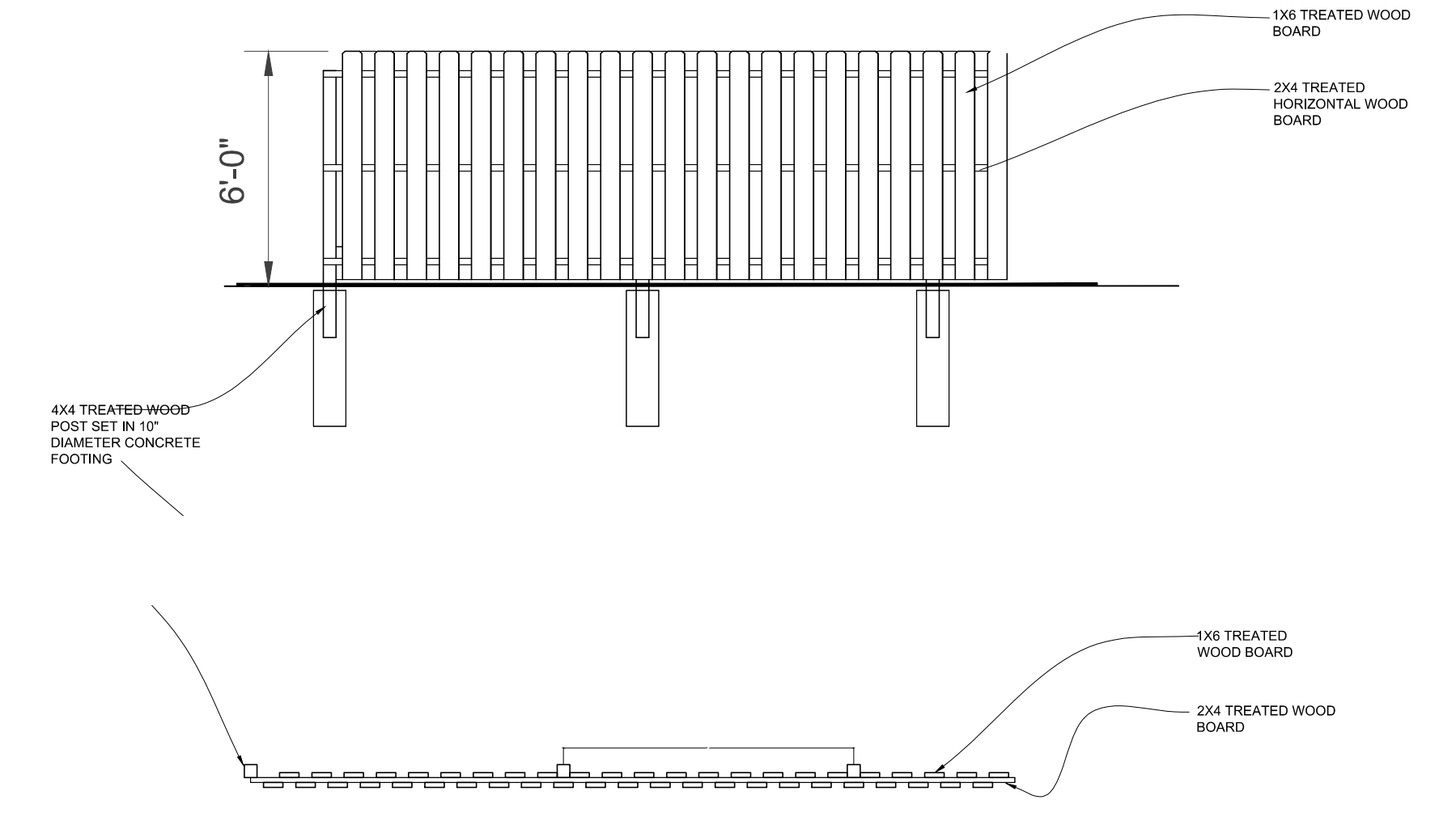
**Planting Details**

NTS



**Trash Enclosure Details**

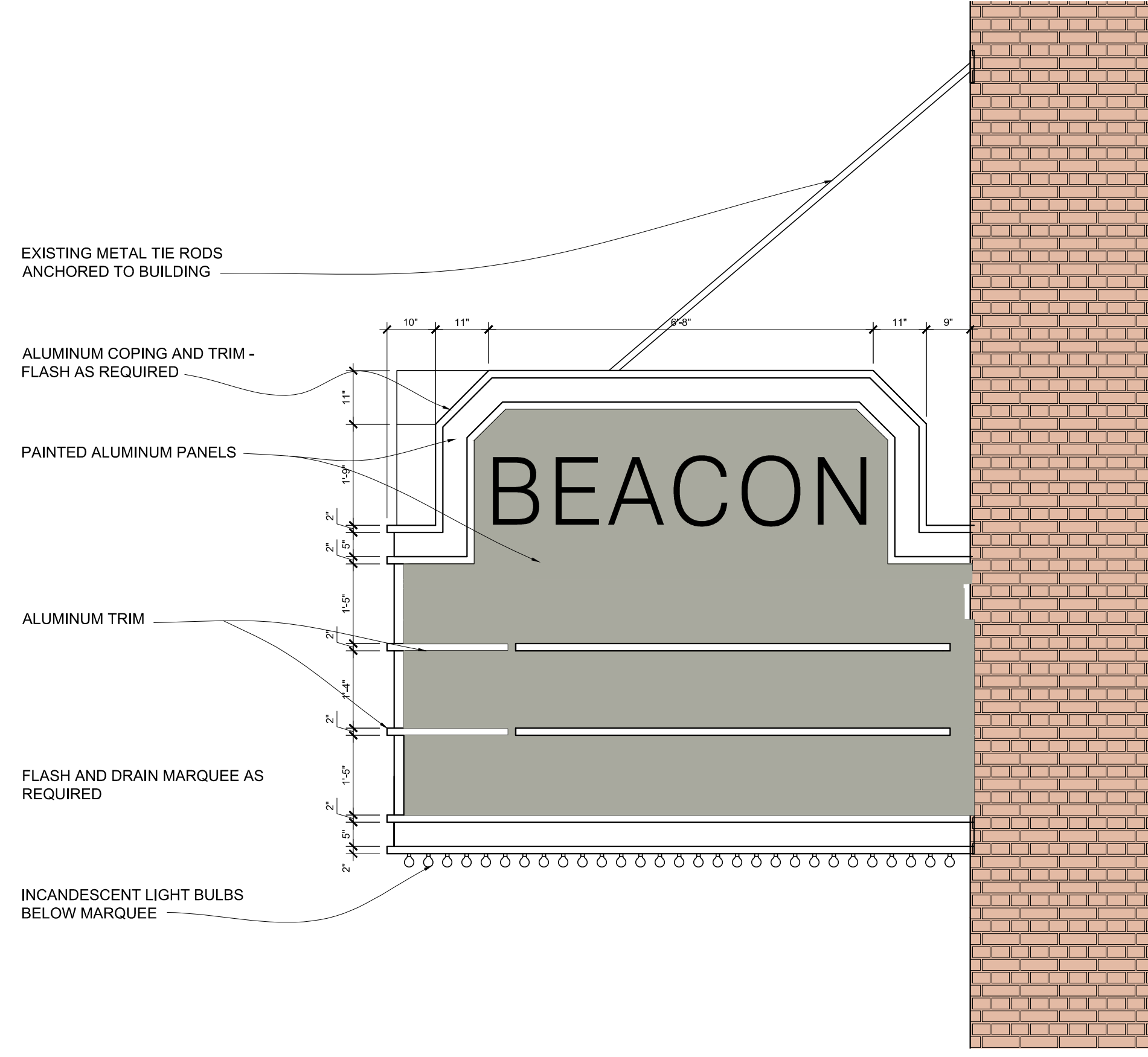
NTS



**Garden Shadowbox Fence**

1/2" = 1'-0"

REVISIONS:				
NO.	DATE	DESCRIPTION	BY	
1	10/27/15	REVISED PER PLANNING BOARD COMMENTS	AJS	
2	11/24/15	REVISED PER PLANNING BOARD COMMENTS	AJS	
3	12/29/15	REVISED PER PLANNING BOARD COMMENTS	AJS	
4	1/26/15	REVISED PER PLANNING BOARD COMMENTS	AJS	



**Side View: Marquee**

1/2" = 1'-0"



**Front View: Marquee**

1/2" = 1'-0"

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

SIGNED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_ BY \_\_\_\_\_

CHAIRMAN

SECRETARY

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

**Site Plan Application**  
Sheet 6 of 8 - Landscape, Lighting Details, Marquee

Owner:  
**Beacon Main Street Theater LLC**  
484 Main Street  
Beacon, New York 12508

Architect:  
**Aryeh Siegel, Architect**  
514 Main Street  
Beacon, New York 12508

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

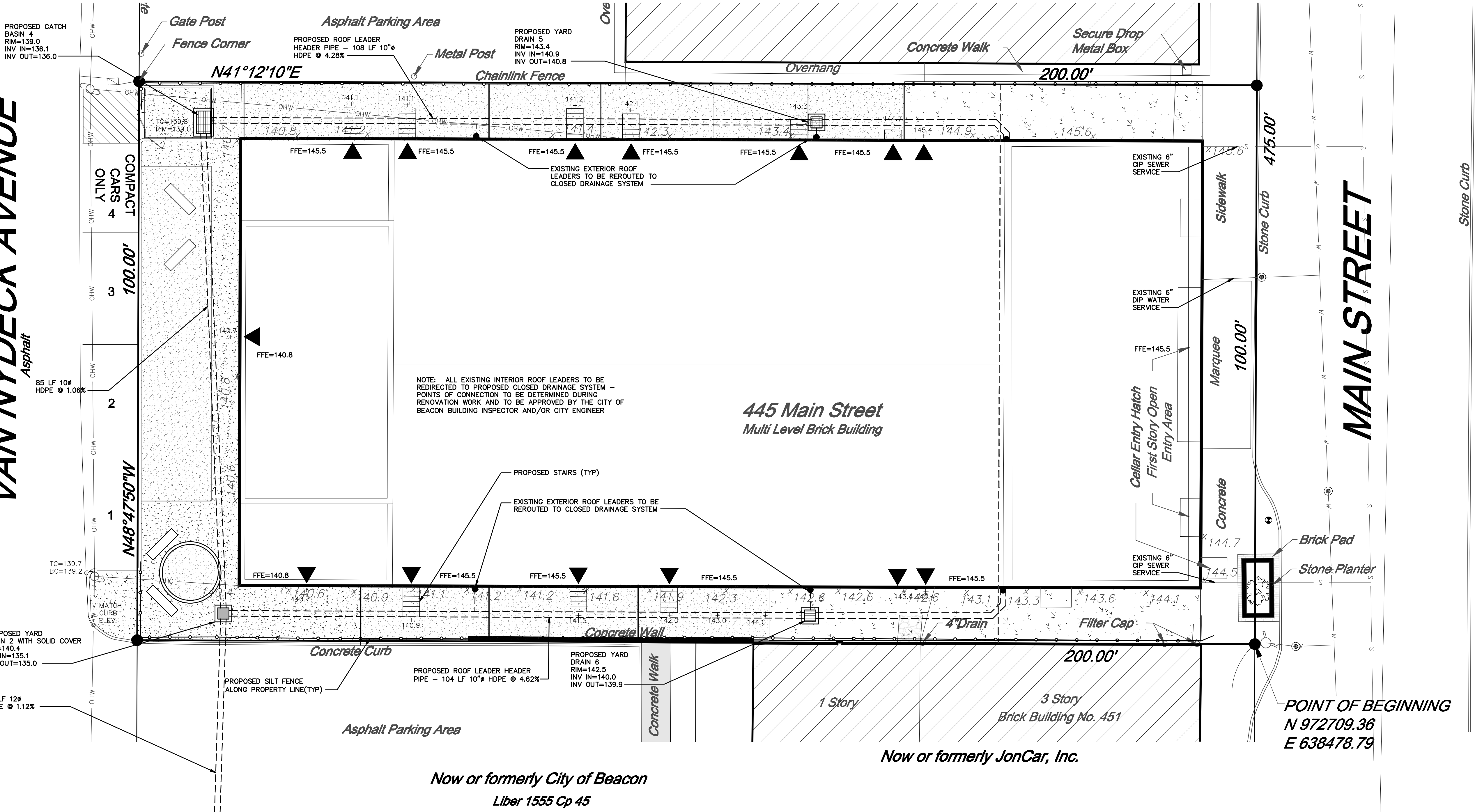
Surveyor:  
**Badey & Watson**  
3063 Route 9  
Cold Spring, New York 10516

**Beacon Theater Apartments**  
Beacon, New York  
Scale: As noted  
September 29, 2015



VAN NYDECK AVENUE  
Asphalt

MAIN STREET



**LEGEND:**

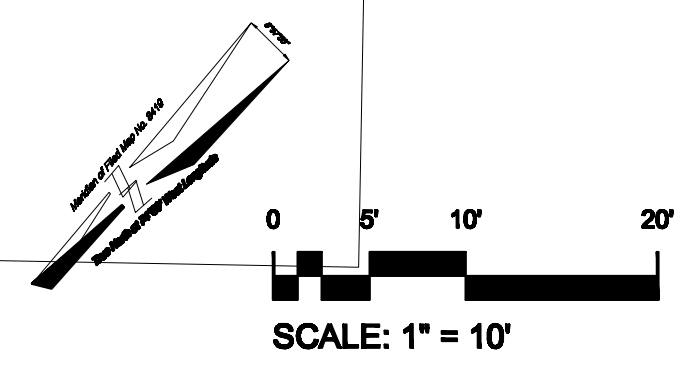
- EXISTING PROPERTY LINE
- GAS — GAS — EXISTING GAS LINE
- W — EXISTING WATER LINE
- S — EXISTING SEWER LINE
- - - - - PROPOSED STORMWATER LINE
- - - - - PROPOSED SILT FENCE
- ▣ EXISTING CATCH BASIN
- ▣ PROPOSED YARD BASIN
- ▣ PROPOSED CATCH BASIN
- ▲ PROPOSED DOOR LOCATION
- TC=139.7  
BC=139.2
- ▲ PROPOSED SPOT ELEVATION

**MAP REFERENCE:**  
1. EXISTING FEATURES AS SHOWN ON THIS PLAN PROVIDED BY A MAP ENTITLED "SURVEY OF PROPERTY PREPARED FOR BEACON MAIN STREET LLC", DATED JULY 27, 2015, LAST REVISED SEPTEMBER 29, 2015 BY BADEY & WATSON SURVEYING AND ENGINEERING, P.C.

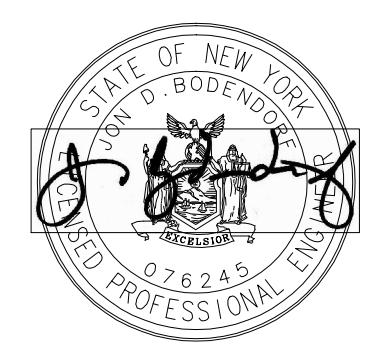
NOTE: ALL EXISTING INTERIOR ROOF LEADERS TO BE REDIRECTED TO PROPOSED CLOSED DRAINAGE SYSTEM - POINTS OF CONNECTION TO BE DETERMINED DURING RENOVATION WORK AND TO BE APPROVED BY THE CITY OF BEACON BUILDING INSPECTOR AND/OR CITY ENGINEER

**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 ACTUAL LOCATIONS OF THE GAS, WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE PROPOSED STORM LINES. TEST PITS SHALL BE CONDUCTED IF NECESSARY TO VERIFY UTILITY MARKOUT. IF UTILITY CONFLICT EXISTS, IT SHALL BE BROUGHT TO THE PROJECT ENGINEER'S ATTENTION IMMEDIATELY.
2. HUDSON LAND DESIGN ASSUMED A RIM ELEVATION OF 100 AT THE EXISTING CATCH BASIN, AND ASSUMED FINAL GRADES AT THE PROPOSED YARD DRAINS. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING ELEVATIONS AT THE YARD DRAINS RELATIVE TO THE EXISTING CATCH BASIN, AND SHALL REPORT SUCH INFORMATION TO THE DESIGN ENGINEER BEFORE COMMENCING CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON BUILDING AND HIGHWAY DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR STORMWATER CONVEYANCE ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
4. THE STORMWATER PIPES AND STRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON HIGHWAY DEPARTMENT REQUIREMENTS.
5. VAN NYDECK AVENUE AND MUNICIPAL PARKING LOT CLOSURES FOR STORMWATER CONNECTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS.
6. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
7. ROOF LEADERS SHALL BE DISCONNECTED FROM INTERNAL BUILDING DRAINS AND RE-DIRECTED TOWARD PROPOSED STORMWATER CONVEYANCE SYSTEM AS SHOWN ON THIS PLAN IF NOT DONE SO ALREADY.
8. ROOF LEADER CONVEYANCE PIPES SHALL BE 10" SCH 40 PVC WITH WATER TIGHT JOINTS @ 2.0% SLOPE MINIMUM WITHIN BUILDING.
9. ROOF LEADER HEADER PIPE OUTSIDE OF BUILDING SHALL BE 10" ADS CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) PIPE.
10. BUILDING PENETRATIONS FOR RE-ROUTING OF ROOF LEADERS SHALL BE STRUCTURALLY REINFORCED AND SEALED TO THE SATISFACTION OF THE CITY BUILDING INSPECTOR.
11. THE PROPOSED CONNECTION TO THE EXISTING CATCH BASIN WITHIN THE ADJACENT MUNICIPAL LOT WILL REQUIRE A LICENSING AGREEMENT WITH THE CITY OF BEACON.



REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	10/27/15	PER PLANNING BOARD COMMENTS	MAB
2	11/24/15	NO CHANGE	MAB
3	12/29/15	PER PLANNING BOARD COMMENTS	MAB
4	01/26/16	PER PLANNING BOARD COMMENTS	MAB



**Site Plan Application**  
Sheet 7 of 8 - Stormwater Plan

**Dig Safely.**  
New York  
800-962-7962  
www.digsafelynewyork.org

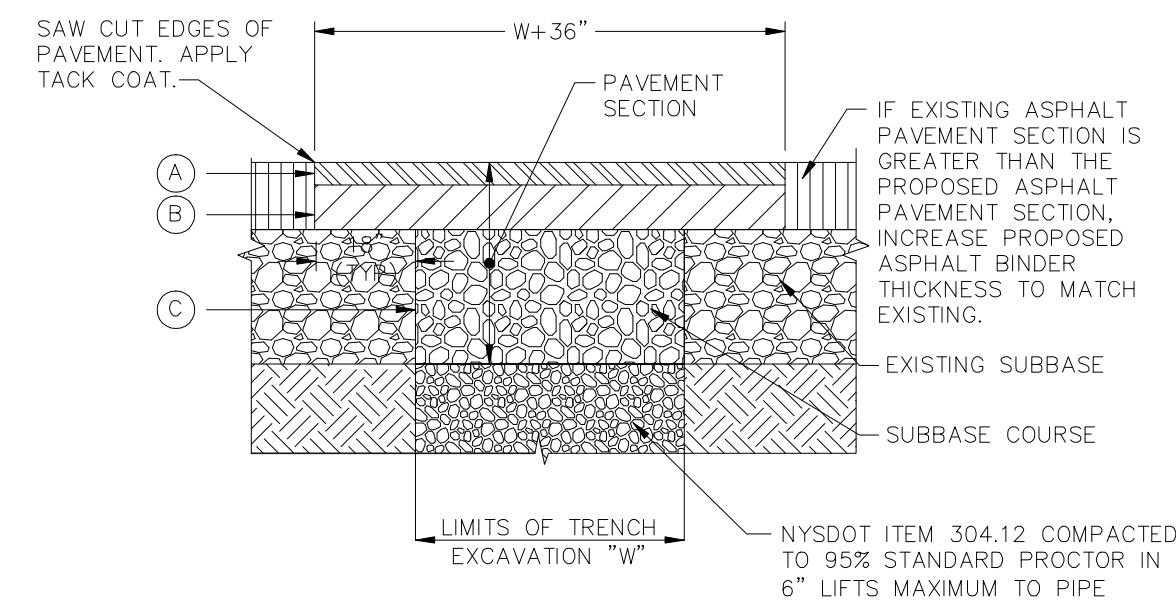
- Call Before You Dig
- Wait The Required Time
- Confirm Utility Response
- Respect The Marks
- Dig With Care

**Owner:**  
**Beacon Main Street Theater LLC**  
484 Main Street  
Beacon, New York 12508

**Architect:**  
**Aryeh Siegel, Architect**  
514 Main Street  
Beacon, New York 12508

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

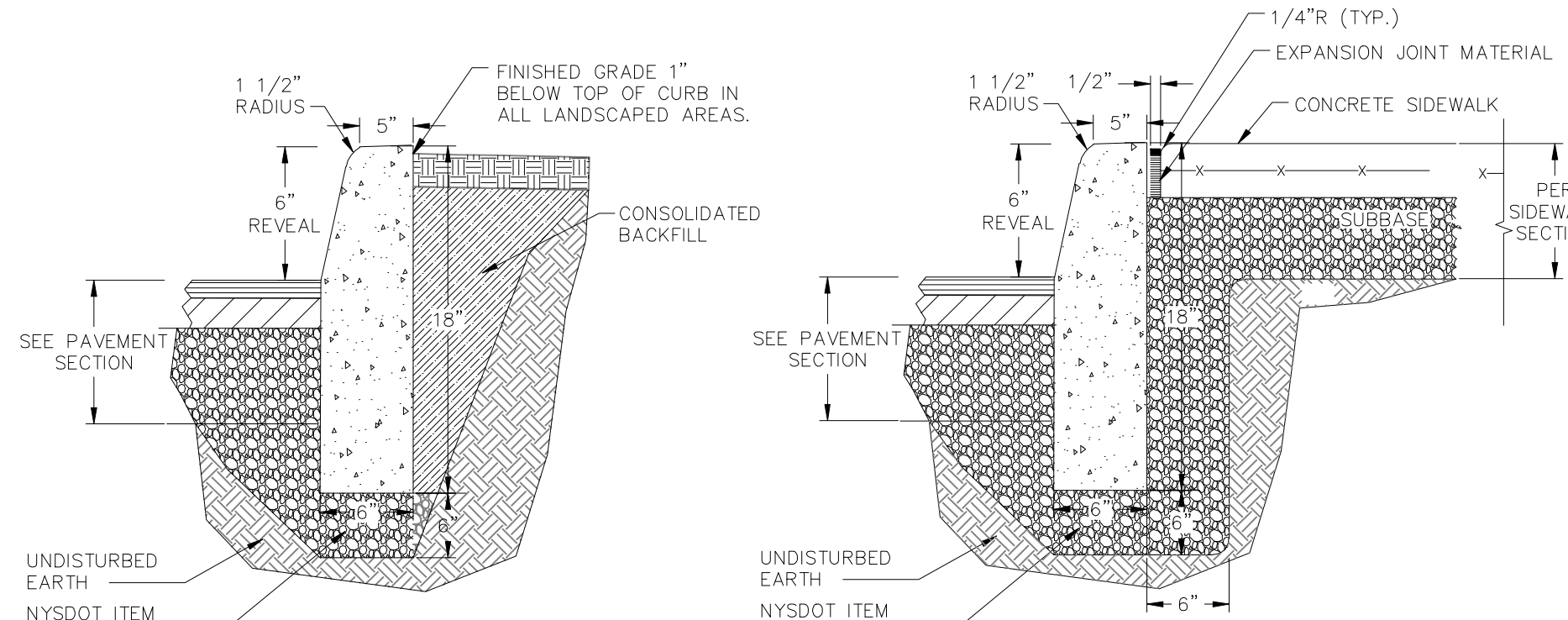
**Beacon Theater Apartments - 445 Main Street**  
Beacon, New York  
Scale: 1" = 10'  
September 29, 2015



- LEGEND**
- (A) 1-1/2" ASPHALT CONCRETE TOP COURSE - NYS DOT TYPE 6F
  - (B) 3" ASPHALT CONCRETE BINDER COURSE - NYS DOT TYPE 3
  - (C) 10" GRANULAR SUBBASE COURSE - NYS DOT ITEM 304.12

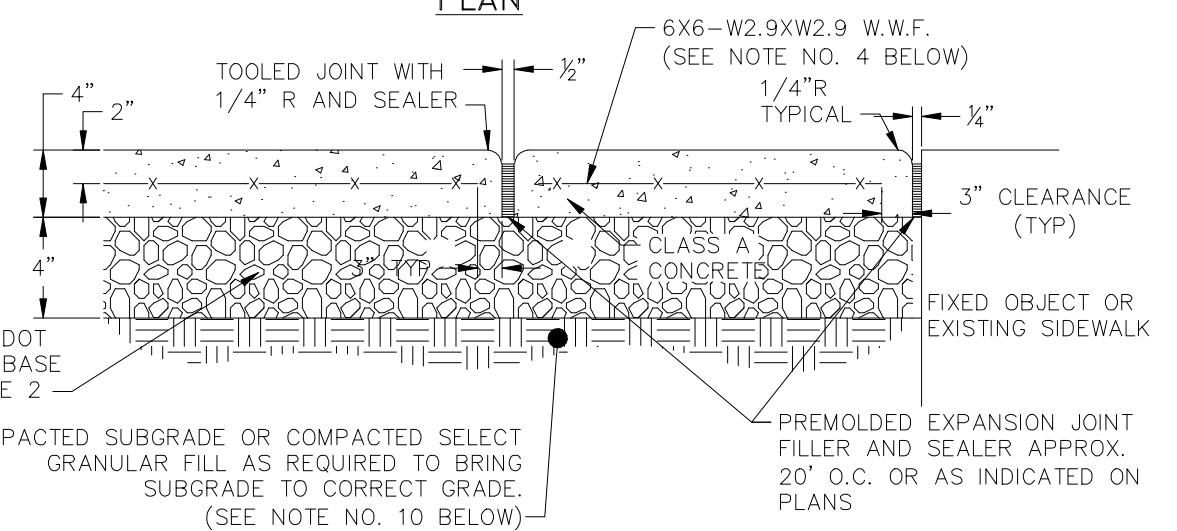
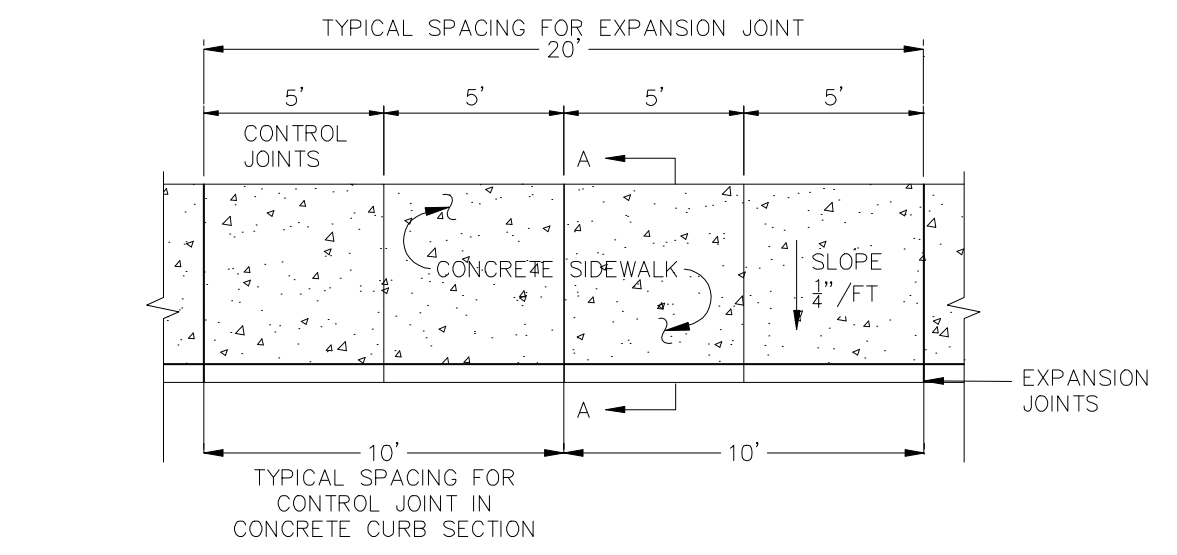
- NOTES:**
- SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES.
  - 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
  - FURNISH, PLACE, AND COMPACT SUBBASE.
  - TACK COAT IN ACCORDANCE WITH NYS DOT STANDARD SPEC.
  - FURNISH AND PLACE ASPHALT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

**PAVEMENT RESTORATION DETAIL**  
NOT TO SCALE



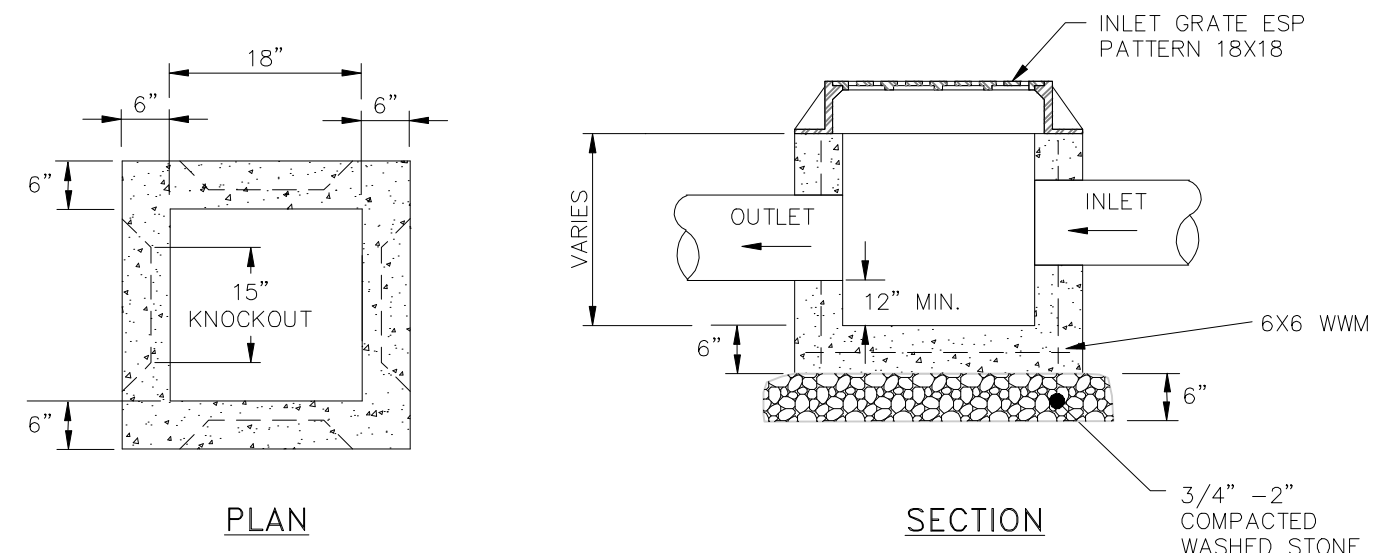
- NOTES:**
- CONCRETE CURB SHALL BE 3,500 PSI CAST-IN-PLACE, AND IN ACCORDANCE WITH NYS DOT STANDARD SPECIFICATION SECTION 609.
  - EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL BE PLACED AT 10 FOOT INTERVALS.

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



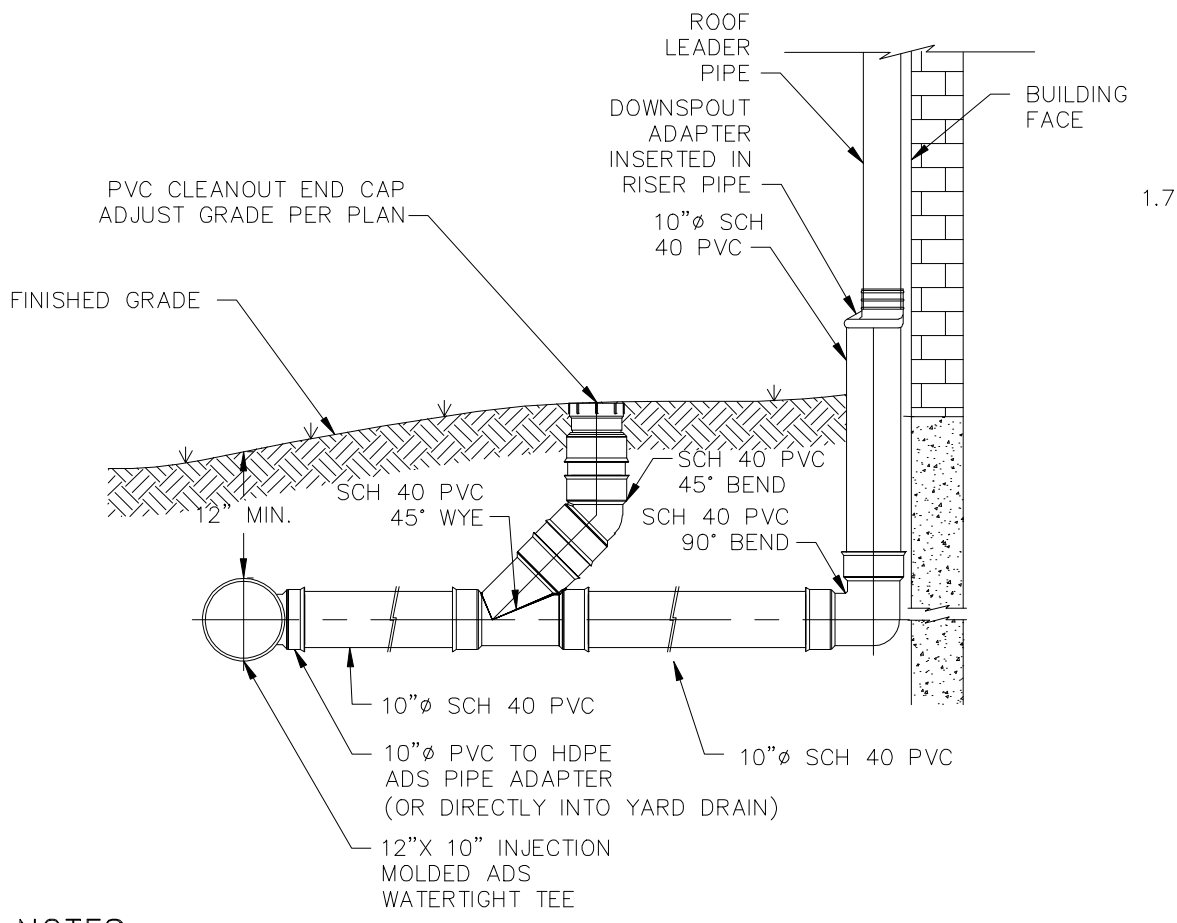
- NOTES:**
- 10' SPACING OF CONTROL JOINTS SHALL BE USED FOR CAST IN PLACE CONCRETE CURBS.
  - MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYS DOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002, AND ALL ADDENDA THERETO; THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
  - ALL CONCRETE SHALL BE 3,500 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYS DOT STANDARD SPECIFICATIONS.
  - REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 - REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYS DOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
  - ALL EXPOSED SURFACES SHALL HAVE A BROOM TEXTURED FINISH.
  - EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
  - JOINTS SHALL NOT BE SAW CUT.
  - EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFE BOND" SB-7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
  - SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYS DOT STANDARD.
  - 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 NYS DOT STANDARD SPECIFICATIONS.
  - ALL WORK SHALL CONFORM WITH SECTION 608-SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYS DOT STANDARD SPECIFICATIONS.

**CONCRETE SIDEWALK DETAIL**  
NOT TO SCALE



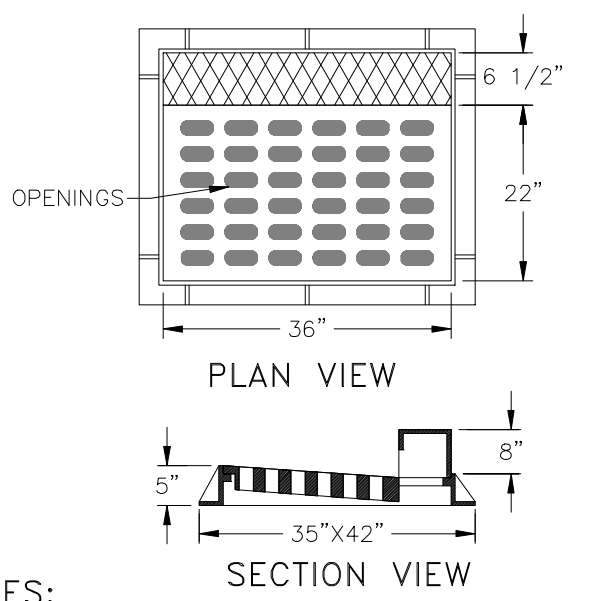
- NOTES:**
- YARD INLET BASINS SHALL BE PRE CAST REINFORCED CONCRETE, SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND SHALL BE IN CONFORMANCE WITH ASTM 478-08. WALLS AND BASE SHALL BE ONE PIECE CONSTRUCTION. YARD INLET BASIN SHOWN BY EXPANDED SUPPLY PRODUCTS (ESP), 3330 ROUTE 9, COLD SPRING, NY (845) 265-3771.
  - BACK FILL USING SELECT MATERIAL, COMPACTED IN 6" LIFTS.
  - SUMP SHALL BE 12".
  - FRAMES AND GRATES SHALL BE SET IN A FULL BED OF MORTAR.
  - STRUCTURE (INCLUDING FRAME AND GRATE) SHALL BE REINFORCED TO WITHSTAND H2O LOADING IN AREAS WHERE VEHICULAR LOADS ARE POSSIBLE.

**PRE-CAST CONCRETE YARD INLET DETAIL**  
NOT TO SCALE



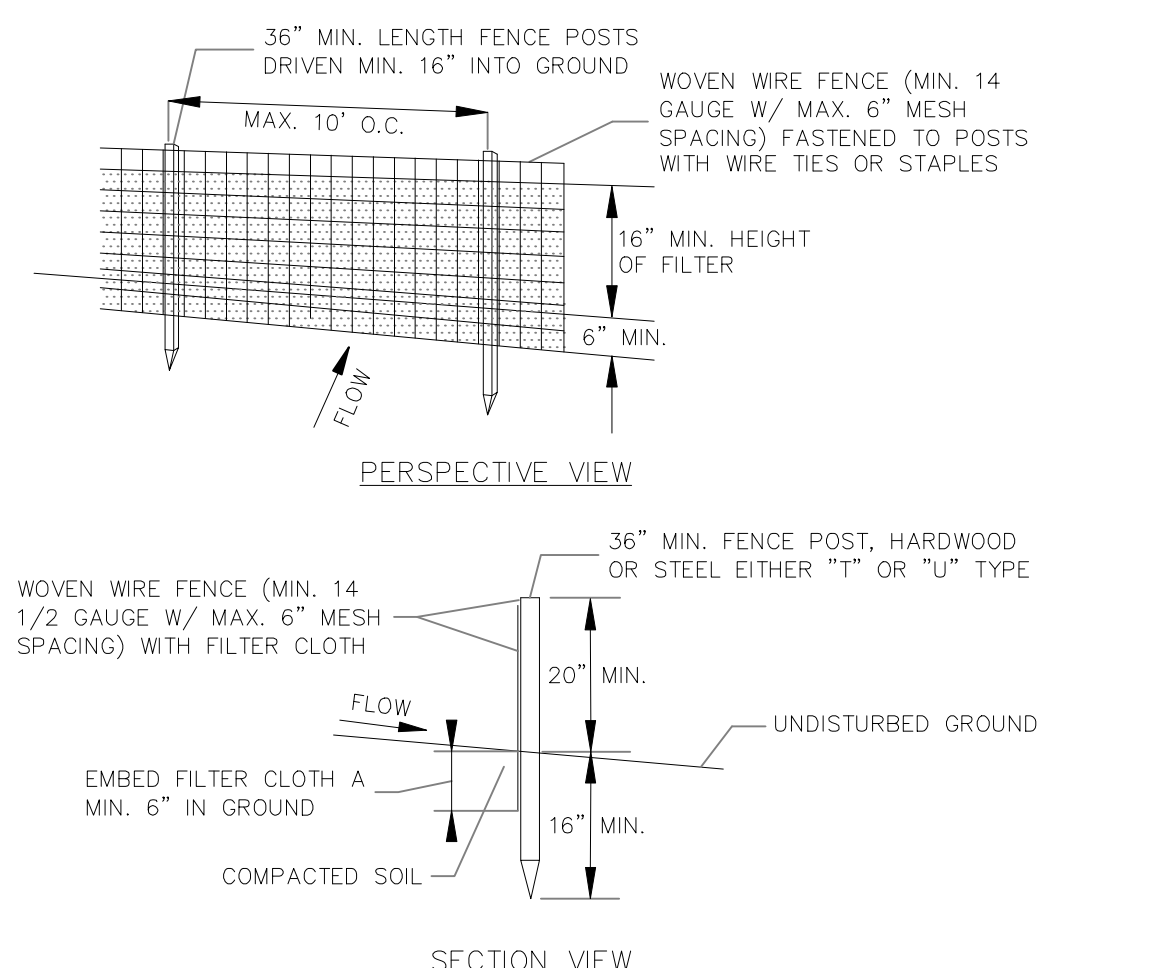
- NOTES:**
- ALL ROOF LEADER PIPES SHALL BE MINIMUM 10" SCH 40 PVC @ 2.0% SLOPE MIN. UNLESS SPECIFIED OTHERWISE.
  - PVC JOINT CONNECTIONS SHALL BE MADE WITH PVC CEMENT.
  - ROOF LEADER HEADER PIPES SHALL BE MINIMUM 10" HDPE PIPE.
  - SUBSTITUTIONS OF PIPE MATERIAL SHALL BE BROUGHT TO THE DESIGN ENGINEER'S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

**ROOF LEADER CONNECTION DETAIL**  
NOT TO SCALE



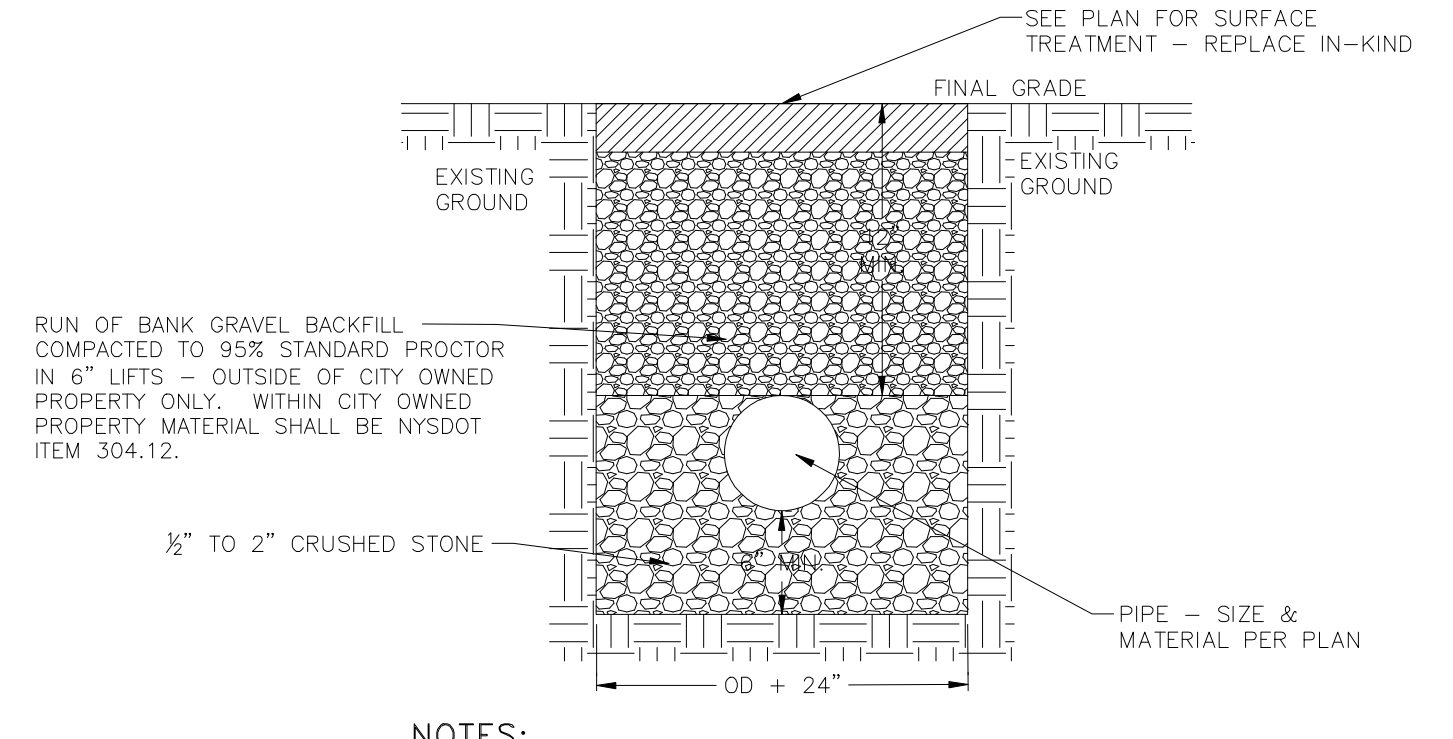
- NOTES:**
- HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
  - CATCH BASINS TO RECEIVE CURB INLETS ARE: CB 3 & 4.

**CAST IRON STORMWATER CURB INLET GRATE DETAIL**  
NOT TO SCALE



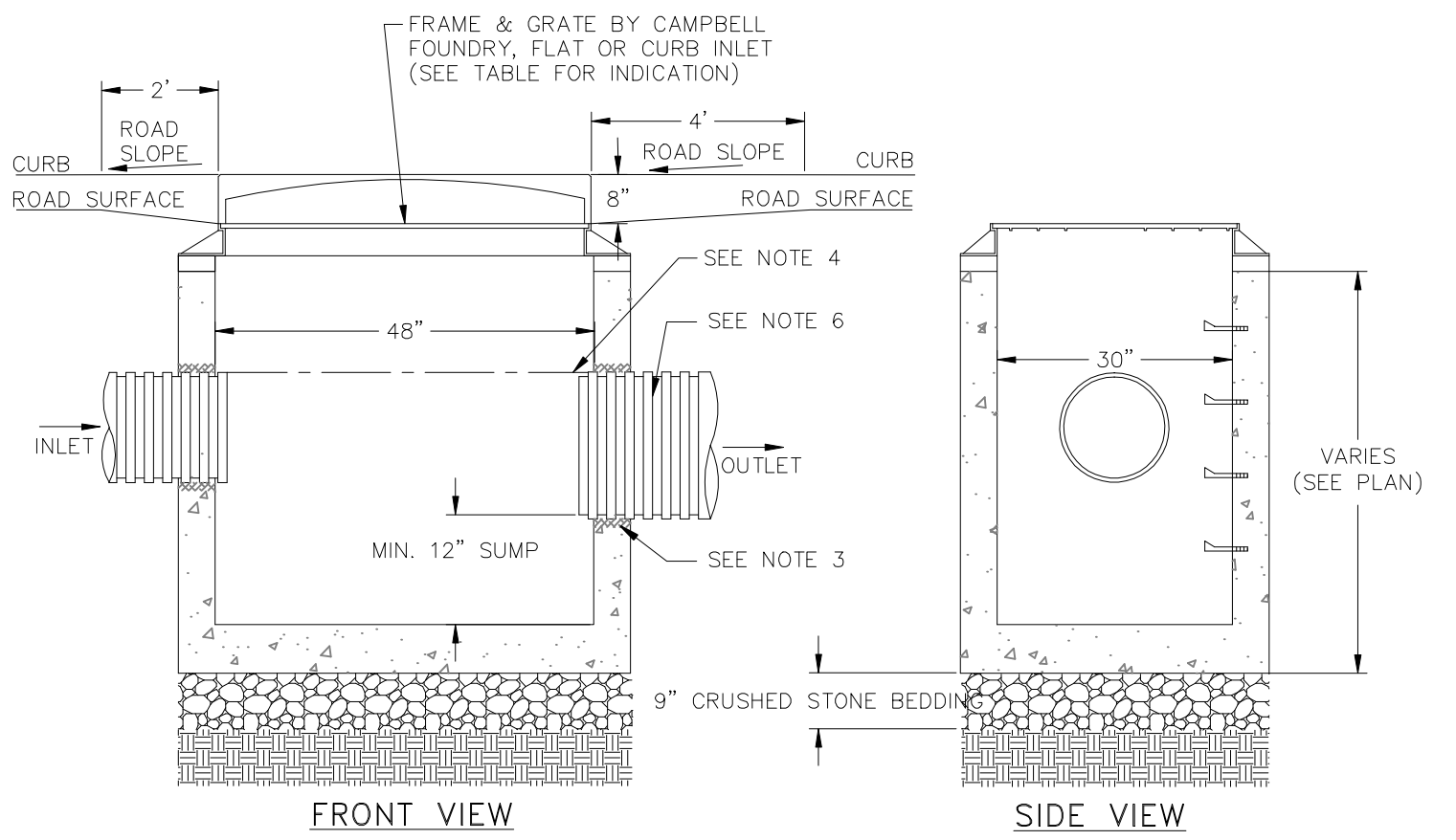
- NOTES:**
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
  - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR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

**SILT FENCE DETAIL**  
NOT TO SCALE



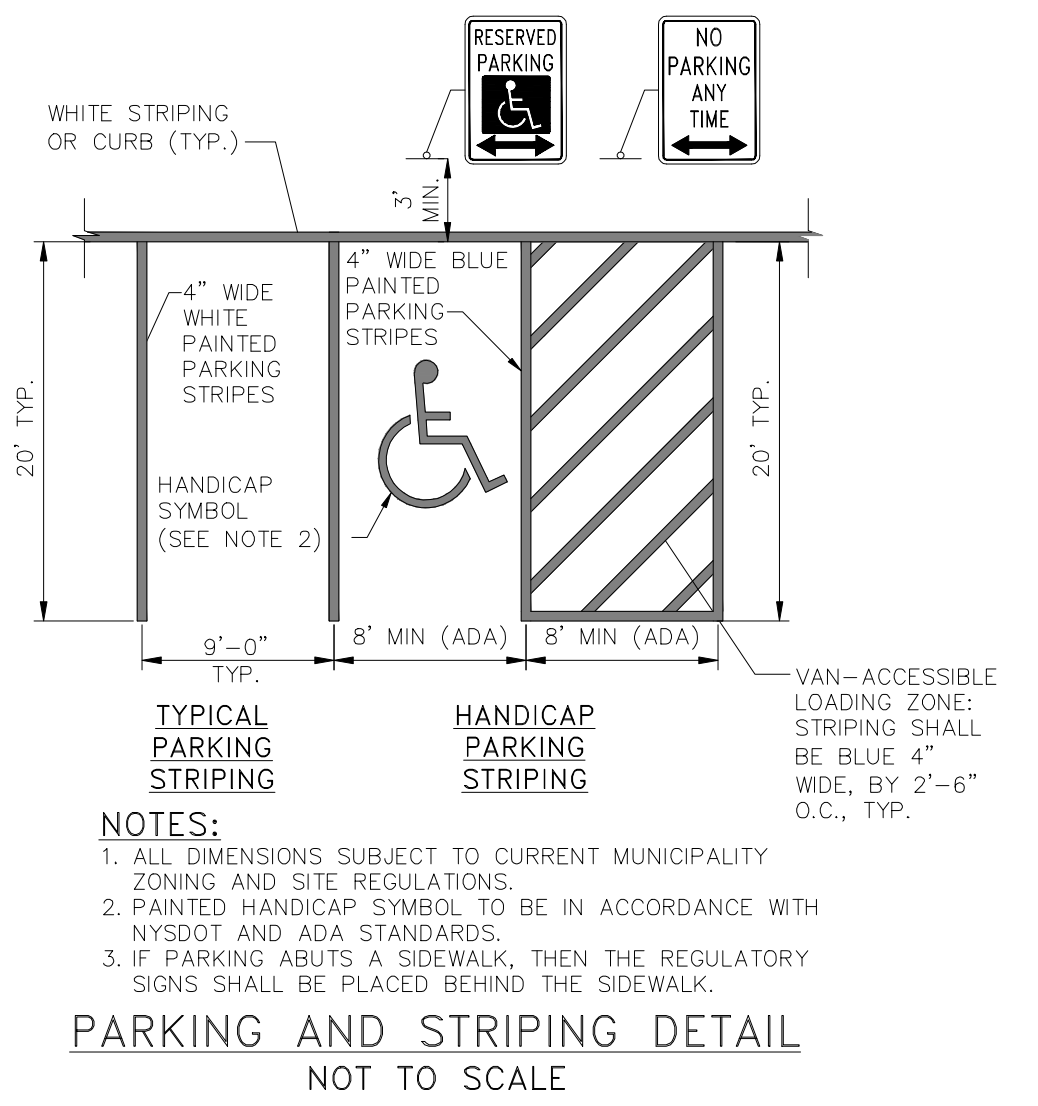
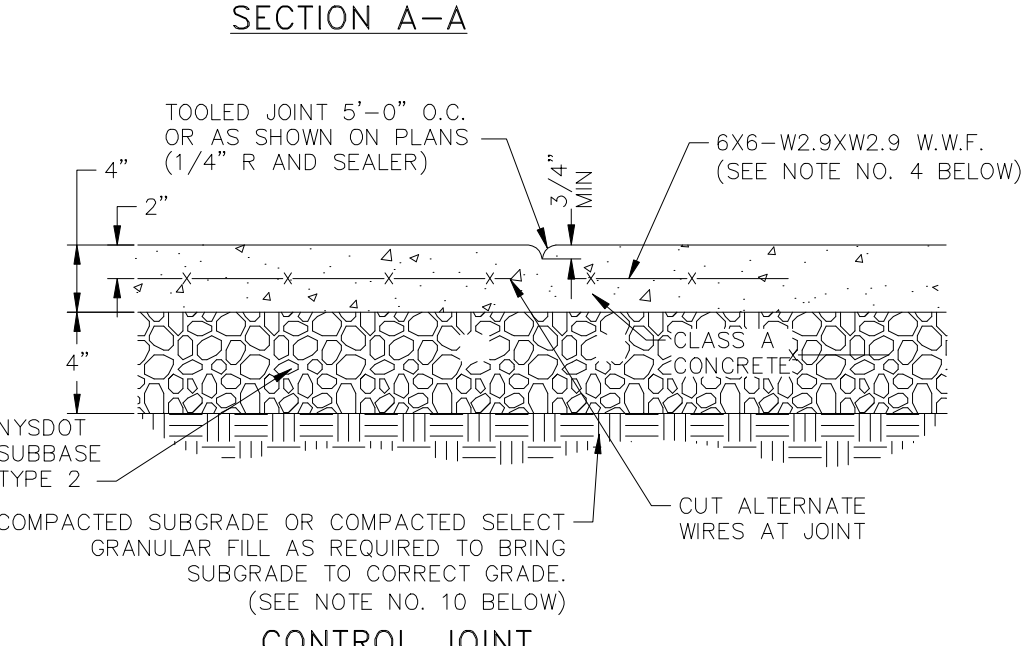
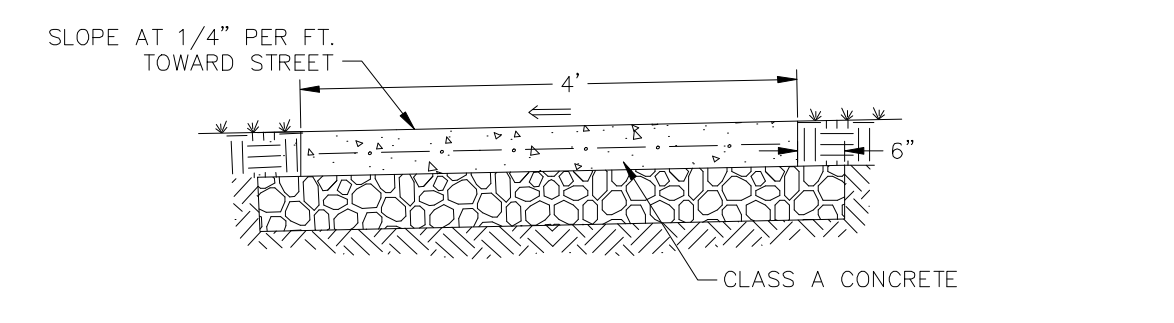
- NOTES:**
- EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

**ROOF LEADER OR CULVERT PIPE IN TRENCH DETAIL**  
NOT TO SCALE



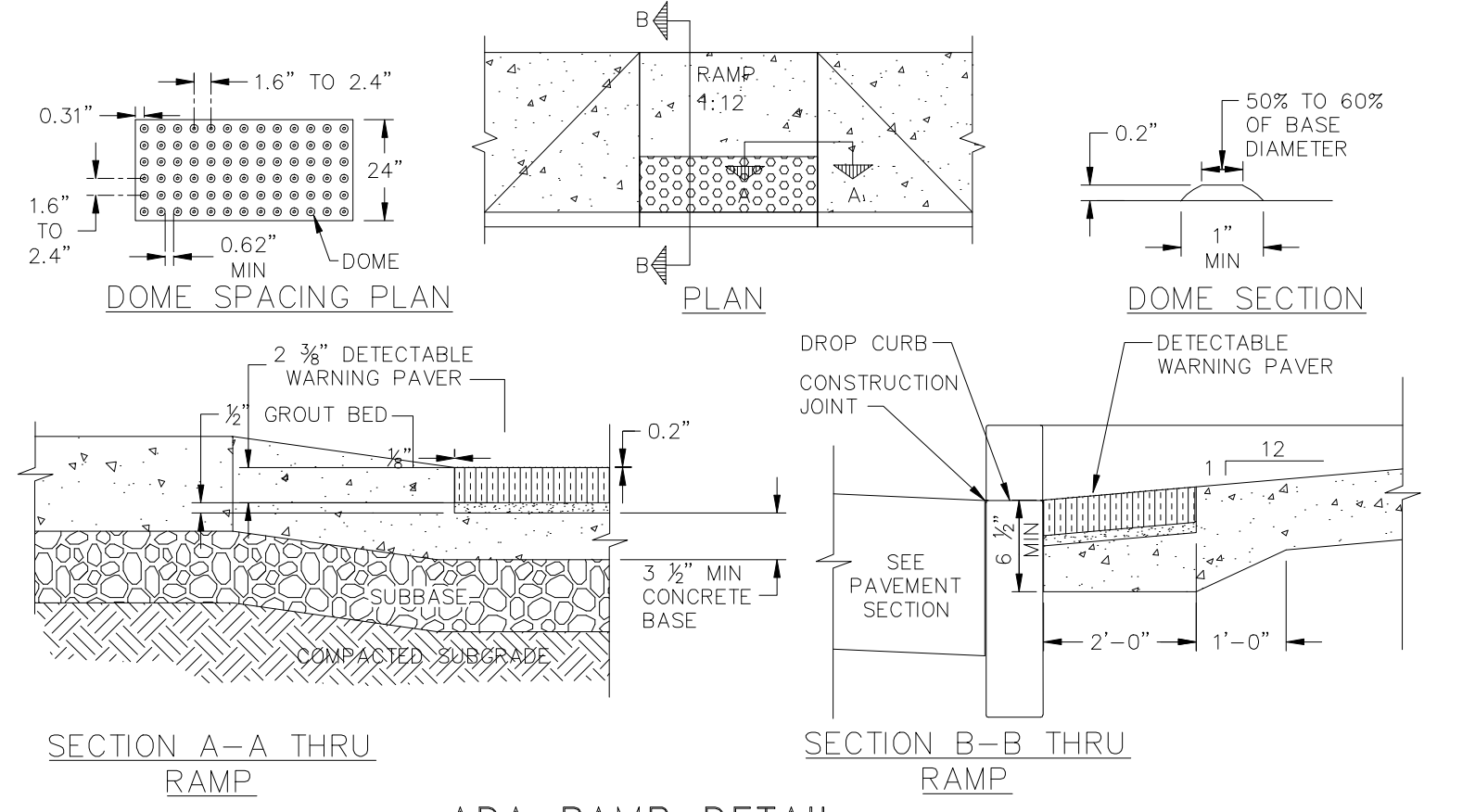
- NOTES:**
- PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
  - THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGED AROUND.
  - PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATERTIGHT.
  - PROVIDE A MINIMUM 0.1' DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZE) UNLESS OTHERWISE NOTED ON THE PLAN.
  - CATCH BASINS WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.
  - HDPE PIPE SHALL BE PROVIDED WITH WATERTIGHT CONNECTIONS. ADS MODEL N12 WT IB OR APPROVED EQUAL.

**CATCH BASIN DETAIL**  
NOT TO SCALE



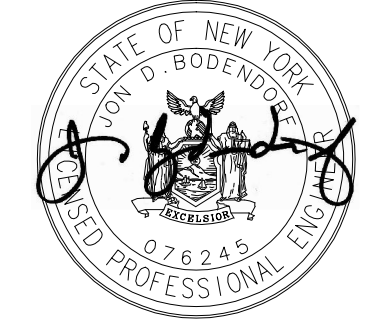
- NOTES:**
- ALL DIMENSIONS SUBJECT TO CURRENT MUNICIPALITY ZONING AND SITE REGULATIONS.
  - PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE WITH NYS DOT AND ADA STANDARDS.
  - IF PARKING ADJUTS A SIDEWALK, THEN THE REGULATORY SIGNS SHALL BE PLACED BEHIND THE SIDEWALK.

**PARKING AND STRIPING DETAIL**  
NOT TO SCALE



**ADA RAMP DETAIL**  
NOT TO SCALE

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	10/27/15	PER PLANNING BOARD COMMENTS	MAB
2	11/24/15	PER PLANNING BOARD COMMENTS	MAB
3	12/29/15	PER PLANNING BOARD COMMENTS	MAB
4	01/26/16	NO CHANGE THIS SHEET	MAB



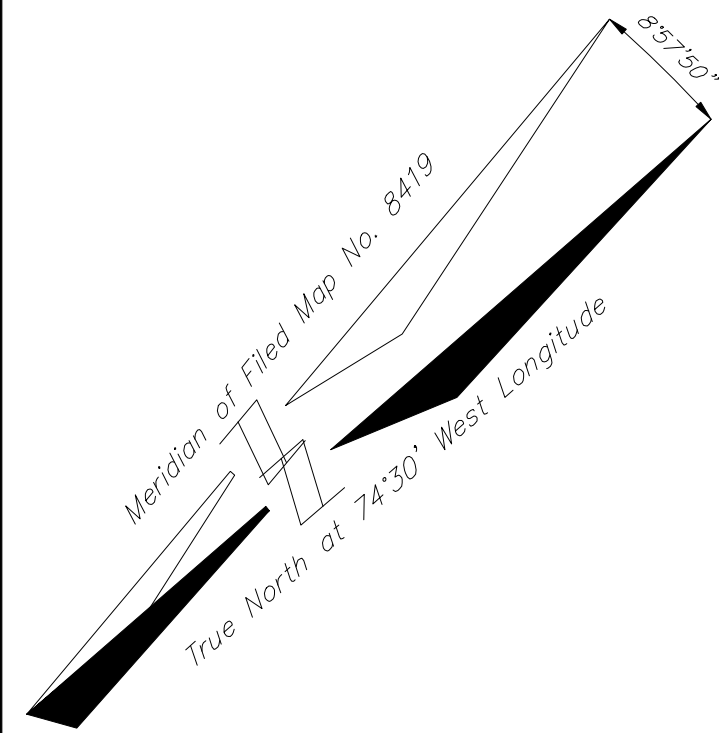
**Site Plan Application**  
Sheet 8 of 8 - Construction Details

**Owner:**  
**Beacon Main Street Theater LLC**  
484 Main Street  
Beacon, New York 12508

**Architect:**  
**Aryeh Siegel, Architect**  
514 Main Street  
Beacon, New York 12508

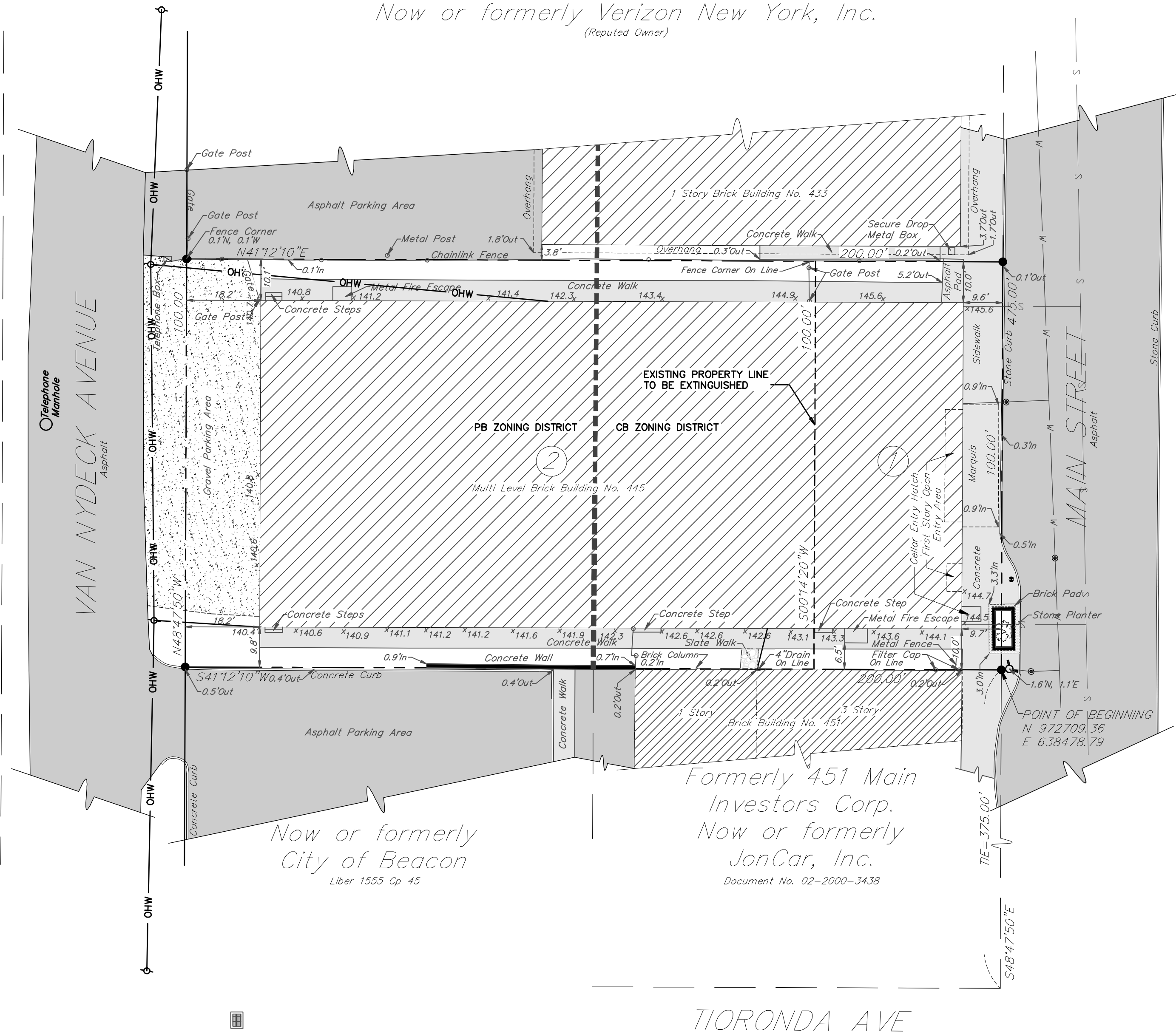
**Site / Civil Engineer:**  
**Hudson Land Design**  
174 Main Street  
Beacon, New York 12508

**Beacon Theater Apartments - 445 Main Street**  
Beacon, New York  
Scale: As noted  
September 29, 2015

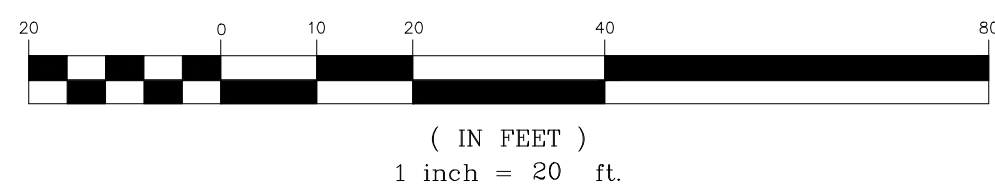


Formerly N.Y. Telephone Co.  
Now or formerly Verizon New York, Inc.  
(Reputed Owner)

- LEGEND:**
- EXISTING PROPERTY LINE
  - - - EXISTING ADJACENT PROPERTY LINE
  - - - - EXISTING PROPERTY LINE TO BE EXTINGUISHED
  - - - ZONING LINE
  - GAS — GAS — EXISTING GAS LINE
  - W — EXISTING WATER LINE
  - S — EXISTING SEWER LINE
  - OHW — EXISTING OVERHEAD WIRE
  - EXISTING CATCH BASIN
  - EXISTING HYDRANT
  - EXISTING GAS VALVE
  - EXISTING UTILITY POLE
  - EXISTING WATER VALVE



**SUBDIVISION PLAT**  
SCALE: 1" = 20'  
GRAPHIC SCALE



**PROJECT INFORMATION:**

PARCEL OWNER:	BEACON MAIN STREET THEATER LLC, 445 MAIN ST., BEACON, NY 12508
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	445 MAIN ST., BEACON, NY 12508
TAX PARCEL ID(S):	PARCEL 1: 6054-29-055758 & PARCEL 2: 6054-29-050752
PARCEL AREA EXISTING:	PARCEL 1: 4,590.68 SQFT, (0.11 AC.); PARCEL 2: 15,409.32 SQFT (0.35 AC.)
PARCEL AREA PROPOSED:	1 LOT: 20,000 SQFT, (0.459 AC.)
ZONING DISTRICT:	PB - BUSINESS OFF-STREET PARKING AND CB - CENTRAL BUSINESS

- MAP REFERENCE:**
- EXISTING FEATURES AS SHOWN ON THIS PLAN PROVIDED BY A MAP ENTITLED "SURVEY OF PROPERTY PREPARED FOR BEACON MAIN STREET LLC", DATED JULY 27, 2015, LAST REVISED SEPTEMBER 29, 2015 BY BADEY & WATSON SURVEYING AND ENGINEERING, P.C.

- LOT CONSOLIDATION NOTES:**
- THE PROPOSAL CALLS FOR CONSOLIDATION OF PARCEL 1 AND 2 INTO ONE (1) LOT.
  - PRIOR TO THIS CONSOLIDATION, THE PROPERTY CONSTITUTED TWO SEPARATE LOTS WITH TAX PARCEL NUMBERS 6054-29-055758 (PARCEL 1) AND 6054-29-050752 (PARCEL 2). THE PARCEL DESIGNATED AS 6054-29-050752 (PARCEL 2) RECEIVED A USE VARIANCE ON FEBRUARY 9, 1988, TO ESTABLISH 32 RESIDENTIAL UNITS IN THE BUILDING ON THAT PARCEL.

**SCHEDULE OF REGULATIONS (PB & CB ZONING DISTRICT) AND LOT CONFORMANCE TABLE:**

PARAMETER	REQUIREMENT	CONSOLIDATED LOT
LOT DEPTH:	100 FEET MINIMUM	200 FEET
YARD SETBACKS:		
SIDE YARD:	20 FEET MINIMUM	9.8 FEET*
REAR YARD:	25 FEET MINIMUM	18.2 FEET*
MAX. BUILDING HEIGHT:	MAX 35 FEET, 2.5 STORIES	56'-8"*
FLOOR TO AREA RATIO:	2 (39,988 SQFT IN CB DIST.)	37,811 SQFT

\*PRE-EXISTING NON-COMFORMING



**SITE LOCATION MAP** SCALE: 1" = 400'

**ADJOINING OWNERS:**

PARCEL:	OWNER & MAILING ADDRESS
1:	VERIZON NEW YORK INC., PO BOX 2749 ADDISON, TX 75001
2:	MELZINGAH CORP., PO BOX 29, CARLSLE, NY 12031
3:	NEIL E. VAUGHN, 432 MAIN ST., BEACON, NY 12508
4:	436 LLC, 32 CEDAR ST., DOBBS FERRY, NY 10522
5:	JON CAR INC., 203 208 EAST MAIN ST., BEACON, NY 12508
6:	CITY OF BEACON, 1 MUNICIPAL PLZ., BEACON, NY 12508
7:	MELZINGAH CHAPTER N S D A R, 50 VAN NYDECK AVE., BEACON, NY 12508

**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.

\_\_\_\_\_  
BRENDAN McALPINE DATE

REVISIONS:			
NO.	DATE	DESCRIPTION	BY

# Subdivision Application

Sheet 1 of 1 - Preliminary Subdivision Plat

**Owner:**  
**Beacon Main Street Theater LLC**  
484 Main Street  
Beacon, New York 12508

**Architect:**  
**Aryeh Siegel, Architect**  
514 Main Street  
Beacon, New York 12508

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

**Beacon Theater Apartments - 445 Main Street**  
Beacon, New York  
Scale: As noted  
December 29, 2015

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

---

John J. Lanc, P.E., L.S., P.P.  
David E. Higgins, P.E.  
Rodney C. Knowlton, L.S.

Arthur R. Tully, P.E.  
John J. O'Rourke, P.E.  
John D. Russo, P.E.

February 4, 2016

Mr. Jay Sheers  
Beacon Planning Board Chair  
City of Beacon  
1 Municipal Plaza  
Beacon, NY 12508

RE: Beacon Theater  
City of Beacon  
Tax Map No. 6054-29-055758 & 050752

Dear Mr. Sheers:

Our office has reviewed the following plans for the Beacon Theater Apartments – 445 Main Street project, as prepared by Aryeh Siegel, Architect and Hudson Land Design:

*Site Plan Application:*

- Sheet 1 of 8, entitled "Site Plan", with the latest revision date of January 26, 2016.
- Sheet 6 of 8, entitled "Landscape, Lighting Details, Marquee", with the latest revision date of January 26, 2016.
- Sheet 7 of 8, entitled "Stormwater Plan", with the latest revision date of January 26, 2016.

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

1. The applicant had originally proposed 7 parking stalls along the rear of the property, but safety concerns were raised with regards to the vehicles backing into Van Nydeck Avenue. In order to address this concern, the applicant has now proposed 4 parallel parking stalls to be located along the rear of the site, with one of the stalls being designated for compact cars. Currently the plans show the large stalls to be 20 foot in length, with the compact stall being 16 foot in length. The 3 larger parking stall should be revised so that they are a minimum of 23 foot in length, so as to allow for the proper maneuvering of vehicles in and out of the stalls. With the increase of the 3 stall lengths, insufficient room would be left to allow for a fourth parking stall, even for a compact vehicle.

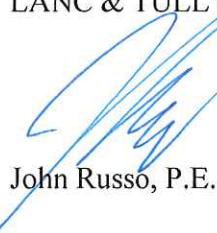
As the number of parking stalls has continued to decrease, the Planning Board may wish to recall that the applicant had previously stated that they would strip and sign Van Nydeck Avenue to create additional parking spaces. In the applicant's submitted report entitled "Beacon Theater Apartments 445 Main Street – Environmental Assessment Form", dated September 29, 2015, it was stated that the "*Applicant also proposes striping and signing Van Nydeck Avenue per the recommendation made in the report entitled "Beacon Center City Parking Analysis", dated November 2014, as prepared by the Dutchess County Department of Planning and Development.*" The applicant should submit a plan to the Planning Board showing the proposed striping and signing improvements proposed along Van Nydeck Avenue per the above referenced report.

2. As discussed by the Planning Board Attorney at the last planning board meeting, a license agreement is still required to be obtained from the City of Beacon for the proposed storm drainage that will connect onto the adjacent parcel owned by the City of Beacon.

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

Very truly,

LANC & TULLY, P.C.



John Russo, P.E.

Cc: Nick Ward-Willis, Esq.  
Tim Dexter, Building Inspector  
David Stolman, City Planner



## FREDERICK P. CLARK ASSOCIATES, INC.

PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK FAIRFIELD, CONNECTICUT

DAVID H. STOLMAN  
AICP, PP  
PRESIDENT

MICHAEL A. GALANTE  
EXECUTIVE  
VICE PRESIDENT

350 THEO. FREMD AVE.  
RYE, NEW YORK 10580  
914 967-6540  
FAX: 914 967-6615

CONNECTICUT  
203 255-3100

HUDSON VALLEY  
845 297-6056

LONG ISLAND  
516 364-4544

www.fpclark.com

email@fpclark.com

### MEMORANDUM

---

To: Jay Sheers, Chairman, and the City of Beacon Planning Board

Date: February 5, 2016

Subject: **445 Main Street – Subdivision, Site Plan and Certification of Appropriateness Application**

As requested, we have reviewed the following plans generally entitled, “Beacon Theater Apartments – 445 Main Street,” prepared by Aryeh Siegel, Architect:

1. Sheet 1 of 8, “Site Plan,” last revised January 26, 2015(sic);
2. Sheet 6 of 8, “Landscape, Lighting Details, Marquee,” last revised January 26, 2015(sic);
3. Sheet 7 of 8, “Stormwater Plan,” last revised January 26, 2015(sic);

We have also received and reviewed the Traffic Impact Study prepared by Maser Consulting, the application forms and the Environmental Assessment Form.

### Proposal

The Applicant is proposing 2,722 SF of commercial space on the ground floor in two separate units, 2,625 SF of multipurpose performance space on the second floor with a 825 SF lobby on the first floor and 32 residential apartments on the first through fifth floors. The Site consists of two separate parcels which the Applicant is proposing to combine. The property is located at 445 Main Street within the Central Business (CB) and the Business Off-Street Parking (PB) zoning districts.

### Analysis and Recommendations

1. In 1988, a use variance was granted for the property to allow 32 residential units. Therefore, the residential use is permitted. The project is a Type I action with regard to SEQR. The Planning Board declared itself as Lead Agency on December 8, 2015.

**FREDERICK P. CLARK ASSOCIATES, INC.**

PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK FAIRFIELD, CONNECTICUT

2. In accordance with Section 223-61.A(7) of the Zoning Law, a Recreation Fee for the proposed 32 units will be required.
  
3. The planting schedule on the landscaping plan notes that 25 arbor vitae shrubs are proposed for the site. However, the site plan notes 29 arbor vitae shrubs. The plans should be revised to note the correct number of arbor vitae proposed.

We look forward to discussing this memorandum with you.

David H. Stolman, AICP, PP  
President

Sarah L. Brown  
Senior Associate/Planning

cc: Lt. Timothy P. Dexter  
Arthur R. Tully, PE  
Jennifer L. Gray, Esq.  
Aryeh Siegel, Architect  
Jennifer L. Van Tuyl, Esq.

**City of Beacon Planning Board**  
**2/9/2016**

**Title:**

**Public Hearing - 158 Main Street**

**Subject:**

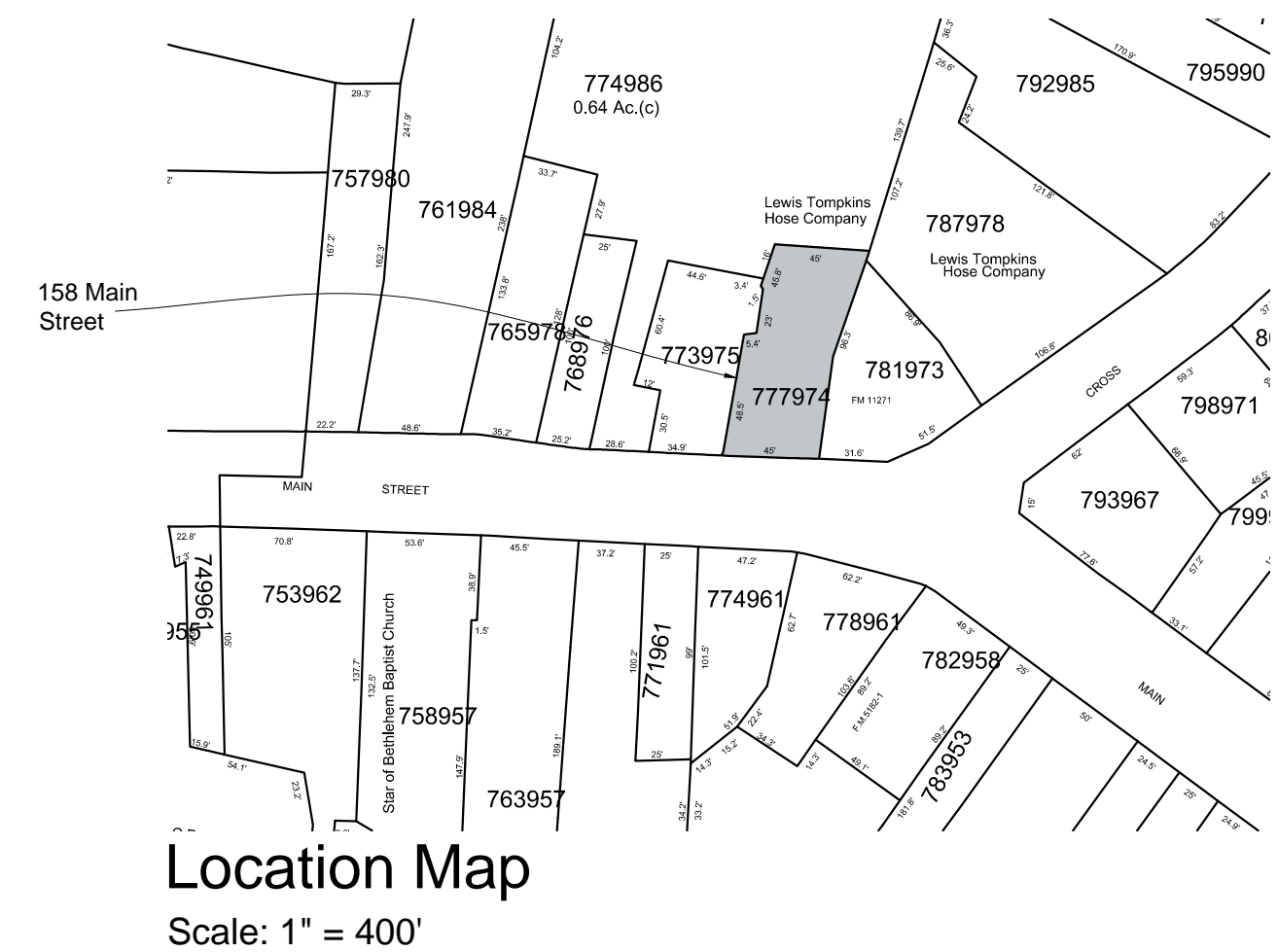
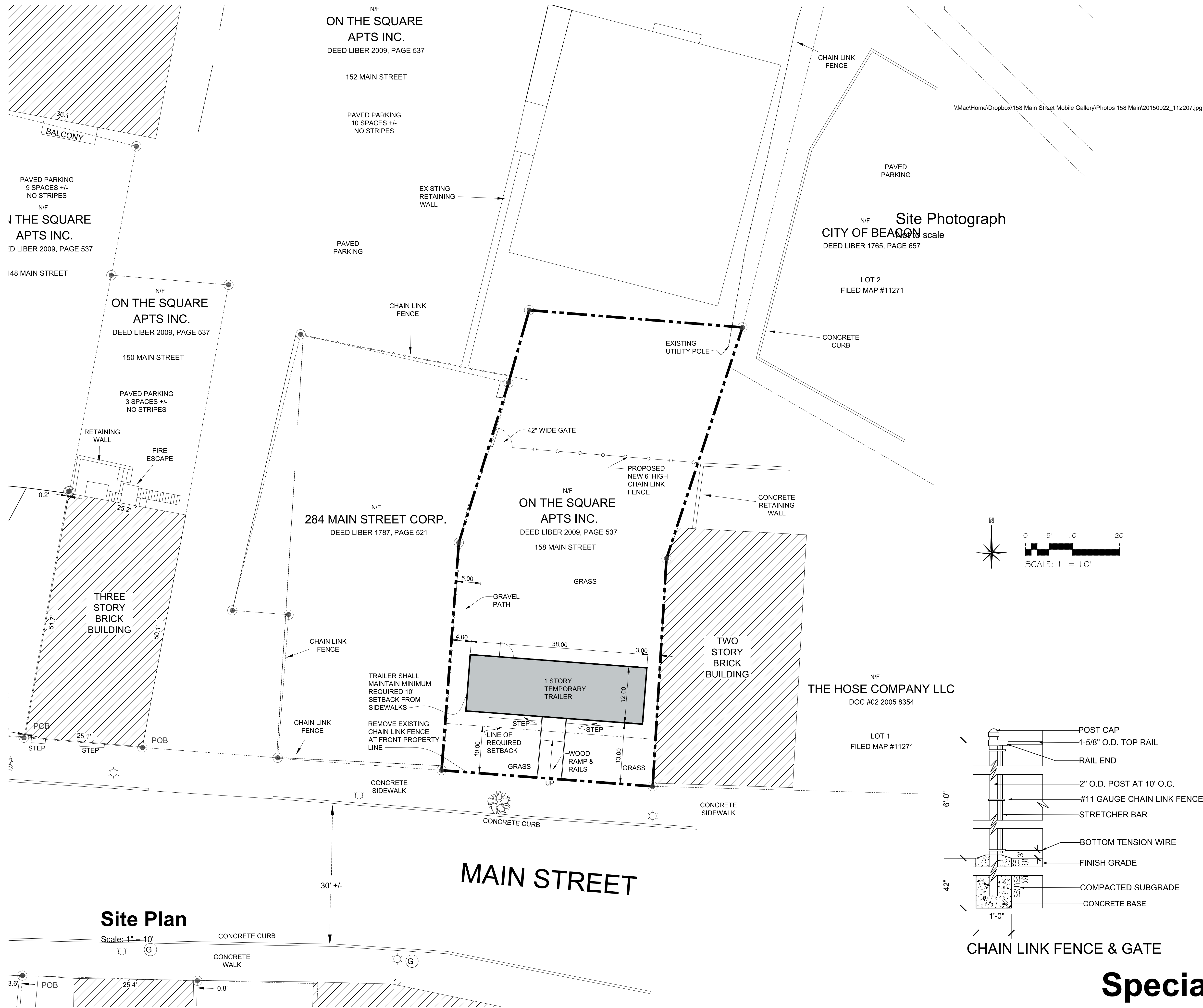
Continue public hearing on application for Site Plan approval, temporary retail art gallery, 158 Main Street, submitted by Carol Hearty

**Background:**

**ATTACHMENTS:**

Description	Type
Site Plan	Plans
Engineer Review Letter	Consultant Comment
Planner Review Letter	Consultant Comment





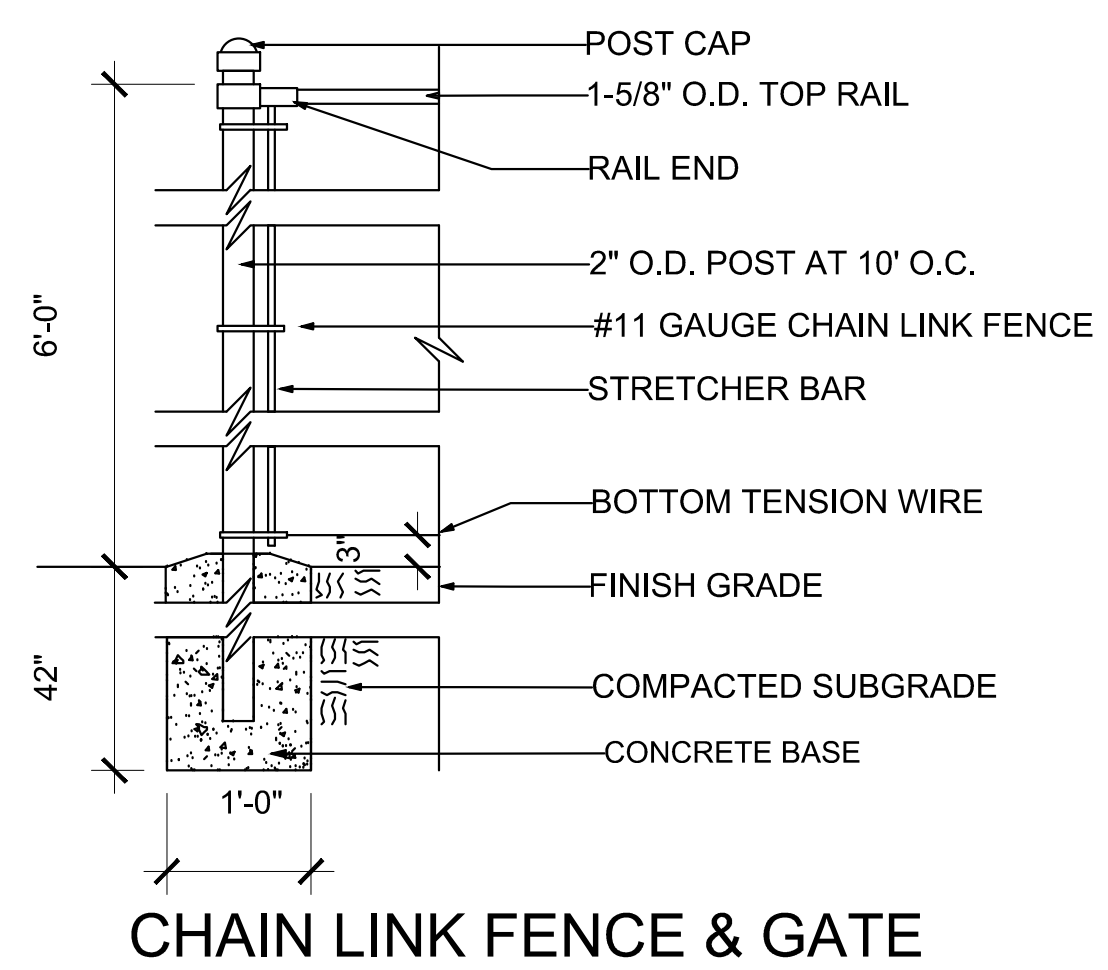
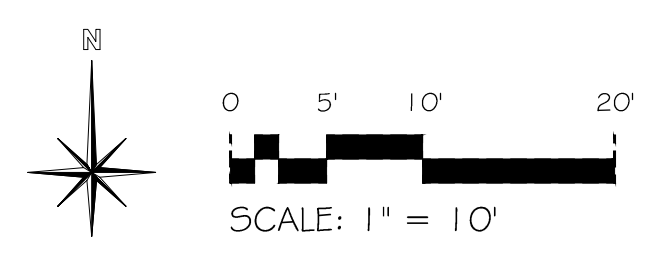
**Zoning Summary**

Zoning District: CB  
 Tax Map No.: 5954-27-777974  
 Lot Area: 0.10 acres  
 Historical Overlay District: Yes  
 Parking Overlay District: Yes  
 Existing Use: Vacant Lot  
 Proposed Use: Temporary Retail Art Gallery

**Parking & Loading**

Use & Parking Requirements	Area / Count	Proposed Parking Requirement
Retail Sales from Trailer 2 spaces for Trailer use on a lot	1 lot with retail art gallery use	2 spaces
<b>Total Required Parking Spaces</b>		<b>2 spaces</b>
<b>Total Proposed Parking Spaces</b>		<b>0 spaces</b>

- Notes:**
- The gallery trailer is located away from the property line to ensure that the customer queue does not block sidewalk traffic
  - Gallery shall be set back a minimum of 10' from public sidewalks and 15' from fire hydrants
  - The Planning Board waived the parking requirement at the December 2015 meeting. Therefore, no parking spaces are proposed.
  - No plumbing fixtures are proposed. Therefore, no waste, liquids, or any other items or materials shall be discharged on to the sidewalk, street, tree pits, sanitary sewer system, storm water inlets; and operator shall comply with all applicable laws and regulations.
  - The Applicant has an agreement in place with an adjacent retail space to use their toilet facilities.
  - At least two 32 gallon trash receptacles with secure lids shall be located inside the gallery, and all refuse shall be removed from the site on a daily basis. No exterior trash storage
  - Electric power is supplied by an existing service from the property owner's adjacent lot. The electrical contractor is currently awaiting Central Hudson approval of his plan to supply electricity to the trailer.
  - Lighting is mounted to the mobile gallery: (2) 80 watt wall mounted fixtures, directed downwards and away from public streets and adjacent properties
  - Noise levels measured at the property shall not violate the City's noise control regulations
  - No alcohol shall be served or consumed at the trailer site
  - Hours of operation: Tuesday through Sunday, inclusive: 11am to 6pm. Note that hours may extend to 9pm on Second Saturday and similar events. Hours may be adjusted seasonally: longer in the summer and shorter in the winter
  - Chain link fence gate near rear property line to remain locked except for owner required access
  - Mobile gallery mounted signage shall not exceed 20 square feet aggregate. Refer to elevation drawing for signage
  - There will be no display of banners, streamers or any other elements designed or intended to attract attention to the retail sales trailer site other than permitted signage.
  - The gallery is proposed to be in operation for the 2 year term allowed by the regulation for Retail Sales from a Truck or Trailer
  - When the gallery operation ceases, either at the end of the 2 year term, or prior to the end of the 2 year term, the trailer and all evidence of the operation will be removed from the site by the Applicant. The electric service connection will be terminated at the source. The chain link fence at the front property line will be re-installed.



**Index of Drawings**

Sheet 1 of 2	Site Plan
Sheet 2 of 2	Elevations

**REVISIONS:**

NO.	DATE	DESCRIPTION	BY
1	12/29/15	REVISED PER PLANNING BOARD COMMENTS	AJS
2	1/26/15	REVISED PER PLANNING BOARD COMMENTS	AJS

# Special Use Permit Application

## Sheet 1 of 2 - Site Plan

**158 Main Street - Pop Up Gallery**  
 Beacon, New York  
 Scale: 1" = 10'  
 November 24, 2015

**Owner:**  
**On The Square Apartments, Inc.**  
 8 Eliza Street  
 Beacon, New York 12508

**Applicant:**  
**Carol Hearty**  
 P.O. Box 186  
 Beacon, NY 12508

**Architect:**  
**Aryeh Siegel, Architect**  
 514 Main Street  
 Beacon, New York 12508

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	12/29/15	REVISED PER PLANNING BOARD COMMENTS	
2	1/26/15	REVISED PER PLANNING BOARD COMMENTS	AJS

THE GALLERY WILL BE MOUNTED ON CONCRETE FOOTINGS INSTEAD OF WHEELS

**COLORS:**  
**CORNICE:** BENJAMIN MOORE PHILIPSBURG BLUE HC-159  
**FASCIA BODY:** BENJAMIN MOORE BREWSTER GRAY HC-162  
**DOOR & TRIM:** BENJAMIN MOORE PHILIPSBURG BLUE HC-159  
**PANEL BODY:** BENJAMIN MOORE BOOTHBAY GRAY HC-165  
**PANEL TRIM:** BENJAMIN MOORE DUXBURY GRAY HC-163  
**COLUMNS:** BENJAMIN MOORE DUXBURY GRAY HC-163  
**SIDING:** BENJAMIN MOORE BREWSTER GRAY HC-162



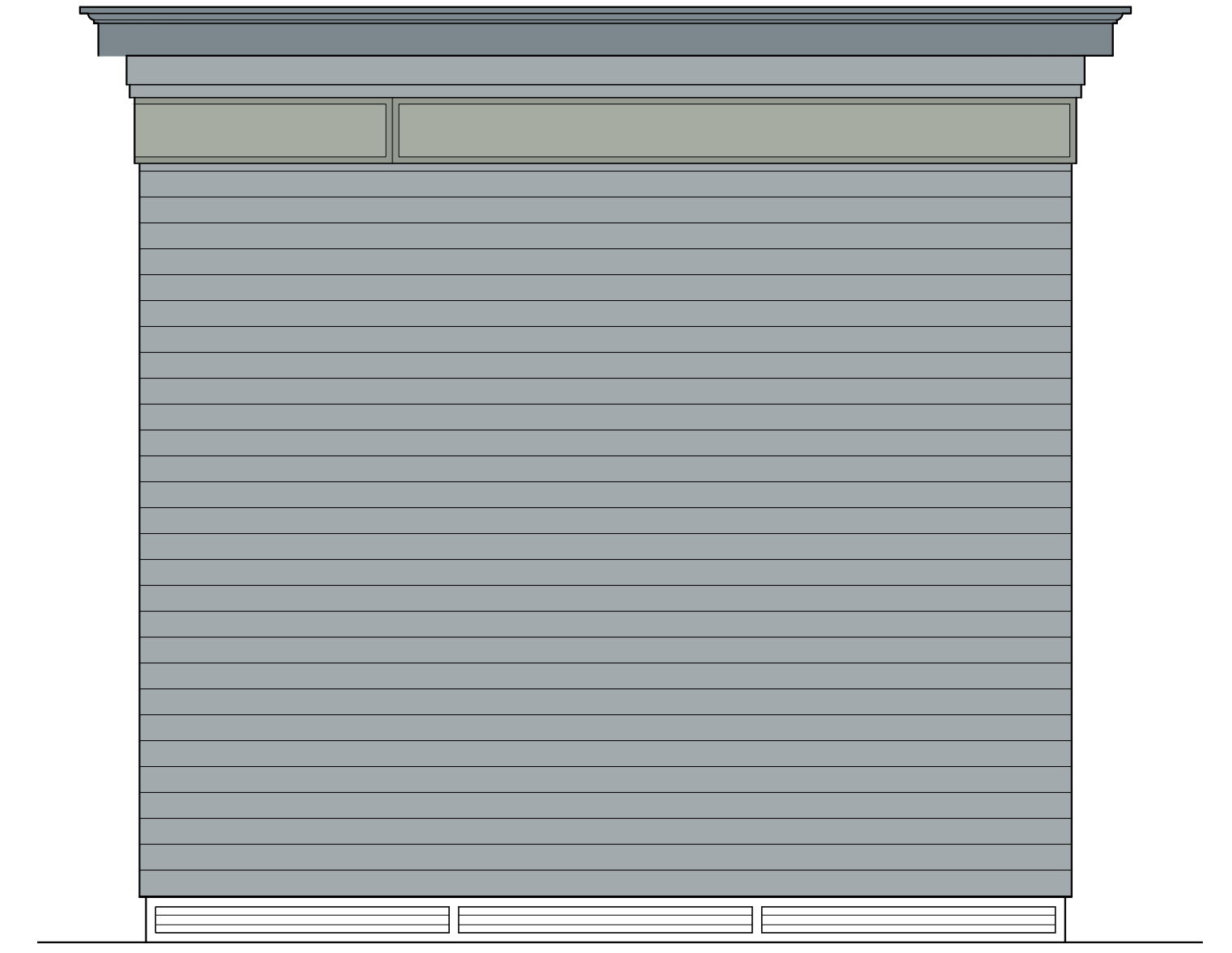
EXTERIOR SCONCE: KICHLER "SEASIDE 1 WALL LANTERN" MODEL #9022NI - BRUSHED NICKEL FINISH. DARK SKIES COMPLIANT. RATED FOR WET LOCATIONS. OR APPROVED EQUAL

NOTE THAT THE MANUFACTURER DOES NOT PROVIDE PHOTOMETRIC DATA FOR THIS FIXTURE.

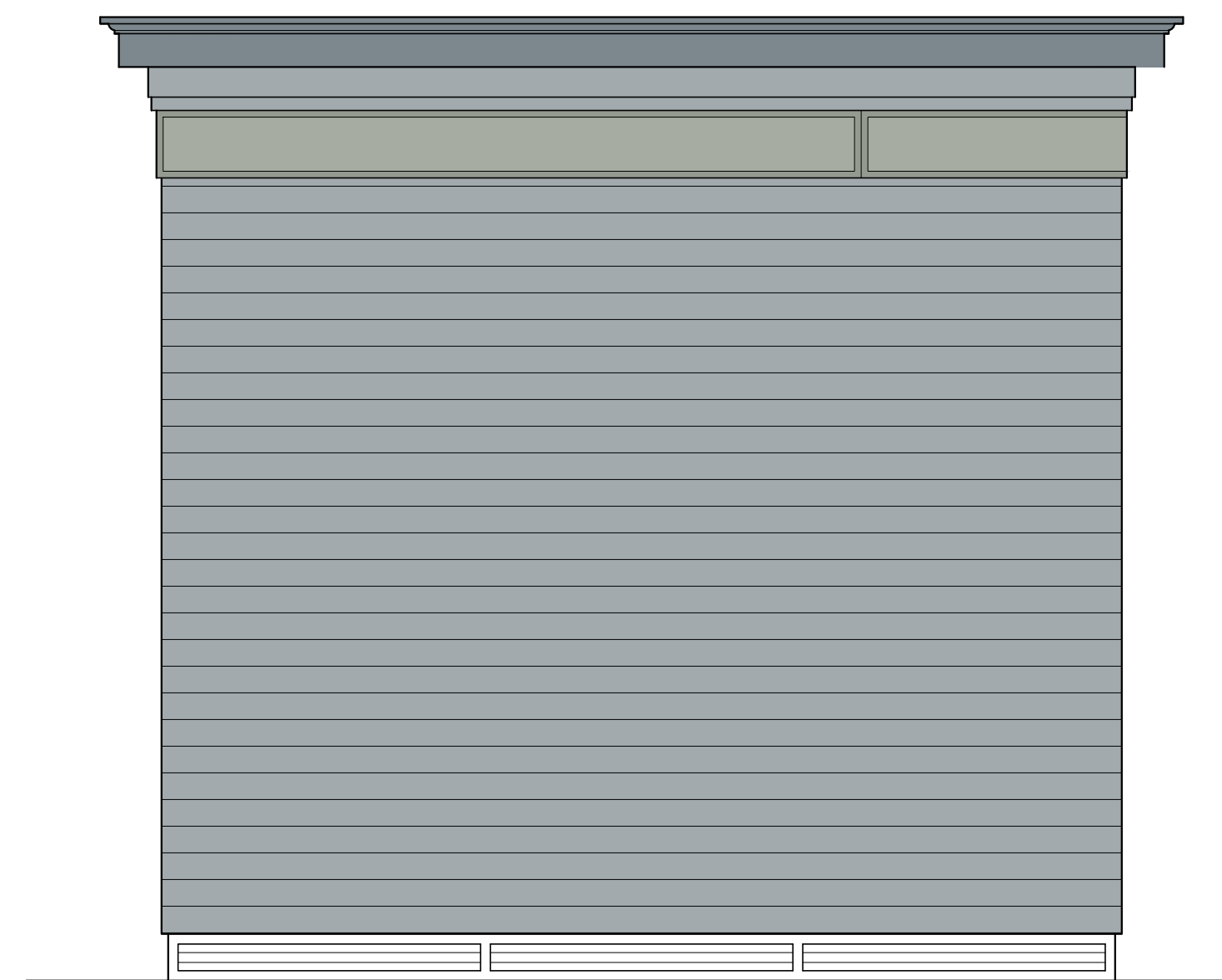


- WOOD RAIN SCREEN OVER WATERPROOF MEMBRANE ON 5/8" CDX PLYWOOD SHEATHING ON 2X4 FRAMING @ 16" O.C.
- TRANSOM (TYP)
- WALL MOUNTED LIGHT FIXTURE (TYP)
- 6' WIDE SLIDING WOOD DOOR WITH PAINTED WOOD TRIM (TYP)
- 5" HIGH WHITE LETTERS ADHERED TO GLASS. 1 1/2" HIGH SMALL WHITE TEXT BELOW - SIGNAGE AREA = 4 SQUARE FEET
- WOOD BASE OVER FOOTINGS (TYP)

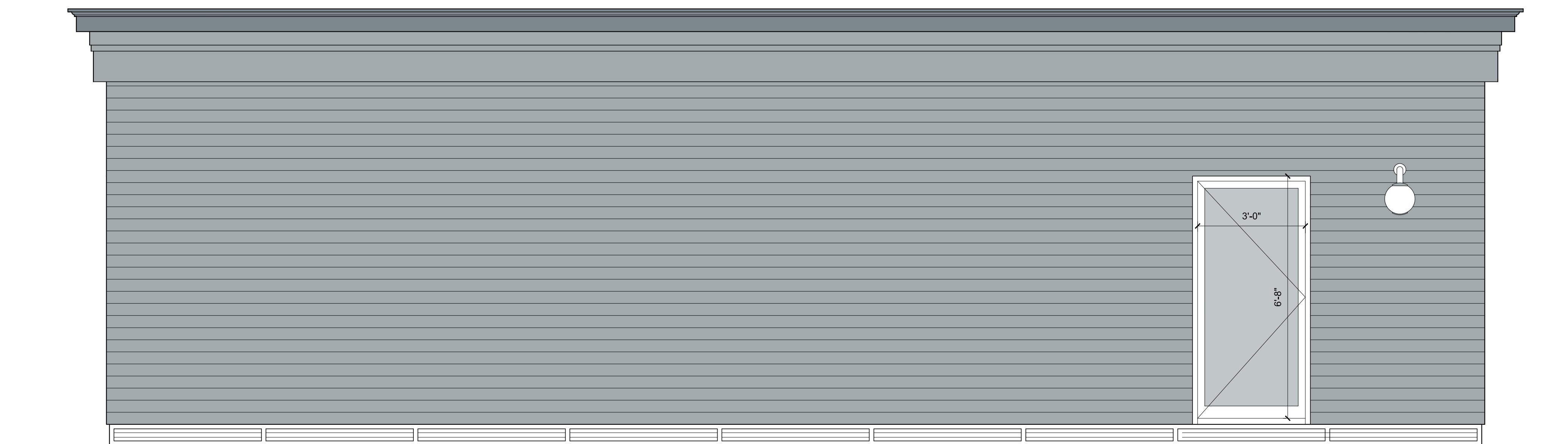
1 South Elevation  
1/2" = 1'-0"



4 East Elevation  
1/2" = 1'-0"



2 West Elevation  
1/2" = 1'-0"



3 North Elevation  
1/2" = 1'-0"

# Special Use Permit Application

Sheet 2 of 2 - Elevations

## 158 Main Street - Pop Up Gallery

Beacon, New York  
 November 24, 2015

Owner:  
**On The Square Apartments, Inc.**  
 8 Eliza Street  
 Beacon, New York 12508

Applicant:  
**Carol Hearty**  
 P.O. Box 186  
 Beacon, NY 12508

Architect:  
**Aryeh Siegel, Architect**  
 514 Main Street  
 Beacon, New York 12508

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

---

John J. Lanc, P.E., L.S., P.P.  
David E. Higgins, P.E.  
Rodney C. Knowlton, L.S.

Arthur R. Tully, P.E.  
John J. O'Rourke, P.E.  
John D. Russo, P.E.

February 2, 2016

Mr. Jay Sheers  
Beacon Planning Board Chair  
City of Beacon  
1 Municipal Plaza  
Beacon, NY 12508

RE: 158 Main Street – Pop Up Gallery  
City of Beacon  
Tax Map No. 5954-27-777974

Dear Mr. Sheers:

Our office has reviewed the following plans for the 158 Main Street – Pop Up Gallery, as prepared by Aryeh Siegel, Architect:

- Sheet 1 of 2, entitled “Site Plan”, with the latest revision date of January 26, 2016.
- Sheet 2 of 2, entitled “Elevations”, with the latest revision date of January 26, 2016.

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

General:

1. Sheet 1 has a call out for a gravel path behind the proposed structure, but a path is not shown on the plans. The plan should either be updated to show the proposed location of the path, or the call out removed from the plans. If a gravel path is to be installed, a construction detail should be provided on the plans.
2. Sheet 1 has a call out for a site photograph on the top of the sheet towards the right side. The plan should either be updated to show the site photograph, or the call out removed.
3. A note should be added to the plan to clarify where the mapping shown was acquired.

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

Very truly,

LANC & TULLY, P.C.



John Russo, P.E.

Cc: David Stolman, AICP, PP  
Nick Ward-Willis, Esq.  
Tim Dexter, Building Inspector



## **FREDERICK P. CLARK ASSOCIATES, INC.**

PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK                                      FAIRFIELD, CONNECTICUT

DAVID H. STOLMAN  
AICP, PP  
PRESIDENT

MICHAEL A. GALANTE  
EXECUTIVE  
VICE PRESIDENT

350 THEO. FREMD AVE.  
RYE, NEW YORK 10580  
914 967-6540  
FAX: 914 967-6615

CONNECTICUT  
203 255-3100

HUDSON VALLEY  
845 297-6056

LONG ISLAND  
516 364-4544

www.fpclark.com

email@fpclark.com

### **MEMORANDUM**

---

To:                              Jay Sheers, Chairman, and the City of Beacon Planning Board

Date:                              February 5, 2016

Subject:                      **Temporary Art Gallery – 158 Main Street – Site Plan Application**

As requested, we have reviewed the following plans generally entitled “158 Main Street – Pop Up Gallery” prepared by Aryeh Siegel, Architect, dated November 24, 2015, last revised January 26, 2015(sic):

1.                      Sheet 1 of 2, Site Plan;
2.                      Sheet 2 of 2, Elevations.

We have also received and reviewed the application forms and the Environmental Assessment Form (EAF).

#### **Analysis and Recommendations**

The plans have a notation for a site photograph. However, the photograph has not been provided on the plan.

We look forward to discussing this memorandum with you.

David H. Stolman, AICP, PP  
President

Sarah L. Brown  
Senior Associate/Planning

cc:                      Lt. Timothy P. Dexter  
                            Arthur R. Tully, PE  
                            Jennifer L. Gray, Esq.  
                            Aryeh Siegel, Architect

**City of Beacon Planning Board**  
**2/9/2016**

**Title:**

**The View - Beekman Street**

**Subject:**

Continue review of application for Special Use Permit and Site Plan Approval, new residential building, 50 units, "The View", Beekman Street (Parcel W), submitted by DMS Consolidators, Ltd.

**Background:**

**ATTACHMENTS:**

Description	Type
Response to City Planner	Cover Memo/Letter
Response to City Engineer	Cover Memo/Letter
Traffic Response	Backup Material
Blasting Plan	Backup Material
GeoSonics Proposal	Backup Material
SWPPP	Backup Material
Site Plan	Plans
Engineer Review Letter	Consultant Comment
Planner Review Letter	Consultant Comment

# M. A. Day Engineering, PC

---

3 Van Wyck Lane  
Suite 2  
Wappingers Falls, New York 12590  
Phone: 845-223-3202

January 22, 2016

Mr. Jay Sheers, Chairman  
Beacon Planning Board  
City of Beacon City Hall  
1 Municipal Plaza  
Beacon, New York 12508

Re: The View –Beekman Street  
City of Beacon  
Tax Map No. 5954-26-660924

Mr. Sheers:

I offer this letter as the response letter to the review letter written by the office of Frederick P. Clark Associates, dated January 8, 2016.

1. The Site is located in the Coastal Management Zone as defined by the City's Local Waterfront Revitalization Program (LWRP). The Planning Board will need to issue an LWRP Consistency Determination as part of the SEQRA determination for the Project.  
**Response: Comment noted.**
2. The proposed residential apartments are a use that is permitted by right in the Linkage District. The proposed building footprint is 22,890 square feet. Any project with over 10,000 square feet in building footprint area requires a Special Use Permit. As the Planning Board may recall, for projects requiring a Special Use Permit in the Linkage District, the Planning Board takes the place of the City Council and is responsible for granting Special Use Permits.  
**Response: Comment noted.**
3. The EAF Mapper Report notes that the Reformed Dutch Church which is contiguous with the project site is listed on the National Register of Historic Places. Therefore, the project is a Type I action with regard to SEQR. The Planning Board circulated its Notice of Intent to Declare Lead Agency on August 26, 2015. Since no objections were received, the Planning Board deemed itself Lead Agency on December 8, 2015.  
**Response: Comment noted**
4. The application will be required to provide below market rate housing in accordance with the Affordable-Workforce Housing provisions. A note has been added to the plan indicating that 5 units are proposed.  
**Response: Comment noted.**

5. In accordance with Section 223-61.A(7) of the Zoning Law, the Planning Board should determine whether a Recreation Fee for the proposed 50 units will be required. The Applicant has requested that the Board take into consideration the proposed amenities when considering the recreation fee for the project.  
**Response: Comment noted.**
  
6. Based on our review of the landscape plan, street trees should be provided along Beekman Street at intervals of 30 to 40 feet, as recommended by the requirements of the Linkage District. The Applicant has noted that planting street trees may conflict with the existing storm sewer system. We recommend that additional tree plantings be provided in another location of the project that will not conflict with the system.  
**Response: Six Additional trees have been proposed directly in front of the building alongside the sidewalk to the lobby entrance. The Lighting and Landscaping plan has been revised to reflect these additional trees.**
  
7. The Applicant has noted that a 3,500 square foot rooftop garden is proposed for the building. The garden and all details necessary for the garden should be included in the plan set.  
**Response: Additional details have been provided in the plan set on sheet CD.4 of both the green roof and flow through storm water planters.**
  
8. Based on the detail of the proposed stormwater planter, it appears that there will be standing water in the structure a good deal of the time. Based on the list of plantings for the planter, the plantings are not appropriate for a facility with standing water. We recommend that if the facility will in fact be constructed as shown, the plant list should be revised to contain plants that can sustain this type of hydrology.  
**Response: Comment noted. As discussed at the previous Planning Board meeting, the planting list is based directly on those recommended in the New York State Stormwater Management Design Manual, January 2015. The proposed planters are a flow through design and excess water will drain from the planter to the storm sewer through an underdrain pipe system.**
  
9. Based on our field investigations during our review of the Traffic Study, it was found that on-street parking along the southerly side of Beekman Street may potentially conflict with the provision of clear and unobstructed sight lines to and from the proposed location of the site access drive. At the request of Frederick P. Clark Associates, Inc., the Applicant's Traffic Consultant conducted a vehicle travel Speed Study on Beekman Street at the proposed location of the site access drive and opposite West Main Street.

The Applicant's Traffic Consultant determined both the required Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD) for both directions on Beekman Street. The SSD represents the minimum distance required along Beekman Street for drivers to safely come to stop and avoid conflict in the event another vehicle unexpectedly pulls out of the site driveway. The ISD represents the minimum



distance required along Beekman Street for a driver to safely egress the site (by making a left, right or through maneuver) without impacting the operations of other drivers. The required SSD should be maintained at all times for each approach on Beekman Street to the site and the required ISD should be maintained at all times for the vehicles exiting the site access drive.

The findings of the analysis indicate that to meet SSD requirements based on the measured (85th percentile) speeds of vehicles on Beekman Street, 5 on-street parking spaces must be removed to the immediate west of the proposed site access drive. It also appears that the on-street parking space immediately east of the proposed site access drive will also need to be removed to provide clear and unobstructed sight lines from westbound Beekman Street to the access drive.

The findings of the analysis indicate that in order to meet ISD requirements based on the measured (85th percentile) speeds of vehicles on Beekman Street, a total of 13 on-street parking spots should be removed to the immediate west of the proposed site access drive. Similar to the SSD requirements the ISD requirements indicate that one on-street parking space immediately east of the proposed site access drive will need to be removed to provide clear and unobstructed sight lines.

Based on our review of the Limited Traffic Study, it is our opinion that the Study methodology is generally consistent with industry standards and that the proposed development will not have an adverse impact on the Study Area. However, we recommend the removal of all on-street parking necessary to satisfy both SSD and ISD requirements.

**Response: Comment noted.**

Please feel free to contact me if you require any further information on this matter.

Very truly yours,

A handwritten signature in cursive script that reads "Brian Watts". The signature is written in dark ink and is positioned above the printed name.

Brian Watts

# M. A. Day Engineering, PC

---

3 Van Wyck Lane  
Suite 2  
Wappingers Falls, New York 12590  
Phone: 845-223-3202

January 22, 2016

Mr. Jay Sheers and Planning Board members  
City of Beacon Planning Board  
1 Municipal Plaza  
Beacon, New York 12508

Re: The View Site Plan  
City of Beacon  
Tap map 5945-26-660924

Mr. Sheers and Planning Board members:

In response to the comment letter made by Lanc & Tully Engineering and Surveying, P.C., dated January 7, 2016 for the above referenced project; I offer the following responses:

## General Comments:

1. Although the applicant states that a blasting plan will be prepared in accordance with Chapter 111 of the City Code, we would recommend that the blasting plan be submitted at this time so that any potential impacts can be addressed during the SEQRA process.  
**Response: Comment noted. A Blasting Company has been retained by the Applicant and is currently in the process of developing the requested plan. The time frame for this is 2-3 weeks and as such, will be provided in a future submission.**
2. We would recommend that the traffic study be updated to reflect the impacts of the truck traffic from the site during construction.  
**Response: Comment noted. Please refer to the letter written by Mr. Marc Petrero, PE of JMC Site Development Consultants, included with this submission, for a response to this comment.**
3. The 4 separate cross-section profile sheets should be made part of the plan set.  
**Response: The cross-section profile sheets have been added to the plan set as sheets 4, 5, 6 and 7 of 16.**
4. Construction details for the green roof and the location of the green roof should be provided on the site plans.

**Response: An additional sheet, CD.4, has been added to the plan set. This sheet further details the green roof. In addition, the location of the green roof has been added to the site plan and has been more fully developed to more accurately reflect the intent.**

Sheet 2 of 12 – Existing Conditions:

1. All easements, proposed and/or existing, should be labeled on the plan.  
**Response: The City of Beacon Drainage Easement has been labeled on the plan.**
2. The plan has a dashed line running along the front of the parcel, which appears designate the lands that were being acquired from the City of Beacon. If this acquisition has already occurred, this line should be removed. If the acquisition has not occurred as of yet, then this line should be labeled as to what it represents, and include the metes and bounds along the line.  
**Response: Comment noted. This line represented the referenced acquisition and has been deleted from the plan set as no longer applicable.**
3. A surveyor's certification should be provided on the plan.  
**Response: Comment noted. A certification block has been added and shall be certified by the surveyor prior to submission for final approval from the Planning Board.**

Sheet 3 of 12 – Site Plan:

1. The number of parking stalls along Beekman Street to be removed as noted on this sheet should be coordinated with the number of spaces as noted to be removed on Sheet 12. As previously requested, the applicant and/or project engineer should discuss the removal of these spaces with the MTA.  
**Response: Comment noted. A copy of the parking plan has been submitted, pursuant to the instructions from the Board on the last meeting, to the City Attorney's office so that they may pursue the necessary MTA agreements. As previously determined, the Applicant and this Office are not responsible to discuss any agreements between the City of Beacon and the MTA.**
2. The plan notes that existing MTA parking stalls on the westerly side of the site are to be eliminated. The note should be expanded to state why these spaces are being removed.  
**Response: Comment noted. The stalls referenced will be temporarily removed to allow the ingress and egress of construction traffic in the proposed construction entrance. The label has been revised.**
3. The plan shows a concrete sidewalk running along the easterly side of the site running to the rear of the parcel. What is the purpose of this walk, and where is it leading people to?  
**Response: Comment noted. The sidewalk is to be installed to the extent possible within the property boundary, at the request of the Planning Board, in the anticipation of future development behind the parcel.**
4. The type of stormwater facility located behind the building should be labeled on the plan.  
**Response: The proposed dry swale behind the building has been labeled on the Site Plan**

Sheet 4 of 12 – Utility & Grading Plan:

1. The existing abandoned sewer line in the manhole where the new sewer service will enter, shall also be sealed within the manhole. This should be noted on the plan.  
**Response: Comment noted. The existing sewer line was labeled “to be plugged” within the manhole on the previous submission. The note has been rephrased to state that it shall be “sealed” for clarity.**
2. The location of roof-leaders, and where they discharge to, should be shown on the plan.  
**Response: Comment noted. The AutoCAD layer, on which the roof-leaders were drawn, has been corrected such that it will plot on subsequent submissions.**
3. We previously commented that a swale should be provided uphill of the proposed retaining wall to prevent runoff from running over and eroding the wall. The construction detail provided on the plans shows only a stone backfill to the retaining wall. Due to the height of the wall and the length of existing hill above the wall, a swale is highly recommended for preventing any erosion issues or issues with excessive water is the stone backfill.  
**Response: A swale has been depicted on the detail of the retaining wall and the grading on the plan sheets has been revised. The swale will direct water around the wall and to the dry swale directly behind the building. The drainage path has been revised in the SWPPP to account for this.**
4. The plans appears to show retaining walls inside the stormwater planter on right side of the project. It is not clear how the planters will function with these walls. Elevations for the stormwater planters should be provided to clarify the heights of the walls. Details of construction for these retaining walls should also be provided on the site plans.  
**Response: A more detailed section of the planter on the right side of the project has been provided on sheet CD.4.**

Sheet 6 of 9 – Erosion Control:

1. The silt fence on the sheet should be darkened so that it is legible.  
**Response: The silt fence has been darkened so that it is more legible.**
2. The silt fence should extended along the westerly side of the site, and should also be provided along the easterly side of the site where grading is proposed.  
**Response: The silt fence has been extended along the west and east sides of the property.**

Sheet 1 of 12 – Construction Details:

1. Given the height of the retaining wall proposed, a note shall be added to the detail that the wall shall be designed and inspected by a licensed engineer in the State of New York. The design for this wall shall be submitted to the building department prior to construction of the wall.  
**Response: The requested note has been added to the retaining wall detail.**

2. The "Pavement Section" detail should be revised to note the type of item 4 (NYSDOT Item No.) to be used. The detail should also be revised to have all notes referring to Town Engineer changed to City Engineer. The detail should also note that all seams are to be sealed with a polymer modified sealant.

**Response: The "Pavement Section" detail has been revised to note NYSDOT Item No. 304.12 as the type of item 4 and references to the Town Engineer have been changed to City Engineer. The requested note has been incorporated into the detail stating the use of polymer modified sealant to seal all seams.**

3. The "Cast-In-Place Concrete Curb Detail" should be revised to reflect the use of NYSDOT Item No. 304.12, not 304.02.

**Response: The erroneous call out has been corrected to state Item No. 304.12.**

4. All details pertaining to concrete curbing and sidewalk, should note that all curbing and sidewalks within the road right-of-way shall be sealed to protect against de-icing agents.

**Response: Our previous submission labeled the need for sealing agents in the R.O.W. to be used within each detail. To help with clarification, this label has been removed and an additional note under each detail has been added.**

Sheet 8 of 12 – Construction Details:

1. The "Tapping Sleeve" detail should be revised to reflect the manufacturer and model of the tapping sleeve and valve to be used. A full-body sleeve, such as Mueller H-615, should be provided, along with a Mueller resilient wedge gate valve.

**Response: The "Tapping Sleeve" detail has been revised to reflect the recommended Mueller H-615 model and resilient wedge gate valve.**

SWPPP Comments:

1. The post-development watershed areas were revised to account for the actual area that will drain to the proposed dry swale, however, there is still a portion of watershed B shown that does not drain to the dry swale. This area is located at the west corner of the property, roughly following the outlet pipe from the dry swale. The watersheds should be revised to correctly show and model the area captured by the dry swale.

**Response: Comment noted. Area "E" has been added to the post development watershed. The SWPPP has been revised to reflect this new area and the analysis revised.**

2. There is still a reference to infiltration stormwater planters on page 17 of the SWPPP. Since the proposed stormwater planters are flow-through design, the infiltration references should be removed.

**Response: The erroneous reference has been deleted.**

3. The Maintenance/Inspection Schedule (Long-Term) information on sheet ESC.1 of the Site Plans should also be included in the SWPPP report. This schedule should also be revised to include

requirements and schedule for the stormwater practices should be provided in the SWPPP and on the plans.

**Response: The Maintenance/Inspection Schedule has been updated to include the Green Roof. This table has been copied to the SWPPP in newly created section 4.7.**

4. The SWPPP notes that the channel protection volume requirement is not necessary because the site directly discharges to the Hudson River. The report should confirm that the existing stormwater piping between the site and the Hudson River is continuous and no swales or channels exist in the flow path.

**Response: Comment noted. This office contacted the Highway Superintendent, Mr. Anthony "Zep" Thomaselli, and he verified the existing stormwater system serving the project site does directly discharge into the Hudson River with no discontinuous pipe. The SWPPP section has been revised to reflect this confirmation.**

5. Page 16 of the SWPPP has a reference to the old NYSDEC Stormwater Management Design Manual. This reference should be updated.

**Response: The reference has been revised to reflect the January 2015 Manual used in the design.**

Kindly review the provided material at your convenience.

Very truly yours,



Brian Watts, EIT



Site Planning  
Civil Engineering  
Landscape Architecture  
Land Surveying  
Transportation Engineering

Environmental Studies  
Entitlements  
Construction Services  
3D Visualization  
Laser Scanning

January 20, 2016

Chairman Jay Sheers  
City of Beacon Planning Board  
City Hall  
1 Municipal Plaza  
Beacon, NY 12508

RE JMC Project 15182  
The View  
Beekman Street  
City of Beacon, NY

**Construction Traffic**

Dear Sarah:

We have prepared this letter in response to Lang & Tully Engineering and Surveying, P.C.'s review letter dated 01/07/2016. Specifically, this letter is responding to Comment #3 mentioned under General Comments within their review letter. Their comment states "we recommend that the traffic study be updated to reflect the impact of truck traffic from the site during construction."

Trucks will be coming to the site during the construction period for various purposes, including to deliver materials and to remove material from the site. Truck movements would be spread throughout the day and would generally occur between the hours of 7:00 AM and 3:00 PM, depending on the period of construction. Excess material will be removed off-site to a location in Dutchess Manor using 20-yard capacity haul trucks. Truck traffic is estimated to generate approximately 780 total trips over approximately 17 days to haul excess material off-site. This equates to approximately 46 truck trips per day or approximately 6 truck trips per hour. Trucks will travel south approximately 2 miles along NY Route 9D to unload the excess material.

Construction vehicle traffic would vary throughout the course of the work. The majority of the construction equipment would remain on-site during construction, thus minimizing movement of equipment to and from the site.

Traffic associated with construction workers is typically generated primarily at approximately 7:00 AM when most contractors arrive to work and 3:00 PM when most contractors leave for the day. Construction workers generally arrive and leave the work site before the peak morning and afternoon hours of roadway traffic.

The truck trips per hour would be relatively low and would not have a significant impact on traffic operations on Route 9D. The traffic associated with the construction workers will

generally occur outside the peak hours of adjacent street traffic so there will be no significant impact to the operations on the roadway.

We trust this letter addresses the comment mentioned in the review letter from Lang & Tully Engineering and Surveying, P.C. We thank you for your consideration.

Sincerely,

JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC



Marc Petroro, PE  
Project Manager

cc: Mr. Mark Day (via email)

F:\2015\15182\ltSheers\_01-20-2016.docx



# AUSTIN POWDER



**NorthAmerican  
Quarry & Construction Services, LLC  
Catskill, NY**

Nick DeLuccia  
President  
Mid Hudson Construction Management  
210 New Hackensack Road  
Wappingers Falls, NY 12590

January 23, 2016

## **The View 26 Beekman Street Beacon, NY Blasting Plan**

- All blasts shall be loaded and covered as needed by use of blasting mats. These mats are designed to prevent any "fly rock" from occurring. All persons are trained and experienced in such work and are under the direct supervision of a NY State licensed and Qualified Blaster.
- All work will be performed between seven thirty AM and five PM Monday through Friday.
- The following signs will be posted at all entrances to the blast site.
  - *Blasting Zone Ahead*
  - *End Blasting Zone*
  - *Blasting Signals*
- All explosives shall be brought on site and returned to NAQC storage facilities by DOT and ATF approved vehicles and by licensed operators on a daily basis. No explosive materials shall be stored overnight on the project.
- The Blaster in charge shall have, at a minimum, 5 years experience in similar excavations and controlled blasting techniques.
- Prior to the detonation of all blasts, all persons, vehicles and equipment shall be removed from the blast site area and directed to a safe distance according to the Blaster in charge.
- All access to and near the blast area shall be restricted.

- An audible warning system shall be used consisting of: 3 tones, 3 minutes to blast, 1 tone, 1 minute to blast, and 2 tones to signal all clear.
- All blasts shall be designed to comply with all local, state, and federal regulations along with design specifications.
- Blast design shall utilize a 3 & 3.5 inch diameter bore hole and consist of 5'x 5' and 5'x 6' drill patterns, and charge weights of various quantities, dependent on depths of cuts, proximity to protected structures and rock fragmentation.
- Products to be used shall be AUSTIN POWDER explosives, consisting of: Emulex emulsion based explosives, Exgel 60% gelatin dynamite, Hydromite and Austinite blasting agents. Initiation shall be by Shock\*Star Dual Delay in hole and Quick Relay surface detonators.
- Blasts shall be designed to detonate in a specific firing order consisting of a minimum of 8 millisecond delay period between charges, achieving design specification vibration limits.
- NAQC shall use all means necessary in design of blasting operations to protect all adjacent existing structures and utilities. This includes but not limited to, projected vibration calculations such as the USBM scaled distance factor, and Dupont K factor formula predicting PPV. Varying site conditions and field judgment shall also be included in control of vibration and air overpressure, keeping within design specifications, local, state and federal regulations.
- All pre blasts inspections, post blast inspections and seismograph motioning will be completed by GeoSonics Inc.
- During blasting operations, four (4) seismograph shall be utilized to monitor and record ground vibrations. The Seismograph shall be calibrated and working properly. The Seismograph shall be placed at the closest structure to the blast. Seismic recordings shall be reviewed after each blast. Printed copies of the seismic recordings shall be provided to the Project Owner the next business day and kept on file for one year.
- A Pre-Blast Inspection survey shall be completed by an independent, qualified third party prior to starting blasting. The Pre-Blast Inspection shall photographically document any pre-existing structural distress for all buildings and facilities within three hundred feet (300') of any blasting work. The inspection shall document both exterior and interior building conditions prior to blasting. Written copies of the Pre-Blast Inspection report shall be provided to owner of the project.
- Post blasting inspections will be completed at the end of the project if needed.

Questions on this blast plan please call our office at 518-943-3623

Pete Leser  
 President  
 NAQC

January 25, 2016

Trackside Business Park  
325 B-2 Sandbank Road  
Cheshire, CT 06410

Mr. Pete Leser  
North American Quarry & Construction  
149 Fyke Road  
Catskill, NY 12414

**Phone:** 203.271.2504  
**Fax:** 203.250.9866

**RE: Proposal for Pre-Blast Inspection Surveys / Vibration Monitoring  
Vicinity of Construction Project in Beacon, New York**

Dear Mr. Leser:

GeoSonics Inc. is pleased to present this proposal to North American Quarry & Construction for pre-blast inspection surveys and vibration monitoring for the project near Route 9D in Beacon, New York. It is our understanding that the project includes:

- Complete pre-blast inspections of abutting structures including residential and commercial properties (7) near the area;
- Provide summary of inspections conducted to North American Quarry & Construction;
- Complete vibration monitoring with up to four seismographs during blasting operations;
- Complete vibration monitoring on-site during blasting operations;
- Communicate with the on-site blaster of the vibration readings; and
- Provide vibration summary reporting.

**Company Background and Experience**

With over 75 years of experience, GeoSonics Inc. represents one of the largest and most diversified forces in the blast consulting, construction vibration monitoring, and seismograph manufacturing industries. Our 12 field offices and worldwide network can respond quickly and effectively to your vibration, air blast, and noise problems.

GeoSonics Inc. is considered the world leader in independent / third-party vibration monitoring and pre-blast inspections for the industry. We provide the highest level of objectivity and quality at all times.

GeoSonics staff work under the direction of a Professional Engineer for inspections and monitoring.

### **Pre-Blast Inspection Surveys**

GeoSonics Inc. has performed similar pre-blast on surveys on other construction projects. The addresses of the structures to be inspected will be provided/approved by North American Quarry & Construction. A Google Earth plan was provided by North American Quarry identifying the seven (7) structures to be inspected.

Permission will be obtained through mailed letters, telephone calls, and hand delivered letters. Certified mailing to the property owners will be done, only if required and North American Quarry & Construction approves. Three (3) attempts will be made to contact each property owner regarding the offer of the inspection.

After obtaining permission, the inspection will be scheduled during regular business hours. The inspection will include:

- Written communication to the property owners requesting permission for access to the structures to be inspected;
- Verbal communication with the property owners for scheduling purposes;
- Completion of the inspections by trained inspectors utilizing photographic and/or video documentation, under the direction of the Connecticut Professional Engineer; and
- Preparation of a pre-construction inspection summary.

The inspections will document the current condition of each of the structures. The surveys will include a description of the conditions of accessible and non-obscured portions of the exterior of each structure. Documentation may include descriptions of current damage including cracks, peeling paint/paper, missing materials (ie brick, mortar, concrete, etc.), separations, holes, protruding nails, condition of windows, mortar, stairs, evidence of foundation or footing settling, cracks or stresses, evidence of water damage, deformation in secondary structures, and immediate areas surround each structure. Based on the distance of the structure to the blast site, exterior inspections only may be appropriate.

Select defects may be photographed to document the condition, if necessary. Although the Wappinger regulations require video inspections, costs savings can be realized by using digital photographs instead.

The pre-construction inspection surveys will include examination, if access is granted by the owner to:

- Select exterior of each building;
- Exterior improvements including but not limited to fences, landscaping, outbuildings, driveways, walks, retaining walls;
- Interior on select buildings, if access is granted;
- Basement of select buildings, only if warranted;
- Roadways immediately surrounding the building; and
- Landscaping immediately surrounding the building.

### **Background – Vibration Threshold**

Ground vibration induced by construction activities may have two types of effects on the integrity of the existing adjacent structures. First it may vibrate a structure, and due to excessive vibration, damage the structural elements. Second, excessive vibration may cause soil softening due to the increasing of pore water pressure and shear strain. This results in a lowering of the soil stiffness supporting the foundation and may cause settlement. Settlement can occur at most any vibration level.

### **Vibration Monitoring During Blasting Activities**

Prior to blasting activities, GeoSonics will mobilize to the site to properly setup the seismographs for monitoring purposes. Depending upon the site-specific conditions, proximity to structures, and the need to protect select structures, the seismograph(s) will be setup for the monitoring. A minimum of two (2) seismographs will be used for each shot.

GeoSonics will properly set up seismographs in the specified locations, as long as proper geophone coupling can be achieved. All seismographs are setup under the direction of a Professional Engineer. GeoSonics will set up each seismograph unit at a location between the structures of concern and the construction activity. Each SSU will be on-site to monitor and record vibration information and construction activities. Each seismograph will be set up for trigger mode to document and record the vibrations during the shots.

A Safeguard Seismic Unit (SSU) portable velocity-recording instrument is a microprocessor-controlled ground vibration and air overpressure recorder. The 3000 series is a self-contained, rechargeable, and automatically triggered instrument. The geophone has three-independent/mutually perpendicular channels to monitor and record the vibrations produced from blasting activities. The trigger can either be for ground motion and/or air concussion. It is a digital seismograph with a sampling rate of, approximately 1,000 samples per second, to permit accurate measurements of the entire frequency spectrum of ground motions that are typically encountered during construction activities, mining, and quarries.

The SSU is also designed to record air over pressure during blasting/construction type activities. Air pressure changes are caused by the vibration of air molecules. These vibrations are sensed by humans through their auditory (hearing) system and are commonly known as sound. The effect of any sound on human response is related to both the intensity and frequency of the air vibrations that an individual perceives. The decibel (dB) is the unit of measure most often used to describe the intensity of the airborne sound.

The monitoring program would be evaluated using the project specified limits of peak particle velocity and associated frequency. Daily monitoring will be warranted to ensure accurate vibration readings in the vicinity of the sensitive structures.

The vibration monitoring would be performed utilizing a seismograph that records ground motion/vibrations and air overpressure data. The seismograph recommended for this type of project is the GeoSonics Inc. 3000 series portable standard seismograph. The seismograph will be set up for continuous/histogram mode to monitor all construction activities producing vibrations at a given interval and trigger level during blasting activities.

The location of the geophone may be subsurface, if warranted. Some considerations for location the geophone will include existing structures, lithology, structures of concern, and access. The placement of the seismographs must remain flexible depending upon the buried structures, proximity to structures, and actual demolition location.

### **Assumptions / Limitations**

GeoSonics has made the following assumptions regarding this proposal:

- GeoSonics is not bidding on the deformation monitoring points;
- GeoSonics day rate (8 hours) includes travel time, mileage for round trip, coordination, on-site time, and scheduling;
- Inspections will be performed during consecutive days;
- Time and materials rate schedule applies for work cancelled en route;
- Damage claim investigations are time & materials;
- Videos are duplicated from 45 to 60 minute tapes;
- GeoSonics is not confined space entry trained;
- Costs for site walkovers are not included; and
- Changes in scope will be provided to GeoSonics.

GeoSonics Inc. will not be responsible for any claims of damage not physically caused by GeoSonics Inc.

### Cost Estimates

Based on the specifications and our assumptions, the following are the costs for the tasks described:

- *Pre-Blast Inspections* – including offering inspections, coordination, lodging, mileage, per diem, field notes, mailings, photographic documentation, round trip mileage, and inspections:

Unit Cost Rate	-\$650.00 per day per inspector
Unit Cost Rate	-\$18.00 per certified letter or UPS delivery
Unit Cost Rate	-\$15.00 per CD of digital photographs
Unit Cost Rate	-\$34.00 per DVD of videos
Unit Cost Rate	-\$165.00 for report with field notes and photographic documentation

The inspections identified will take five days to complete at a cost of \$3,250.00 (w/o report).

- *On-Site Vibration Monitoring, if required* – including mobilization, on-site, lodging, per diem, reporting, and minimum of four (4) seismographs:

Unit Cost Day Rate	-\$725.00 per day
--------------------	-------------------

GeoSonics requests 24-hour notice of cancellation of fieldwork, if at all possible for scheduling purposes. Time and materials rates apply if work is canceled en route.

Thank you for the opportunity to provide a proposal for the pre-blast inspections for the project in Beacon, New York. We hope to be working with you soon. If you have any questions regarding this proposal, please contact me at 203.271.2504.

Sincerely,

Susan I. Shepley  
Area Manager

**GeoSonics Inc.**  
Trackside Business Park  
325 B-2 Sandbank Road  
Cheshire, CT 06410

Proposal Accepted/Authorized:

---

Signature, Title, and Date

---

Printed Name

---

Company Name/Mailing Address



# Storm Water Pollution Prevention Plan for The View Site Plan

**Location:**

Beekman Street  
City of Beacon  
County of Dutchess

**Date:** November 24, 2015  
December 29, 2015  
January 20, 2016



3 Van Wyck Lane  
Suite 2  
Wappingers Falls, New York 12590  
Phone: 845-223-3202



# Table of Contents

<b>CERTIFICATION STATEMENTS .....</b>	<b>IV</b>
OWNER’S/OPERATOR’S CERTIFICATION .....	V
CONTRACTOR’S CERTIFICATION.....	VI
SUBCONTRACTOR’S CERTIFICATION.....	VII
QUALIFIED PROFESSIONAL’S CREDENTIALS AND CERTIFICATION .....	VIII
<b>1 INTRODUCTION .....</b>	<b>9</b>
1.1 PROJECT BACKGROUND .....	9
1.2 PROPOSED PROJECT .....	9
<b>2 EXISTING SITE FEATURES .....</b>	<b>10</b>
2.1 SITE SOILS .....	10
<b>3 PRE VS POST HYDROLOGY .....</b>	<b>13</b>
3.1 METHODOLOGY .....	13
3.2 PRE DEVELOPMENT DRAINAGE.....	13
3.3 POST DEVELOPMENT DRAINAGE.....	14
3.4 PRE VS POST RUNOFF ANALYSIS.....	14
3.5 CONCLUSIONS:.....	15
<b>4 STORMWATER SITE PLANNING AND PRACTICE SELECTION... 15</b>	
4.1 SITE PLANNING .....	15
4.1.1 Preservation of Natural Resources.....	15
4.1.2 Reduction of Impervious Cover .....	16
4.2 DETERMINE WATER QUALITY TREATMENT VOLUMES (WQ <sub>v</sub> ).....	16
4.3 RUNOFF REDUCTION BY APPLYING GREEN INFRASTRUCTURE AND STANDARD SMPs WITH RR <sub>v</sub> CAPACITY 17	
4.3.1 Green Infrastructure Runoff Reduction Techniques.....	17
4.3.2 Standard SMP’s with RR <sub>v</sub> Capacity .....	18
4.4 DETERMINE THE MINIMUM RR <sub>v</sub> REQUIRED .....	19
4.5 APPLY STANDARD STORMWATER MANAGEMENT PRACTICES TO ADDRESS REMAINING WATER QUALITY VOLUMES .....	20
4.6 APPLY VOLUME AND PEAK RATE CONTROL PRACTICES IF STILL NEEDED TO MEET REQUIREMENTS. ....	20
4.7 STORMWATER MANAGEMENT MAINTENANCE SCHEDULE .....	20
<b>5 PERMANENT WATER QUALITY AND QUANTITY CONTROLS.... 22</b>	
<b>6 TEMPORARY EROSION &amp; SEDIMENT CONTROL MEASURES ..... 2</b>	
6.1 SILT FENCE: .....	3
6.2 FILTER FABRIC DROP INLET PROTECTION:.....	7
6.3 CONSTRUCTION ENTRANCE: .....	10
6.4 DUST CONTROL: .....	14
<b>7 PERMANENT EROSION &amp; SEDIMENT CONTROL MEASURES .... 16</b>	
7.1 LANDGRADING:.....	16
<b>8 CONSTRUCTION SCHEDULE .....</b>	<b>21</b>



8.1	PRE-CONSTRUCTION SCHEDULE (DUPLICATE ON SWPPP PLAN SHEET) .....	21
8.2	CONSTRUCTION SCHEDULE (DUPLICATE ON SWPPP PLAN SHEET).....	21
8.3	CONSTRUCTION WASTE MANAGEMENT PLAN .....	22
<b>9</b>	<b>CONCLUSIONS .....</b>	<b>24</b>

**LIST OF FIGURES**

Figure A - Location Map .....	10
Figure B - Soils Map.....	12
Figure E –Silt Fence Detail.....	6
Figure F –Stone & Block Drop Inlet Protection .....	9
Figure G – Landgrading Detail.....	19
Figure H – Landgrading Construction Specifications Detail.....	20

**LIST OF TABLES**

Table 1: Pre Development Drainage Area Input Summary:.....	14
Table 2: Post Development Drainage Area Input Summary: .....	14
Table 3: Hydrograph Summary .....	15
Table 6: Silt Fence Requirements .....	4
Table 7: Criteria for Geotextile Material in Construction Entrance .....	11

**APPENDIX**

Pre-Development Cn, Tc Calculations .....	A
Pre-Development Hydrographs & Summary.....	A
Post-Development Cn, Tc Calculations.....	B
Post-Development Hydrographs & Summary .....	B
SPDES General Permit .....	C
Notice of Intent (NOI) .....	D
MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form .....	E
Notice of Termination (NOT).....	F
Pre & Post Hydrology.....	G
Erosion & Sediment Control.....	H
Plan & Details.....	H
Construction Inspection Log Book .....	I





## Certification Statements







### Owner's/Operator's Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluated the information submitted. Based on my inquiry of the persons or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. Further, I hereby certify that the SWPPP meets all Federal, State, and local erosion and sediment control requirements. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law."

Name (please print) \_\_\_\_\_

Title \_\_\_\_\_ Date \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

Signature \_\_\_\_\_





### Contractor’s Certification

“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 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 State of New York and could subject me to criminal, civil and/or administrative proceedings.”

**Contracting Firm Name** (please print) \_\_\_\_\_

**Address** \_\_\_\_\_

**Phone** \_\_\_\_\_ **Fax** \_\_\_\_\_

**Name** (please print) \_\_\_\_\_

**Title** \_\_\_\_\_ **Date** \_\_\_\_\_

**Signature** \_\_\_\_\_

**SWPPP Responsibilities** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Trained Individual Name** (please print) \_\_\_\_\_

**Title** \_\_\_\_\_ **Date** \_\_\_\_\_

**Signature** \_\_\_\_\_

**SWPPP Responsibilities** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Note: All contractors involved with Stormwater related activities shall sign a contractor’s certification form.





### Subcontractor's Certification

"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 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 State of New York and could subject me to criminal, civil and/or administrative proceedings."

**Subcontracting Firm Name** (please print) \_\_\_\_\_

**Address** \_\_\_\_\_

**Phone** \_\_\_\_\_ **Fax** \_\_\_\_\_

**Name** (please print) \_\_\_\_\_

**Title** \_\_\_\_\_ **Date** \_\_\_\_\_

**Signature** \_\_\_\_\_

**SWPPP Responsibilities** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Trained Individual Name** (please print) \_\_\_\_\_

**Title** \_\_\_\_\_ **Date** \_\_\_\_\_

**Signature** \_\_\_\_\_

**SWPPP Responsibilities** \_\_\_\_\_

\_\_\_\_\_

Note: All contractors involved with Stormwater related activities shall sign a contractor's certification form.





## Qualified Professional's Credentials and 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 following Pre-Construction Site Assessment Checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction."

**Name** (please print) \_\_\_\_\_

**Title** \_\_\_\_\_ **Date** \_\_\_\_\_

**Address** \_\_\_\_\_

**Phone** \_\_\_\_\_ **Email** \_\_\_\_\_

**Signature** \_\_\_\_\_

"Qualified Professional" means a person knowledgeable in the principles and practices of erosion and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, licensed engineer or someone working under the direction and supervision of a licensed engineer (person must have experience in the principles and practices of erosion and sediment control).





## 1 Introduction

This Stormwater Pollution Prevention Plan (SWPPP) for the site to be known as “The View Site Plan” has been developed in accordance with New York State Department of Environmental Conservation (NYSDEC) technical standards as presented in the New York Standards and Specifications for Sediment and Erosion Control Manual (August 2005), and the New York State Stormwater Management Design Manual (August 2015). This report has also been designed to meet the criteria requirements of the New York State Pollutant Discharge Elimination System (SPDES) General Permit GP-0-15-002.

### 1.1 Project Background

The proposed project site is a 2.3 acre parcel of land located along Beekman Street, at the intersection of Beekman and West Main Street. The site is currently vacant and is comprised of a grass and woodland ground cover. The site once consisted of several single family houses as well as portions of West Main Street. In the mid 1970’s, the homes were demolished and West Main Street was realigned.

A location map has been provided in figure A below, which shows an aerial view of the site and the surrounding area.

### 1.2 Proposed Project

The applicant wishes to construct a 4 story, 50 unit apartment building. Other improvements to the site will include associated amenities such as parking, sidewalks, curbing, landscaping etc.

A dry swale and related storm sewer system shall be constructed to direct runoff from the site to an existing catch basin on the Northwest corner of the property and to the existing stormwater system that runs beneath Beekman Street. In addition, flow through planters are to be provided along the front perimeter of the building to accept roof run off. The roof itself shall include a small scale extensive green roof.

The storm water management practices that are being proposed are to satisfy both the requirements for water quality and quantity. Please refer to section 5.0, “Permanent Water Quality and Quantity Controls,” of this report for further information.

According to the NY SPDES General Permit, a SWPPP must be implemented for any project greater than one (1) acre of disturbance. The total disturbance for this project shall be approximately 1.30 acres, therefore a complete SWPPP shall be provided. Disturbance to the site during construction will be minimized to every extent possible. Temporary erosion and sediment control measures have been provided and locations have been shown on the plan to indicate the limits of

disturbance and to delineate the areas deemed necessary for re-grading and clearing during construction. This report has been designed to offer both temporary and permanent mitigation practices during and after the construction phase in an effort to reduce the sediment laden runoff created by the disturbed areas.

Figure A - Location Map



## 2 Existing Site Features

The site in the present condition features mostly woodland ground cover. A location map has been provided in figure A, which shows an aerial view of the site and the surrounding area.

### 2.1 Site Soils

The official soil types indicated by the USDA Soil Conservation Service for the Site are “Pittstown Silt Loam”, “Dutchess-Cardigan complex” and “Bernardston Silt Loam”. Refer to the following site soil descriptions and soils map in Figure B for the soil conditions presently found on the site.

NwC- Nassau Cardigan complex, rolling, very rocky (55.5%)

Hydrologic Soil Classification = *D*

Description: (5 to 16 percent slopes) – This complex is about 40 percent Nassau soils, 40 percent Cardigan soils, and 20 percent other soils and rock outcrop. Folded shale rock outcrop covers 2 to 10 percent of the surface.

Nassau Soils – Shallow (10 to 20 inches), somewhat excessively drained loamy soils formed in to till underlain by folded shale bedrock. Permeability is moderate.

Cardigan Soils – Moderately deep (20 to 40 inches), well drained loamy soils formed in till underlain by folded shale bedrock. Permeability is moderate.

Ud – Undorthents, smoothed (35.4%)

Hydrologic Soil Classification = *A*

Description: (0 to 8 percent slopes) – Very deep, somewhat excessively drained to moderately well drained soils that have been altered by cutting and filling.

DwB – Dutchess –Cardigan Complex undulating, rocky (9.6%)

Hydrologic Soil Classification = *B*

Description: (1 to 6 percent slopes) – This complex is about 40 percent Dutchess Soils, 30 percent Cardigan Soils and 30 percent other soils and rock outcrop. Folded shale rock outcrop cover 0.1 to 2 percent of the surface

Dutchess Soils - very deep, well drained loamy soils formed in till. Permeability is moderate.

Cardigan Soils – Moderately deep (20 to 40 inches), well drained loamy soils formed in till underlain by folded shale bedrock. Permeability is moderate.

Figure B - Soils Map



## 3 Pre vs Post Hydrology

### 3.1 Methodology

The sites overall drainage was considered as one single area in the pre development condition. The areas upgrade of the site was also considered in the water shed that was to be analyzed. The drainage path chosen along with the site conditions were modeled using HydroCAD® Stormwater Modeling System using a type-III storm distribution. Rainfall amounts used in the model were obtained directly from the most recent data at <http://precip.eas.cornell.edu> for Dutchess County. The resulting runoffs from the 1-yr, 2-yr, 10-yr, 25-yr and 100-yr storm events were compared to the post development hydrology.

In modeling the post development condition, the watershed was broken into 5 separate areas. All areas were modeled in the same manner as the pre development; by using utilizing HydroCAD® software and the same rainfall parameters. All drainage areas have a path that ends at DP#1, the catch basin near the Northwest corner of the property. The pre and post drainage conditions were analyzed and compared at this point to determine drainage impacts.

The portion of the site that was not affected by the proposed development or has no storm water mitigation proposed was considered as Area A. The upper areas of the property and the portion of the roof that drain to the dry swale were included in Area B. Both areas have a significant drainage path that ends at DP#1. Area C includes the portion of the roof and sidewalks that will drain to the proposed planters. The remaining part of the parcel, mainly pervious grass between the proposed planters and the existing sidewalk, was modeled as Areas D and E. Areas C, D and E have a short flow path that discharge to DP#1 via existing catch basins along Beekman Street. Due to this they were not modeled with a flow path to determine  $T_c$  for these areas; the minimum value of 6.0 minutes was used as required by the methodology as an alternative.

Please refer to Drainage Sheets “Pre Development Hydrology” and “Post Development Hydrology” included in the back of this report, for graphical representations of the drainage flow paths and areas.

### 3.2 Pre Development Drainage

The site in the pre-development condition consists of wooded, and grassland ground cover. Due to the natural topography of the land, the site drains toward Beekman Street. Runoff from the site is directed to an existing storm sewer system that is located on the South side of Beekman Street. Refer to Appendix “A” for a detailed calculation of the Area, CN and  $T_c$  values. A summary of the pre development drainage input calculations can be found in Table 1 below.

Table 1: Pre Development Drainage Area Input Summary:

Area	Total Area (acres)	CN	T <sub>c</sub> (minutes)
Pre	3.53	64	30.7

### 3.3 Post Development Drainage

The site in the post-development build out condition will consist of an approximately 22,890 square foot; 4 story apartment building with 50 units. Other development on this site will include the construction roadways, parking areas, a storm sewer system, drainage structures, and various land-grading and landscaping. Ground cover changes will include wooded/grass areas being converted to impervious and grassed lawn areas. Construction and re-grading on the site will alter the existing topography and will therefore change the existing drainage patterns. While the same design point that was analyzed in the pre-development condition will be analyzed in the post-development condition, the drainage areas and flow will be altered due to the improvements on the site. Refer to Appendix “B” for a detailed calculation of the Area, CN and T<sub>c</sub> values. A summary of the post development drainage input calculations can be found in Table 2 below.

Table 2: Post Development Drainage Area Input Summary:

Area	Total Area (acres)	CN	T <sub>c</sub> (minutes)
A	0.90	55	17.6
B	2.03	66	24.0
C	0.47	94	6.0*
D	0.14	81	6.0*
E	0.10	80	6.0*

\*Minimum required by methodology used

### 3.4 Pre vs Post Runoff Analysis

All drainage areas in both the pre and post development conditions use a single design point in the analysis, DP#1. This allows a direct comparison of the total runoff in both the pre and post conditions. There are no runoff reduction techniques in place in the pre development area and the runoff goes directly to the existing storm sewer system. In the post development B and C areas, runoff is routed through mitigation elements including a dry swale and stormwater planters prior to discharging to DP#1. The relevant hydraulic flows are provided in table 3 below for comparison.

Table 3: Hydrograph Summary

Storm Event	Pre Development	Post Development	Delta
1-year	0.37 c.f.s.	0.36 c.f.s.	-0.01 c.f.s.
2-year	0.81 c.f.s.	0.49 c.f.s.	-0.32 c.f.s.
10-year	2.62 c.f.s.	1.06 c.f.s.	-1.56 c.f.s.
25-year	4.35 c.f.s.	2.01 c.f.s.	-2.34 c.f.s.
100-year	8.34 c.f.s.	7.60 c.f.s.	-0.74 c.f.s.

### 3.5 Conclusions:

The discharge for all storm events has been mitigated to pre development levels or less for all storm events. The development will not have any negative impacts on the site or surrounding area in terms of drainage.

## 4 Stormwater Site Planning and Practice Selection

During the planning process, many green aspects have been incorporated into the site layout. Some of these practices include the preservation of natural features and the reduction of impervious cover.

### 4.1 Site Planning

During the planning process, many green aspects have been incorporated into the site layout. Some of these practices include the preservation of natural features and the reduction of impervious cover.

#### 4.1.1 Preservation of Natural Resources

The following measures have been incorporated into the site design to preserve natural resources.

**Reduction of Clearing and Grading** - The site has been designed with the intent to limit clearing and grading required to the minimum amount necessary.

#### 4.1.2 Reduction of Impervious Cover

The site has been designed to minimize the amount of required impervious cover. The following manage practices have been integrated into the site layout:

**Parking Reduction** – Eliminating unnecessary parking stalls and minimizing parking stall dimensions. This site incorporates parking lifts which allow 4 vehicles to be parked in an area otherwise suitable for only 2 vehicles. The majority of parking has been provided in the form of a parking garage in the 1<sup>st</sup> floor of the proposed structure, further reducing the need for impervious surfaces.

#### 4.2 Determine Water Quality Treatment Volumes (WQ<sub>v</sub>)

The required WQ<sub>v</sub> have been calculation in accordance with Chapter 4: Unified Stormwater Sizing Criteria of the New York State Stormwater Management Design Manual January 2015. The calculation is as follows:

$$WQ_v = \frac{(P)(R_v)(A)}{12}$$

Where:

- WQ<sub>v</sub> = Water Quality Volume (acre-feet)
- P = 90% Rainfall Event Number (See Figure C)
- R<sub>v</sub> = 0.05 + 0.009(I), where I is percent impervious cover
- A = Contributing area (acres)

Compute Impervious Cover, I:

- Total Area of Drainage Area (A) = 3.53 Ac.
- Impervious Area within Drainage Area = 0.67Ac.
- Percentage of Impervious Cover (I) =19%

Compute Runoff Coefficient, R<sub>v</sub>:

$$R_v = 0.05 + (0.009) (I)$$

$$R_v = 0.05 + (0.009) (19)$$

$$R_v = 0.221$$

Compute Water Quality Volume, WQ<sub>v</sub>:

$$P = 1.4 \text{ (Using the 90\% Rainfall Event Number from Figure C)}$$

$$WQ_v = \frac{(1.4)(0.221)(3.53)}{12}$$

$$WQ_v = 0.091 \text{ ac-ft}$$



$$WQ_v = 3,965 \text{ ft}^3$$

### 4.3 Runoff Reduction by Applying Green Infrastructure and Standard SMPs with RRv Capacity

#### 4.3.1 Green Infrastructure Runoff Reduction Techniques

The site has been designed to manage the impacts by using natural features and runoff reduction practices to slow down the runoff and promote infiltration. The following management practices have been integrated into the site layout:

**Rain Planters** – Managing and treating small volumes of stormwater runoff using conditioned planting soil beds and planting materials to filter runoff stored within a contained planter.

**Green Roof** – Capture and store stormwater runoff using a conditioned planting soil bed on top of a conventional flat or sloped roof.

##### 4.3.1.1 Green Infrastructure WQ<sub>v</sub> Sizing

A filtration practice in the form of flow through stormwater planters will be provided around the front perimeter of the building. Approximately 2/3 of all roof runoff and sidewalk runoff will be directed to these planters. The planters will be approximately 3,600ft<sup>2</sup> in surface area. Using the following equation, the WQ<sub>v</sub> provided is as follows:

$$A_f = WQ_v \times (d_f) / [k \times (h_f + d_f) (t_f)]$$

Where:

- A<sub>f</sub> = surface area [square feet]
- WQ<sub>v</sub> = water quality volume [cubic feet]
- d<sub>f</sub> = depth of soil medium [feet]
- k = hydraulic conductivity [ft/day] usually set at 4 ft/day
- h<sub>f</sub> = average height of water above the planter bed [≤ 6 inches for a maximum ponding depth of 12 inches]
- t<sub>f</sub> = the design time to filter the treatment volume through the filter media [usually set at 3 to 4 hours]

$$A_f = WQ_v \times (d_f) / [k \times (h_f + d_f)(t_f)]$$

$$3,600\text{ft}^2 = WQ_v \times (1.5 \text{ ft}) / [4 \text{ ft/day} \times (0.5\text{ft} + 1.5\text{ft})(0.17 \text{ days})]$$

$$\mathbf{WQ_v = 3,282\text{ft}^3}$$

The planters will provide a  $WQ_v$  of  $3,282\text{ft}^2$  with a soil medium depth of 1.5ft.

A small green roof area will be provided on site. The total area of the green roof will be approximately  $3,330\text{ft}^2$ . Of this area, only half will be actual vegetation and the remainder will be patio area, walkways and stone. As such,  $1,665\text{ft}^2$  will be considered as applicable towards  $WQ_v$ . The following equation was used in determining the  $WQ_v$  provided:

$$\text{Storage Volume} = V_{SM} + V_{DL} + (D_P \times A_{GR})$$

$$V_{SM} = A_{GR} \times D_{SM} \times n_{SM}$$

$$V_{DL} = A_{GR} \times D_{DL} \times n_{DL}$$

Where:

$V_{SM}$  = volume of the soil media [cubic feet]

$V_{DL}$  = volume of the drainage layer [cubic feet]

$A_{GR}$  = green roof surface area [square feet]

$D_{SM}$  = depth of the soil media [0.25 to 0.5 feet for extensive; 0.5 to 2.0 feet for intensive]

$D_{DL}$  = depth of the drainage layer [feet]

$D_P$  = depth of ponding above surface [feet]

$n_{SM}$  = porosity of the soil media (~20%)

$n_{DL}$  = porosity of the drainage layer (~25%)

$$V_{SM} = 1,665\text{ft}^2 \times 0.25 \text{ ft} \times 0.20 = 83.25 \text{ ft}^3$$

$$V_{DL} = 1,665\text{ft}^2 \times 0.17 \text{ ft} \times 0.25 = 70.76 \text{ ft}^3$$

$$D_P = \text{ponding depth} = 0.5 \text{ inches} = 0.04 \text{ ft}$$

$$\text{Storage Volume} = V_{SM} + V_{DL} + (D_P \times A_{GR}) = 83.25 \text{ ft}^3 + 70.76 \text{ ft}^3 + (0.04 \text{ ft} \times 1,665 \text{ ft}^2) = 220\text{ft}^3$$

$$\mathbf{WQ_v = 220\text{ft}^3}$$

The green roof will provide a  $WQ_v$  of  $220\text{ft}^3$  with a drainage layer of 2 inches and a growing medium of 3 inches.

### 4.3.2 Standard SMP's with RRv Capacity

Stormwater Management Practices acceptable for water quality has been integrated into this site to control both quantity and quality. The following are the practices that have been utilized:

**Dry Swale** – An open drainage channel or depression explicitly designed to detain and promote the filtration of stormwater runoff into the soil media or be released by a controlled outlet.

#### 4.3.2.1 Standard SMP WQ<sub>v</sub> Sizing

The calculated maximum volume of storage available in the dry swale is 6,636ft<sup>3</sup>. Calculation of this storage may be found in appendix “B” of this report.

The swale will be in an area of the site where the soils have a hydraulic soil group classification of “D”. 20% of the runoff reduction volume may be applied towards the water quality volume for this practice in this type of soil. This will net a **WQ<sub>v</sub> = 1,327ft<sup>3</sup>**

#### 4.4 Determine the Minimum RR<sub>v</sub> Required

$$RR_v = \frac{(P)(R_v)(A_i)}{12}$$

Where:

- RR<sub>v</sub> = Runoff Reduction Volume (acre-feet)
- A<sub>i</sub> = (S)(A<sub>ic</sub>)
- (A<sub>ic</sub>) = impervious cover targeted for runoff reduction
- R<sub>v</sub> = 0.05 + 0.009(I) where I is 100% impervious
- S = Hydrologic Soil Group (HSG) Specific Reduction Factor

Compute Impervious Cover, I:

$$\text{Total Impervious Area within Drainage Area} = 0.63 \text{ Ac}$$

Compute Runoff Coefficient, R<sub>v</sub>:

$$\begin{aligned} R_v &= 0.05 + (0.009) (I) \\ R_v &= 0.05 + (0.009) (100) \\ R_v &= 0.95 \end{aligned}$$

Compute Runoff Coefficient, A<sub>i</sub>:

$$\begin{aligned} A_i &= (S)(A_{ic}) \\ A_i &= (0.20)(0.67) \\ A_i &= 0.134 \end{aligned}$$

(S) = The following lists the specific reduction factors for the HSGs:

- o HSG A = 0.55
- o HSG B = 0.40
- o HSG C = 0.30

o HSG D = 0.20

Compute Runoff Reductions Volume,  $RR_v$ :

$P = 1.4$  (Using the 90% Rainfall Event Number from Figure D)

$$RR_v = \frac{(1.4)(0.95)(0.134)}{12}$$

$$RR_v = 0.015 \text{ ac-ft}$$

$$RR_v = 647 \text{ ft}^3$$

The minimum  $RR_v$  required is calculated to be  $647\text{ft}^3$ .

#### **4.5 Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volumes**

By applying a combination of green infrastructure techniques and standard SMPs with  $RR_v$  capacity, the design must reduce 100% of the  $WQ_v$  calculated in section 4.2. The total  $WQ_v$  provided by the proposed flow through planters ( $3,282\text{ft}^3$ ), green roof ( $220\text{ft}^3$ ) and dry swale ( $1,327\text{ft}^3$ ) will provide a total Water Quality Volume of  $4,829\text{ft}^3$ .

The provided  $4,829\text{ft}^3$  provided exceeds the minimum calculated required  $WQ_v$  of  $3,965\text{ft}^3$  and no further SMP's are needed.

#### **4.6 Apply Volume and Peak Rate Control Practices if Still Needed to Meet Requirements.**

These items are not required as all runoff from the site discharges to an existing storm sewer system which in turn discharges to tidal waters (Hudson River). The existing storm sewer outfall, from the Beekman Street collection system (Catch Basins), to the Hudson River has been confirmed to be a direct discharge and man made in its entirety by the Highway Superintendent for the City of Beacon.

#### **4.7 Stormwater Management Maintenance Schedule.**

The following table outlines the minimum required maintenance to maintain the functionality of the stormwater practices proposed in this SWPPP. This information is also contained within the Plan Sheet Set associated with this project.



Stormwater Pollution Prevention Plan  
The View Site Plan

<b>Maintenance/Inspection Schedule</b>			
<b>Maintenance Item</b>	<b>Frequency</b>	<b>Field Representative Shall Inspect for the Following</b>	<b>Maintenance/Repair Representative Shall Repair Respective Deficiency As Follows:</b>
<i>Catch Basins</i>	Monthly	- Excess Silt & Sediment in Sumps	-Remove (Vacuum)
<i>Pipe Network</i>	Monthly	-Excess Silt & Sediment	-Remove (Vacuum)
<i>Dry Swale</i>	Annual & Monthly	- Vegetation	- Remove
		- Adequate Vegetation	- Restore to Original Specification as Per Landscaping Plan
		- Undesirable Vegetative Growth	- Remove
		- Undesirable Woody Vegetation	- Remove
		- Standing Water/Wet Spots	- Add/ Remove Fill as Necessary to Restore Pond Base Elevation
		- Sediment and/or trash Accumulation	- Remove
<i>Planter Plantings</i>	Annually	- Survival of Desired Wetland Plants	- Re-Plant Wetland Species as Necessary
		- 50% Cover of Plants After 2nd Growing Season	- Restore as Necessary
		- Distribution of Plants as Per Landscaping Plan	- Re-Distribute as Necessary
		- Any Evidence of Undesirable Invasive Species	- Remove
		- Maintenance of Adequate Water Depth Plan Species	- Clean outlet to Restore Appropriate Water Levels
		- "Choking" of Plants Due to Excessive Sediment Depths	- Remove Pond Sediments as Necessary
<i>Green Roof</i>	Monthly for first 24 months & Biannually	- Any Evidence of Undesirable/Invasive Vegetative Growth	- Remove
		- Plant Health/Establishment Inadequate	- Water, Fertilize, and Re-Plant as Necessary
		- Roof Drains Clogged or Impeded by Debris	- Remove Debris
		- Leaks or Structural Deficiencies	- Correct as Directed by a Trained and Qualified Contractor
<i>Miscellaneous</i>	Monthly	- Complaints from Residents	- Note Complaint and Discuss with Owner and Engineers
		- Aesthetics ( Graffiti, Lack of Grass Cover, Etc)	- Remove Any Graffiti and Scarify, Seed and Mulch as Needed
		- Signs of Hydrocarbon Build-up	- Remove
		- Any Possible Public Hazards	- Notify City and Discuss with Owner and Town as Necessary

## 5 Permanent Water Quality and Quantity Controls

### Open Channels



**Description:** Vegetated channels that are explicitly designed and constructed to capture and treat stormwater runoff within dry or wet cells formed by check dams or other means.

**Design Options:** Dry Swale (O-1), Wet Swale (O-2)

<u>KEY CONSIDERATIONS</u>	<u>STORMWATER MANAGEMENT SUITABILITY</u>
<p><b>FEASIBILITY</b></p> <ul style="list-style-type: none"> <li>Maximum longitudinal slope of 4%</li> </ul>	<p><b>X</b> Water Quality Channel Protection</p> <p>Overbank Flood Protection</p> <p>Extreme Flood Protection</p> <p><b>Accepts Hotspot Runoff: Yes</b> <i>(requires impermeable liner)</i></p>
<p><b>CONVEYANCE</b></p> <ul style="list-style-type: none"> <li>Non-erosive (3.5 to 5.0 fps) peak velocity for the 2-year storm</li> <li>Safe conveyance of the ten-year storm with a minimum of 6 inches of freeboard.</li> <li>Side slopes gentler than 2:1 (3:1 preferred).</li> <li>The maximum allowable temporary ponding time of 48 hours</li> </ul>	
<p><b>PRETREATMENT</b></p> <ul style="list-style-type: none"> <li>10% of the WQ<sub>V</sub> in pretreatment, usually provided using check dams at culverts or driveway crossings.</li> </ul>	<p><b>L</b> Capital Cost</p> <p><b>L</b> Maintenance Burden</p> <p><b>Residential</b> <b>Subdivision Use: Yes</b></p> <p><b>High Density/Ultra-Urban: No</b></p> <p><b>Drainage Area: 5 acres max.</b></p> <p><b>Soils: No restrictions</b></p> <p><b>Other Considerations:</b></p> <ul style="list-style-type: none"> <li>Permeable soil layer (dry swale)</li> <li>Wetland plants (wet swale)</li> </ul> <p>Key: <b>H</b>=High <b>M</b>=Medium <b>L</b>=Low</p>
<p><b>TREATMENT</b></p> <ul style="list-style-type: none"> <li>Temporary storage the WQ<sub>V</sub> within the facility to be released over a minimum 30 minute duration.</li> <li>Bottom width no greater than 8 feet, but no less than two feet.</li> <li>Soil media as detailed in Appendix H.</li> </ul>	
<p><b>MAINTENANCE</b></p> <ul style="list-style-type: none"> <li>Removal of sediment build-up within the bottom of the channel or filter strip when 25% of the original WQ<sub>V</sub> volume has been exceeded.</li> <li>Maintain a grass height of 4" to 6" in dry swales.</li> </ul>	
	<p><b><u>POLLUTANT REMOVAL</u></b></p> <p><b>G</b> Phosphorus</p> <p><b>F</b> Nitrogen</p> <p><b>G</b> Metals - Cadmium, Copper, Lead, and Zinc removal</p> <p><b>P</b> Pathogens - Coliform, Streptococci, E.Coli removal</p> <p>Key: <b>G</b>=Good <b>F</b>=Fair <b>P</b>=Poor</p>

## **6 Temporary Erosion & Sediment Control Measures**

This SWPPP adheres to the erosion and sediment control requirements as described in the New York State Standards and Specifications for Erosion and Sediment Control. Construction on the project site involves the disturbance of greater than one (1) acre of soil and, therefore, requires GP-0-15-002 permit coverage. Coverage under this permit requires that a comprehensive Erosion and Sediment Control Plan be developed for the site during the construction phase. Please refer to the following items concerning temporary erosion & sediment control practices:



**STANDARDS AND SPECIFICATIONS  
FOR  
SILT FENCE**



**6.1 Silt Fence:**

All silt fencing locations have been shown on the SWPPP insert in the back of this report and shall be installed in accordance with the detail shown in Figure E below:

**Definition**

A temporary barrier of geotextile fabric installed on the contours across a slope used to intercept sediment laden runoff from small drainage areas of disturbed soil.

**Purpose**

The purpose of a silt fence is to reduce runoff velocity and effect deposition of transported sediment load. Limits imposed by ultraviolet stability of the fabric will dictate the maximum period the silt fence may be used (approximately one year).

**Conditions Where Practice Applies**

A silt fence may be used subject to the following conditions:

1. Maximum allowable slope lengths contributing runoff to a silt fence placed on a slope are:

<u>Slope Maximum</u>	<u>Steepness Length (ft.)</u>
2:1	25
3:1	50
4:1	75
5:1 or flatter	100

Maximum drainage area for overland flow to a silt fence shall not exceed ¼ acre per 100 feet of fence, with maximum ponding depth of 1.5 feet behind the fence.

Erosion would occur in the form of sheet erosion.

There is no concentration of water flowing to the barrier.

**Design Criteria**

Design computations are not required for installations of 1 month or less. Longer installation periods should be designed for expected runoff. All silt fences shall be placed as close to the areas as possible, but at least 10 feet from the toe of a slope to allow for maintenance and roll down. The area beyond the fence must be undisturbed or stabilized. Sensitive areas to be protected by silt fence may need to be reinforced by using heavy wire fencing for added support to prevent collapse. Where ends of filter cloth come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

A detail of the silt fence shall be shown on the plan. See Figure below for details.

**Criteria for Silt Fence Materials**

Silt Fence Fabric: The fabric shall meet the following specifications unless otherwise approved by the appropriate erosion and sediment control plan approval authority. Such approval shall not constitute statewide acceptance.

Table 6: Silt Fence Requirements

<b>Fabric Properties</b>	<b>Acceptable Value</b>	<b>Test Method</b>
Grab Tensile Strength (lbs)	90	ASTM D1682
Elongation at Failure (%)	50	ASTM D1682
Mullen Burst Strength (PSI)	190	ASTM D3786
Puncture Strength (lbs)	40	ASTM D751 (modified)
Slurry Flow Rate (gal/min/sf)	0.3	
Equivalent Opening Size	40-80	US Std Sieve CW-02215
Ultraviolet Radiation Stability (%)	90	ASTM G-26

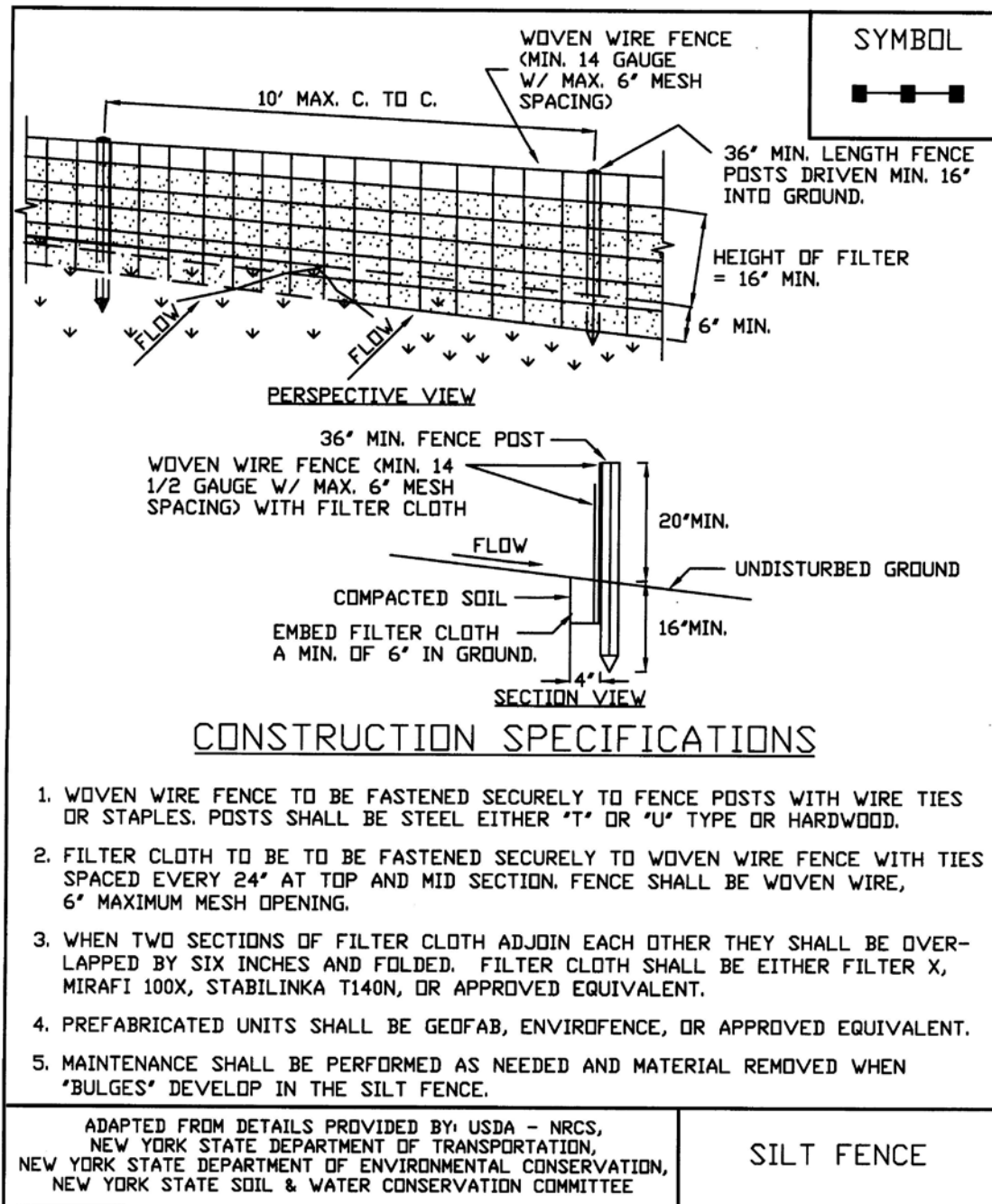
Fence Posts (for fabricated units): The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a minimum cross sectional area of 2 square

inches. Steel posts will be standard T and U section weighing not less than 1.00 pound per linear foot.

Wire Fence (for fabricated units): Wire fencing shall be a minimum 14 gage with a maximum 6 in. mesh opening, or as approved.

Prefabricated Units: Envirofence, Geofab, or approved equal, may be used in lieu of the above method providing the unit is installed per the detail shown below

Figure E –Silt Fence Detail



**STANDARDS AND SPECIFICATIONS  
FOR  
DROP INLET PROTECTION (Stone & Block)**



## **6.2 Filter Fabric Drop Inlet Protection:**

All Stone & Block drop inlet protection locations have been shown on the SWPPP insert located in the back of this report and shall be installed in accordance with the detail shown in Figure F below:

### **Definition**

A temporary somewhat permeable barrier, installed around inlets in the form of a filter fabric fence, trapping water and thereby reducing the sediment content of sediment laden water by settling.

### **Purpose**

To prevent heavily sediment laden water from entering a storm drain system through inlets.

### **Conditions Where Practice Applies**

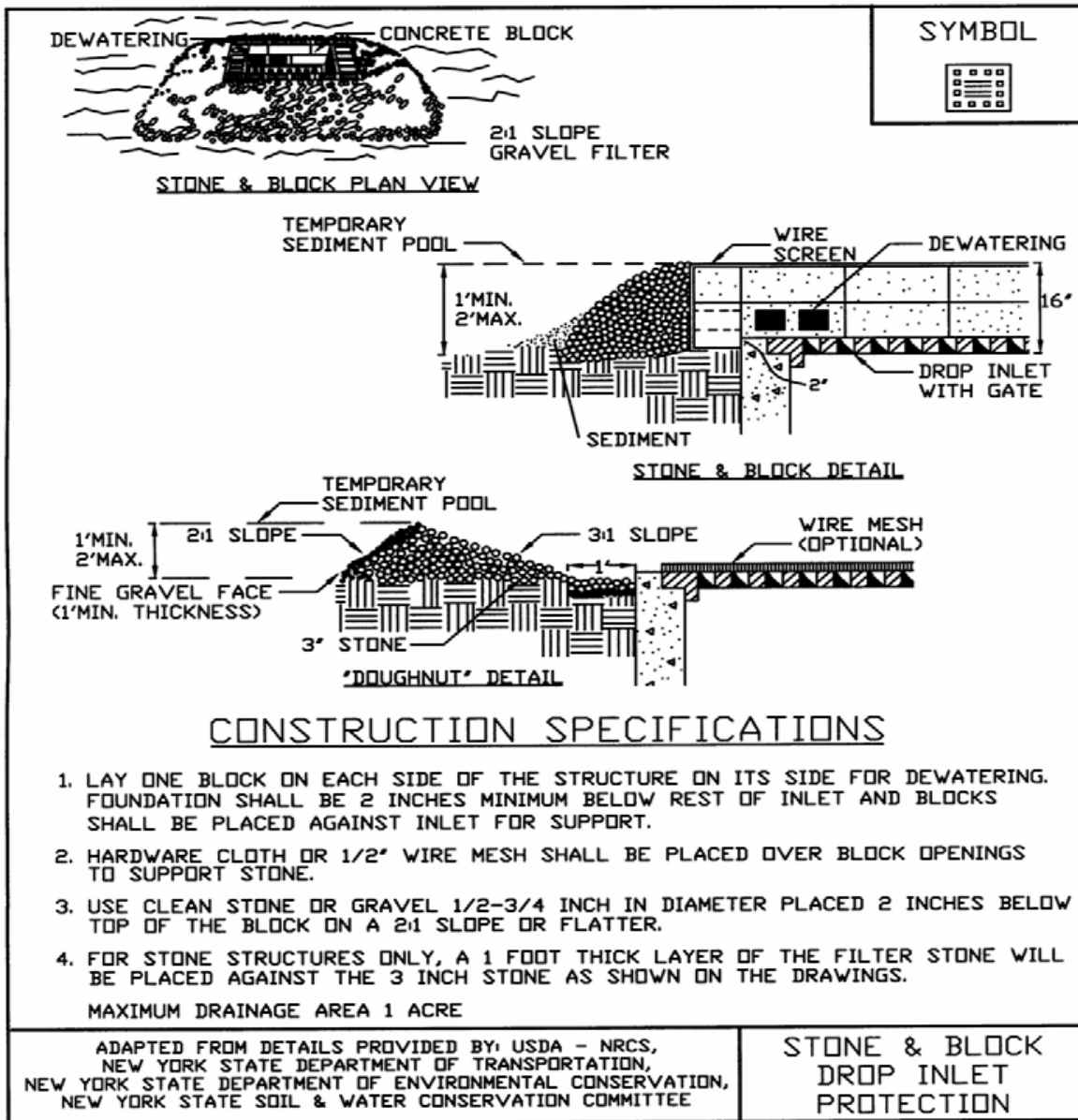
This practice shall be used where the drainage area to an inlet is disturbed, it is not possible to temporarily divert the storm drain outfall into a trapping device, and watertight blocking of inlets is not advisable. **It is not to be used in place of sediment trapping devices.** This may be used in conjunction with storm drain diversion to help prevent siltation of pipes installed with low slope angle.

### **Design Criteria**

Limit the drainage area to 1 acre at the drop inlet. The stone barrier should have a minimum height of 1 foot and a maximum height of 2 feet. Do not use mortar. The height should be

limited to prevent excess ponding and bypass flow. Recess the first course of blocks at least 2 inches below the crest opening of the storm drain for lateral support. Subsequent courses can be supported laterally if needed by placing a 2x4 inch wood stud through the block openings perpendicular to the course. The bottom row should have a few blocks oriented so flow can drain through the block to dewater the basin area. The stone should be placed just below the top of the blocks on slopes of 2:1 or flatter. Place hardware cloth of wire mesh with ½ inch openings over all block openings to hold stone in place. As an optional design, the concrete blocks may be omitted and the entire structure constructed of stone, ringing the outlet (“doughnut”). The stone should be kept at a 3:1 slope toward the inlet to keep it from being washed into the inlet. A level area 1 foot wide and four inches below the crest will further prevent wash. Stone on the slope toward the inlet should be at least 3 inches in size for stability and 1 inch or smaller away from the inlet to control flow rate. The elevation of the top of the stone crest must be maintained 6 inches lower than the ground elevation down slope from the inlet to ensure that all storm flows pass over the stone into the storm drain and not past the structure. Temporary diking should be used as necessary to prevent bypass flow. The barrier should be inspected after each rain event and repairs made where needed. Remove sediment as necessary to provide for accurate storage volume for subsequent rains. Upon stabilization of contributing drainage area, remove all materials and any unstable soil and dispose of properly. Bring the disturbed area to proper grade, smooth, compact and stabilized in a manner appropriate to the site.

Figure F – Stone & Block Drop Inlet Protection



**STANDARD AND SPECIFICATIONS  
FOR  
STABILIZED CONSTRUCTION ENTRANCE**



**6.3 Construction Entrance:**

A construction entrance location has been shown on the SWPPP insert in the back of this report and shall be installed and maintained in accordance with the detail shown in Figure G below; until such time that the driveway has been stabilized by pavement.

**Definition**

A stabilized pad of aggregate underlain with geotextile located at any point where traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, sidewalk, or parking area.

**Purpose**

The purpose of stabilized construction entrance is to reduce or eliminate the tracking of sediment onto public rights-of way or streets.

**Conditions Where Practice Applies**

A stabilized construction entrance shall be used at all points of construction ingress and egress.

**Design Criteria**

**Aggregate Size:** Use a matrix of 1-4 inch stone, or reclaimed or recycled concrete equivalent.

**Thickness:** Not less than six (6) inches.



**Width:** 12-foot minimum but not less than the full width of points where ingress or egress occurs. 24-foot minimum if there is only one access to the site.

**Length:** As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum would apply).

**Geotextile:** To be placed over the entire area to be covered with aggregate. Filter cloth will not be required on a single-family residence lot. Piping of surface water under entrance shall be provided as required. If piping is impossible, a mountable berm with 5:1 slopes will be permitted.

**Criteria for Geotextile**

The geotextile shall be woven or non-woven fabric consisting only of continuous chain polymeric filaments or yarns of polyester. The fabric shall be inert to commonly encountered chemicals, hydro-carbons, mildew, rot resistant, and conform to the fabric properties as shown

Table 7: Criteria for Geotextile Material in Construction Entrance

<u>Fabric Properties</u> <sup>3</sup>	Light Duty <sup>1</sup> Roads Grade <u>Subgrade</u>	Heavy Duty <sup>2</sup> Haul Roads Rough <u>Graded</u>	<u>Test Method</u>
Grab Tensile Strength (lbs)	200	220	ASTM D1682
Elongation at Failure (%)	50	60	ASTM D1682
Mullen Brust Strength (lbs)	190	430	ASTM D3786
Puncture Strength (lbs)	40	125	ASTM D751 modified
Equivalent Opening Size	40-80	40-80	US Std Sieve CW-02215
Aggregate Depth	6	10	--

<sup>1</sup>Light Duty Road: Area sites that have been graded to subgrade and where most travel would be single axle vehicles and an occasional multi-axle truck. Acceptable materials are Trevira Spunbond 1115, Mirafi 100X, Typar 3401, or equivalent.

<sup>2</sup>Heavy Duty Road: Area sites with only rough grading, and where most travel would be multi-axle vehicles. Acceptable materials are Trevira Spunbond 1135, Mirafi 600X, or equivalent.

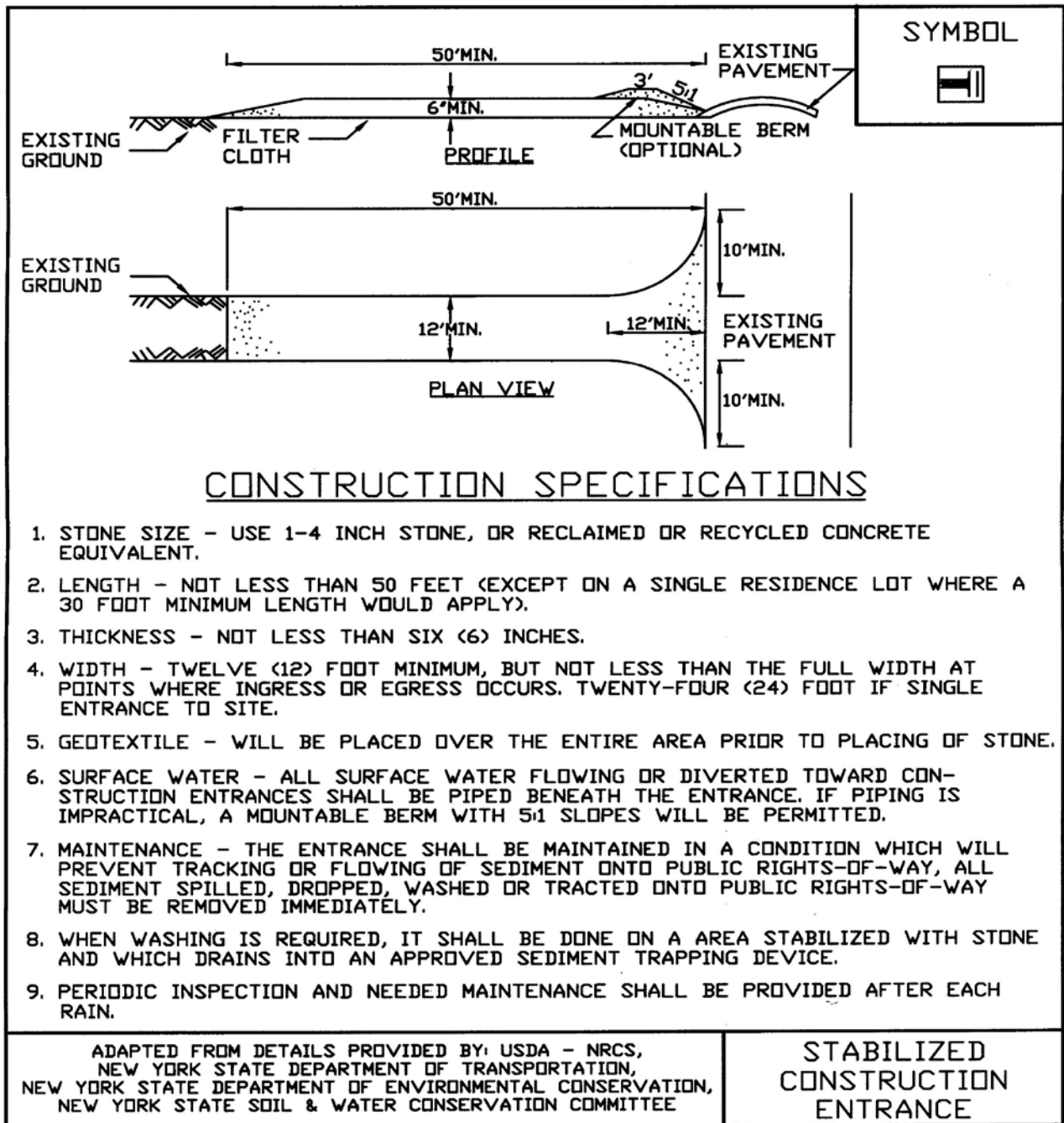
<sup>3</sup>Fabrics not meeting these specifications may be used only when design procedure and supporting documentation are supplied to determine aggregate depth and fabric strength.

**Maintenance**

The entrance shall be maintained in a condition which will prevent tracking of sediment onto public rights-of-way or streets. This may require periodic top dressing with additional aggregate. All sediment spilled, dropped, or washed onto public rights-of-way must be

removed immediately. When necessary, wheels must 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 aggregate, which drains into an approved sediment-trapping device. All sediment shall be prevented from entering storm drains, ditches, or watercourses.

Figure G – Construction Entrance  
Detail



**STANDARD AND SPECIFICATIONS  
FOR  
DUST CONTROL**



**6.4 Dust Control:**

During the construction phase of the project, approximately 4.50 acres of soil will be disturbed to facilitate land re-grading and general building construction. The time interval from initial excavation of the proposed disturbed area to the seeding and mulching stabilization phase shall be kept to a minimum. During this window of time during construction of bare soil exposure, dust control may be necessary. Refer to the following specifications regarding dust control.

**Definition**

The control of dust resulting from land-disturbing activities.

**Purpose**

To prevent surface and air movement of dust from disturbed soil surfaces that may cause off-site damage, health hazards, and traffic safety problems.

**Conditions Where Practice Applies**

On construction roads, access points, and other disturbed areas subject to surface dust movement and dust blowing where off-site damage may occur if dust is not controlled.

**Design Criteria**

Construction operations should be scheduled to minimize the amount of area disturbed at one time. Buffer areas of vegetation should be left where practical. Temporary or permanent stabilization measures shall be installed. No specific design criteria are given;

see construction specifications below for common methods of dust control. Water quality must be considered when materials are selected for dust control. Where there is a potential for the material to wash off to a stream, ingredient information must be provided to the local permitting authority.

### **Construction Specifications**

#### **A.**

**Non-driving Areas** – These areas use products and materials applied or placed on soil surfaces to prevent airborne migration of soil particles.

**Vegetative Cover** – For disturbed areas not subject to traffic, vegetation provides the most practical method of dust control (see Section 3).

**Mulch** (including gravel mulch) – Mulch offers a fast effective means of controlling dust. This can also include rolled erosion control blankets.

**Spray adhesives** – These are products generally composed of polymers in a liquid or solid form that are mixed with water to form an emulsion that is sprayed on the soil surface with typical hydroseeding equipment. The mixing ratios and application rates will be in accordance with the manufacturer's recommendations for the specific soils on the site. In no case should the application of these adhesives be made on wet soils or if there is a probability of precipitation within 48 hours of its proposed use. Material Safety Data Sheets will be provided to all applicators and others working with the material.

#### **B.**

**Driving Areas** – These areas utilize water, polymer emulsions, and barriers to prevent dust movement from the traffic surface into the air.

**Sprinkling** – The site may be sprayed with water until the surface is wet. This is especially effective on haul roads and access routes.

**Polymer Additives** – These polymers are mixed with water and applied to the driving surface by a water truck with gravity feed drip bar, spray bar or automated distributor truck. The mixing ratios and application rates will be in accordance with the manufacturer's recommendations. Incorporation of the emulsion into the soil will be done to the appropriate depth based on expected traffic. Compaction after incorporation will be by vibratory roller to a minimum of 95%. The prepared surface shall be moist and no application of the polymer will be made if there is a probability of precipitation within 48 hours of its proposed use. Material Safety Data Sheets will be provided to all applicators working with the material.

**Barriers** – Woven geo-textiles can be placed on the driving surface to effectively reduce dust throw and particle migration on haul roads. Stone can also be used for construction roads for effective dust control.

**Windbreak** – A silt fence or similar barrier can control air currents at intervals equal to ten times the barrier height. Preserve existing wind barrier vegetation as much as practical.

August 2005 Page 5A.87 New York Standards and Specifications for Erosion and Sediment Control All Stormwater Pollution Prevention Plans must contain the NYS DEC issued "Conditions for Use" and "Application Instructions" for any polymers used on the site. This information can be obtained from the NYS DEC website.

### **Maintenance**

Maintain dust control measures through dry weather periods until all disturbed areas are stabilized.

## 7 Permanent Erosion & Sediment Control Measures

### **STANDARDS AND SPECIFICATIONS FOR LANDGRADING**



### 7.1 Landgrading:

#### **Definition**

Reshaping of the existing land surface in accordance with a plan as determined by engineering survey and layout.

#### **Purpose**

The purpose of a landgrading specification is to provide for erosion control and vegetative establishment on those areas where the existing land surface is to be reshaped by grading according to plan.

#### **Design Criteria**

The grading plan should be based upon the incorporation of building designs and street layouts that fit and utilize existing topography and desirable natural surrounding to avoid extreme grade modifications. Information submitted must provide sufficient topographic surveys and soil investigations to determine limitations that must be imposed on the grading

operation related to slope stability, effect on adjacent properties and drainage patterns, measures for drainage and water removal and vegetative treatment, etc.

Many counties have regulations and design procedures already established for land grading and cut and fill slopes. Where these requirements exist, they shall be followed.

The plan must show existing and proposed contours of the area(s) to be graded. The plan shall also include practices for erosion control, slope stabilization, safe disposal of runoff water and drainage, such as waterways, lined ditches, reverse slope benches (include grade and cross section), grade stabilization structures, retaining walls, and surface and subsurface drains. The plan shall also include phasing of these practices. The following shall be incorporated into the plan:

1. Provisions shall be made to safely conduct surface runoff to storm drains, protected outlets, or to stable water courses to ensure that surface runoff will not damage slopes or other graded areas.
2. Cut and fill slopes that are to be stabilized with grasses shall not be steeper than 2:1. When slopes exceed 2:1, special design and stabilization considerations are required and shall be adequately shown on the plans. (Note: Where the slope is to be mowed, the slope should be no steeper than 3:1, although 4:1 is preferred because of safety factors related to mowing steep slopes.)
3. Reverse slope benches or diversion shall be provided whenever the vertical interval (height) of any 2:1 slope exceeds 20 feet; for 3:1 slope it shall be increased to 30 feet and for a 4:1 to 40 feet. Benches shall be located to divide the slope face as equally as possible and shall convey the water to a stable outlet. Soils, seeps, rock outcrops, etc., shall also be taken into consideration when designing benches.
  - A. Benches shall be a minimum of 6 feet wide to provide ease for maintenance.
  - B. Benches shall be designed with a reverse slope of 6:1 or flatter to the toe of the upper slope and with a minimum of one foot in depth. Bench gradient to the outlet shall be between 2 percent and 3 percent, unless accompanied by appropriate design and computations.
  - C. The flow length within a bench shall not exceed 800 feet unless accompanied by appropriate design and computations.
4. Surface water shall be diverted from the face of all cut and/or fill slopes by the use of diversions, ditches and swales or conveyed downslope by the use of a designed structure, except where:
  - A. The face of the slope is or shall be stabilized and the face of all graded slopes shall be protected from surface runoff until they are stabilized.
  - B. The face of the slope shall not be subject to any concentrated flows of surface water such as from natural drainage ways, graded swales, downspouts, etc.
  - C. The face of the slope will be protected by special erosion control materials, sod, gravel, riprap, or other stabilization method.

5. Cut slopes occurring in ripable rock shall be serrated. The serrations shall be made with conventional equipment as the excavation is made. Each step or serration shall be constructed on the contour and will have steps cut at nominal two-foot intervals with nominal three-foot horizontal shelves. These steps will vary depending on the slope ratio or the cut slope. The nominal slope line is 1.5:1. These steps will weather and act to hold moisture, lime, fertilizer, and seed thus producing a much quicker and longer-lived vegetative cover and better slope stabilization. Overland flow shall be diverted from the top of all serrated cut slopes and carries to a suitable outlet.
6. Subsurface drainage shall be provided where necessary to intercept seepage that would otherwise adversely affect slope stability or create excessively wet site conditions.
7. Slopes shall no be created so close to property lines as to endanger adjoining properties without adequately protecting such properties against sedimentation, erosion, slippage, settlement, subsidence, or other related damages.
8. Fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris, and other objectionable material. It should be free of stones over two inches in diameter where compacted by hand or mechanical tempers or over eight inches in diameter where compacted by rollers or other equipment. Frozen materials shall no be placed in the fill nor shall the fill material be place on a frozen foundation.
9. Stockpiles, borrowed areas, and spoil shall be shown on the plans and shall be subject to the provision of this Standards and Specifications.
10. All disturbed areas shall be stabilized structurally or vegetatively in compliance with the Critical Area Treatment section of the New York State Standards and Specifications for Erosion and Sediment Control Manual.

### **Construction Specifications**

See Figure N below for the list of Construction Specifications. This list can also be found on the SWPPP details sheet included in the back of this report.



Figure G – Landgrading Detail

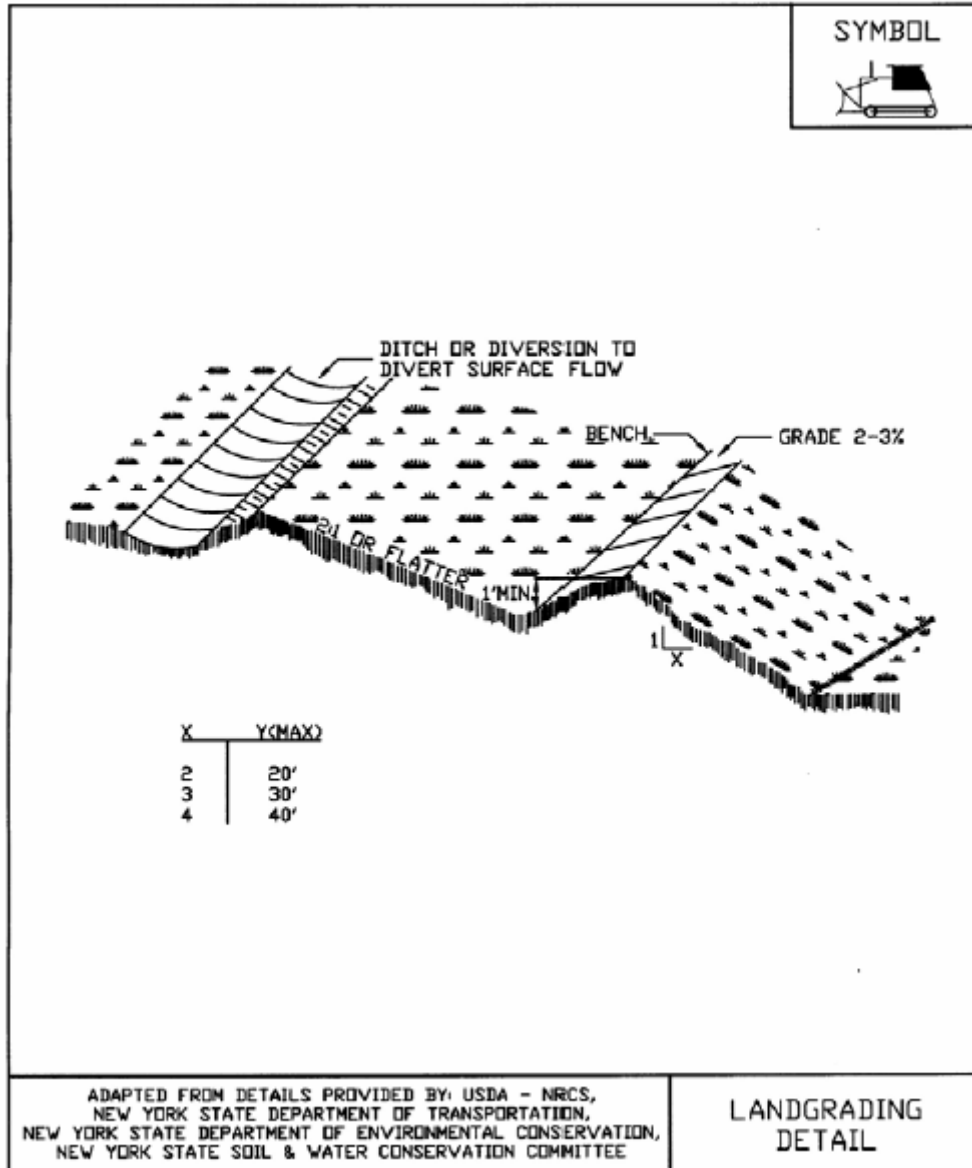


Figure H – Landgrading Construction Specifications Detail

<u>CONSTRUCTION SPECIFICATIONS</u>	
<ol style="list-style-type: none"> <li>1. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.</li> <li>2. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN AND THE 'STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS'.</li> <li>3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.</li> <li>4. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.</li> <li>5. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT OF TOPSOIL.</li> <li>6. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.</li> <li>7. ALL FILL TO BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.</li> <li>8. EXCEPT FOR APPROVED LANDFILLS, FILL MATERIAL SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.</li> <li>9. FROZEN MATERIALS OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED IN FILLS.</li> <li>10. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.</li> <li>11. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.</li> <li>12. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.</li> <li>13. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.</li> <li>14. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATION.</li> </ol>	
<p>ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL &amp; WATER CONSERVATION COMMITTEE</p>	<p><b>LANDGRADING SPECIFICATIONS</b></p>

## **8 Construction Schedule**

As required under GP-0-15-002 permit coverage, a construction schedule for the site is required and must be strictly followed. This project is able to be done in a single phases and still to adhere to the NYS DEC policy of disturbing less than five (5) acres of land at any given time. Please refer to the construction schedule outlined below:

The construction sequence will be strictly followed unless a modified plan is submitted for review and approval by the Town.

### **8.1 Pre-Construction Schedule (Duplicate on SWPPP Plan Sheet)**

#### PRE-CONSTRUCTION SEQUENCE:

Submit N.O.I. to bureau of water permits, Albany NY.

Receive acknowledgement back from NYSDEC.

Non-disturbance areas shall be marked with 4-ft orange snow fencing to town engineer's satisfaction prior to site disturbance, and shall be maintained until issuance of a Certificate-of-Occupancy.

Hold a pre-construction meeting with the site engineer, Town engineer, contractor, erosion control inspector and building inspector. Place a copy of the SWPPP report on site along with a copy of the inspector's log book containing copies of the weekly inspections. (Applicant's erosion & sediment control inspection agent shall be a "Qualified Professional" and conduct an inspection on a weekly basis)

### **8.2 Construction Schedule (Duplicate on SWPPP Plan Sheet)**

#### CONSTRUCTION SEQUENCE:

Install and stabilize temporary erosion & sediment control measures as shown on the Erosion & Sediment Control plan.

Begin remaining site grading, driveway grade construction and foundation excavation.

Rough cut driveway and parking area to sub-grade

Pour concrete footings and foundations for proposed buildings.

Install remaining site utilities and/or infrastructure.

Pave driveway and install curbing once all major work on site is complete, as required.

Install on-pavement temporary inlet protection.

Topsoil, seed and mulch all disturbed areas that have obtained finished grade elevations as per the soil restoration detail

Seed and mulch all disturbed areas that will not be re-disturbed for at least 14 days.

Finalize building construction.

Pave parking area and drives with final top-coat of asphalt

Once all major site disturbance activities have ceased and the site has achieved final stabilization, file an N.O.T. (notice of termination) with NYSDEC.

Terminate erosion control inspections

### **8.3 Construction waste management plan**

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

Material resulting from the clearing and grubbing operation will be stockpiled up slope from adequate sedimentation controls.

Equipment cleaning, maintenance, and repair areas shall be designated and protected by a temporary perimeter berm.

The use of detergents for large scale washing is prohibited (i.e., vehicles, buildings, pavement surfaces, etc.).

#### **Spill Prevention and Response**

A Spill Prevention and Response Plan shall be developed for the site by the general contractor. The plan shall detail the steps needed to be followed in the event of an accidental spill and shall identify contact names and phone numbers of people and agencies that must be notified.

The plan shall include Material Safety Data Sheets (MSDS) for all materials to be stored on-site. All workers on-site will be required to be trained on safe handling and spill prevention procedures for all materials used during construction. Regular tailgate safety meetings shall be held and all workers that are expected on the site during the week shall be required to attend.

#### **Material Storage**

Construction materials shall be stored in a dedicated staging area. The staging area shall be located in an area that minimizes the impacts of the construction materials effecting stormwater quality.

Chemicals, paints, solvents, fertilizers, and other toxic material must be stored in waterproof containers. Except during application, the contents must be kept in trucks or within storage facilities. Runoff containing such material must be collected, removed from the site, treated and disposed at an approved solid waste or chemical disposal facility.

#### Temporary Concrete Washout Facility

Temporary concrete washout facilities should be located a minimum of 50 ft from storm drain inlets, open drainage facilities, and watercourses. Each facility should be located away from construction traffic or access areas to prevent disturbance or tracking. A sign should be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.

When temporary concrete washout facilities are no longer required for the work, the hardened concrete shall be removed and disposed of. Materials used to construct the temporary concrete washout facilities shall be removed from the site and disposed of. Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities shall be backfilled and/or repaired and seeded and mulched for final stabilization.

#### Solid Waste Disposal

No solid materials, including building materials, are allowed to be discharged from the site with stormwater. All solid waste, including disposable materials incidental to the major construction activities, must be collected and placed in containers. The containers will be emptied periodically by a contract trash disposal service and hauled away from the site.

Substances that have the potential for polluting surface and/or groundwater must be controlled by whatever means necessary in order to ensure that they do not discharge from the site. As an example, special care must be exercised during equipment fueling and servicing operations. If a spill occurs, it must be contained and disposed so that it will not flow from the site or enter groundwater, even if this requires removal, treatment, and disposal of soil. In this regard, potentially polluting substances should be handled in a manner consistent with the impact they represent.

#### Water Source

Non-stormwater components of site discharge must be clean water. Water used for construction, which discharges from the site, must originate from a public water supply or private well approved by the Health Department. Water used for construction that

does not originate from an approved public supply must not discharge from the site. It can be retained in the ponds until it infiltrates and evaporates.

## 9 Conclusions

The SWPPP (Stormwater Pollution Prevention Plan) for the site to be known as “The View” has been designed in accordance with the *New York Standards and Specifications for Sediment and Erosion Control Manual August 2005*, and the *New York State Stormwater Management Design Manual June 2015*. All BMP (Best Management Practices) have been applied to the site to ensure the proper control of any erosion and sediment created on site from disturbance activities. The City of Beacon building inspector, Town Engineer and NYSDEC representative have the authority to modify, add or eliminate any erosion control practice on the construction site. The site’s owner shall file an NOI, included in Appendix F of this report, as required by the NYSDEC before starting construction.

# Appendix

---

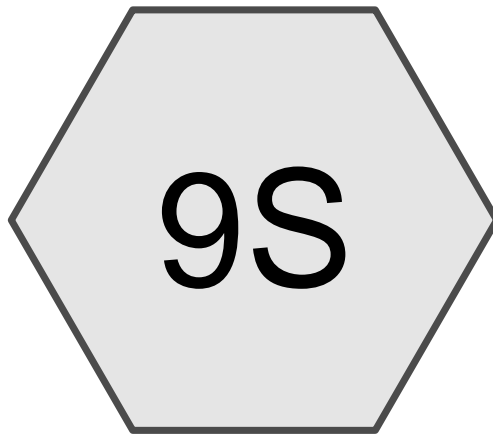




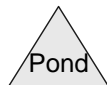
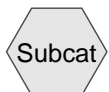
# Appendix A

## Pre-Development Cn, Tc Calculations & Pre-Development Hydrographs & Summary





# Pre-Development



# The View - Hydrology Calculations

Prepared by M.A. Day Engineering, PC

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Printed 1/22/2016

Page 2

## Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.510	80	>75% Grass cover, Good, HSG D (9S)
1.285	36	Woods, Fair, HSG A (9S)
1.737	79	Woods, Fair, HSG D (9S)
<b>3.532</b>	<b>64</b>	<b>TOTAL AREA</b>

**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 3

**Summary for Subcatchment 9S: Pre-Development**

Runoff = 0.37 cfs @ 12.62 hrs, Volume= 0.090 af, Depth> 0.30"

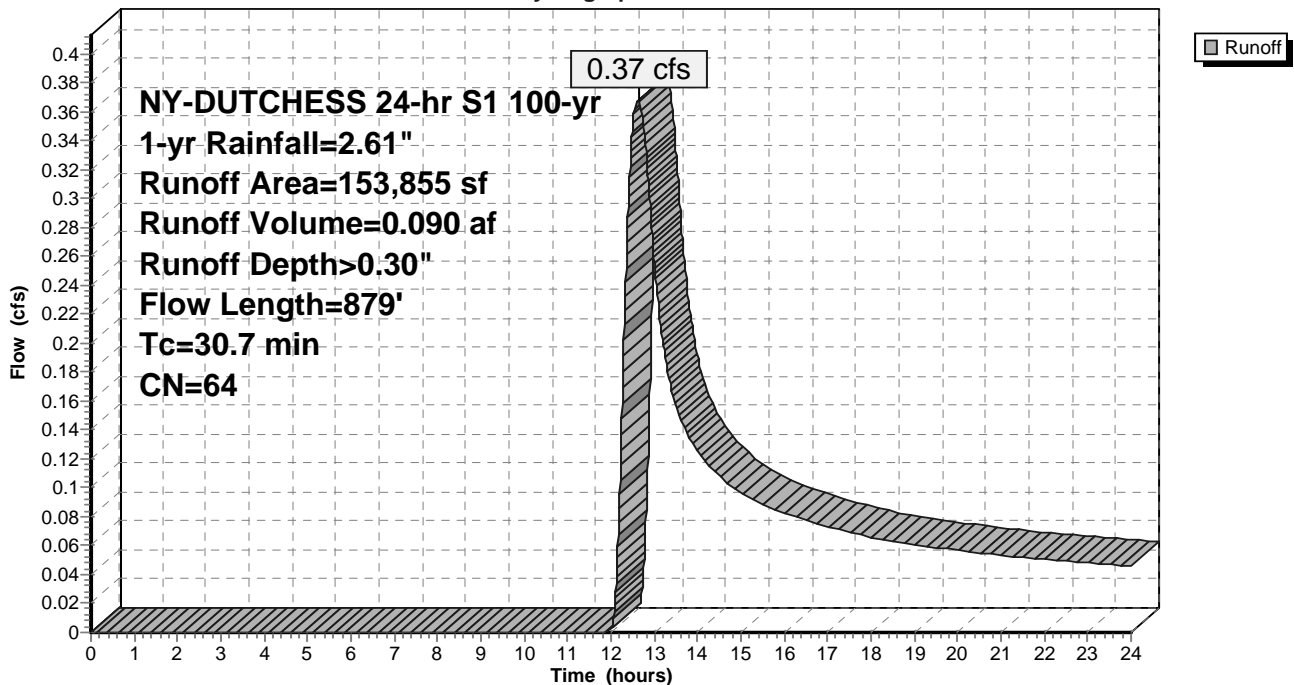
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Area (sf)	CN	Description
55,975	36	Woods, Fair, HSG A
75,670	79	Woods, Fair, HSG D
22,210	80	>75% Grass cover, Good, HSG D
153,855	64	Weighted Average
153,855		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	100	0.0100	0.06		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
2.8	329	0.1500	1.94		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.8	450	0.0140	9.23	29.00	<b>Pipe Channel, Reach C- DP#1</b> 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.012 Concrete pipe, finished
30.7	879	Total			

**Subcatchment 9S: Pre-Development**

Hydrograph



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 4

**Summary for Subcatchment 9S: Pre-Development**

Runoff = 0.81 cfs @ 12.51 hrs, Volume= 0.156 af, Depth> 0.53"

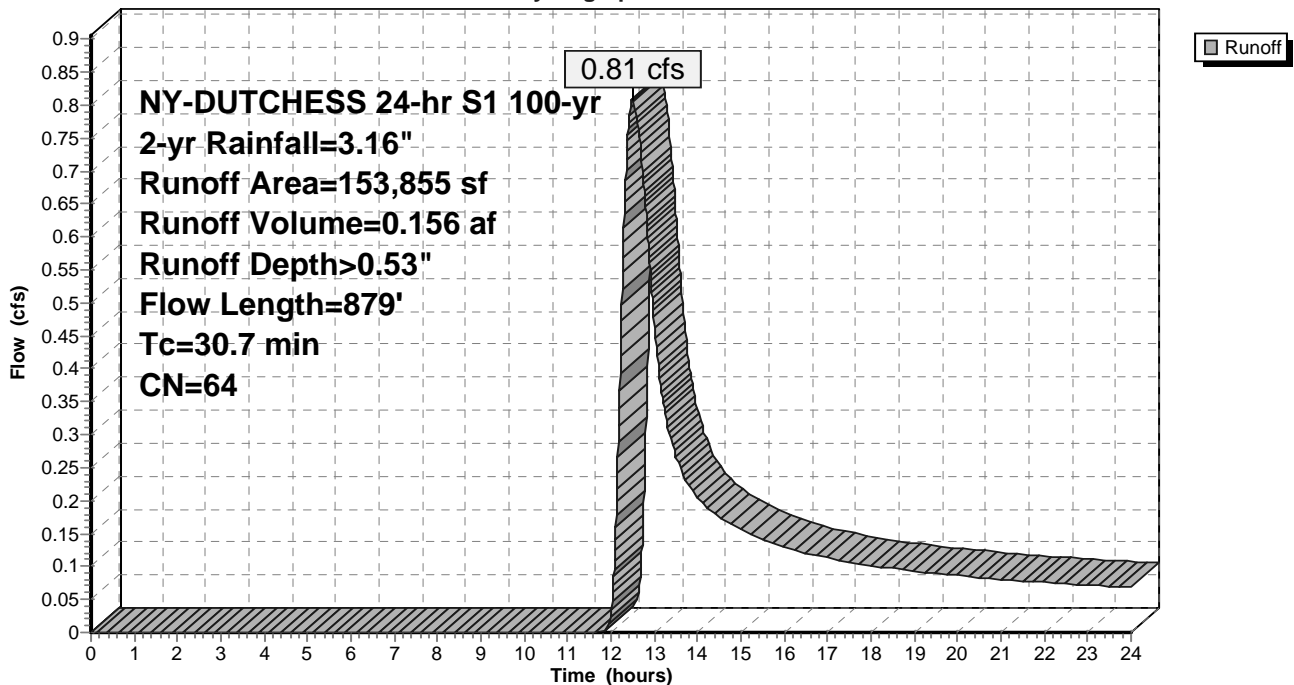
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Area (sf)	CN	Description
55,975	36	Woods, Fair, HSG A
75,670	79	Woods, Fair, HSG D
22,210	80	>75% Grass cover, Good, HSG D
153,855	64	Weighted Average
153,855		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	100	0.0100	0.06		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
2.8	329	0.1500	1.94		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.8	450	0.0140	9.23	29.00	<b>Pipe Channel, Reach C- DP#1</b> 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.012 Concrete pipe, finished
30.7	879	Total			

**Subcatchment 9S: Pre-Development**

Hydrograph



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 5

**Summary for Subcatchment 9S: Pre-Development**

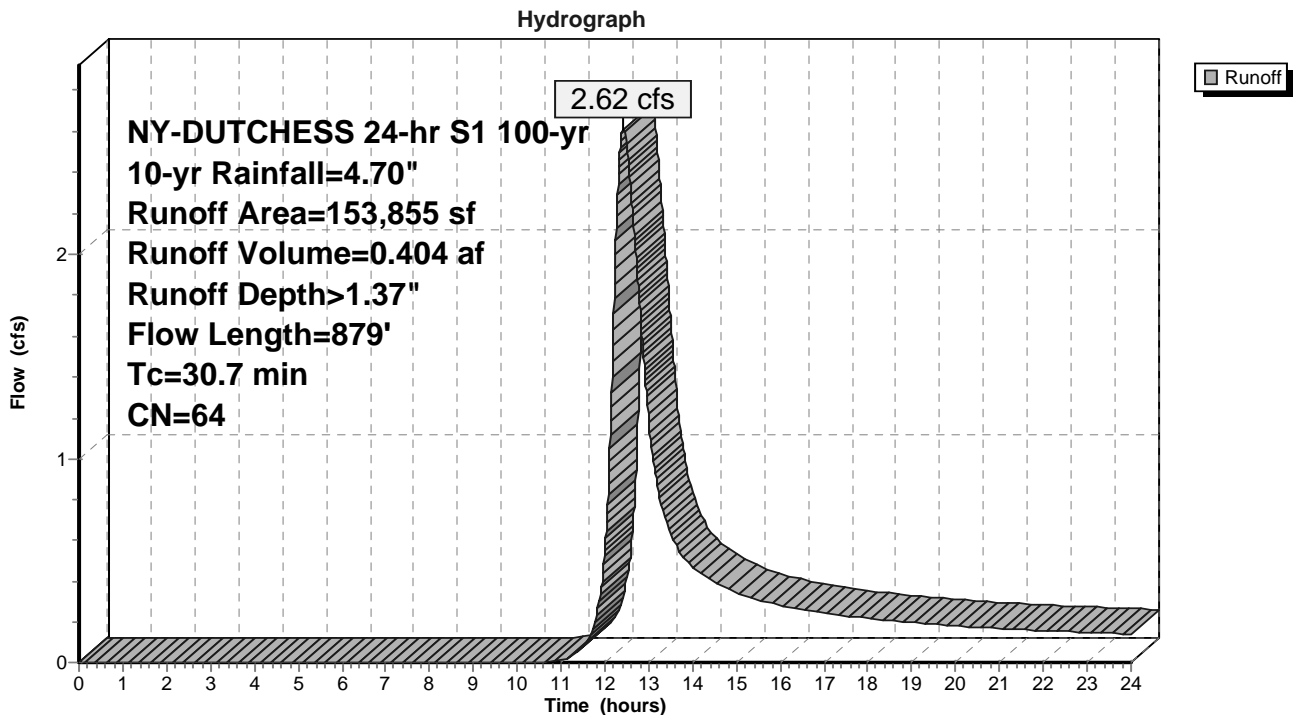
Runoff = 2.62 cfs @ 12.42 hrs, Volume= 0.404 af, Depth> 1.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Area (sf)	CN	Description
55,975	36	Woods, Fair, HSG A
75,670	79	Woods, Fair, HSG D
22,210	80	>75% Grass cover, Good, HSG D
153,855	64	Weighted Average
153,855		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	100	0.0100	0.06		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
2.8	329	0.1500	1.94		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.8	450	0.0140	9.23	29.00	<b>Pipe Channel, Reach C- DP#1</b> 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.012 Concrete pipe, finished
30.7	879	Total			

**Subcatchment 9S: Pre-Development**



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 6

**Summary for Subcatchment 9S: Pre-Development**

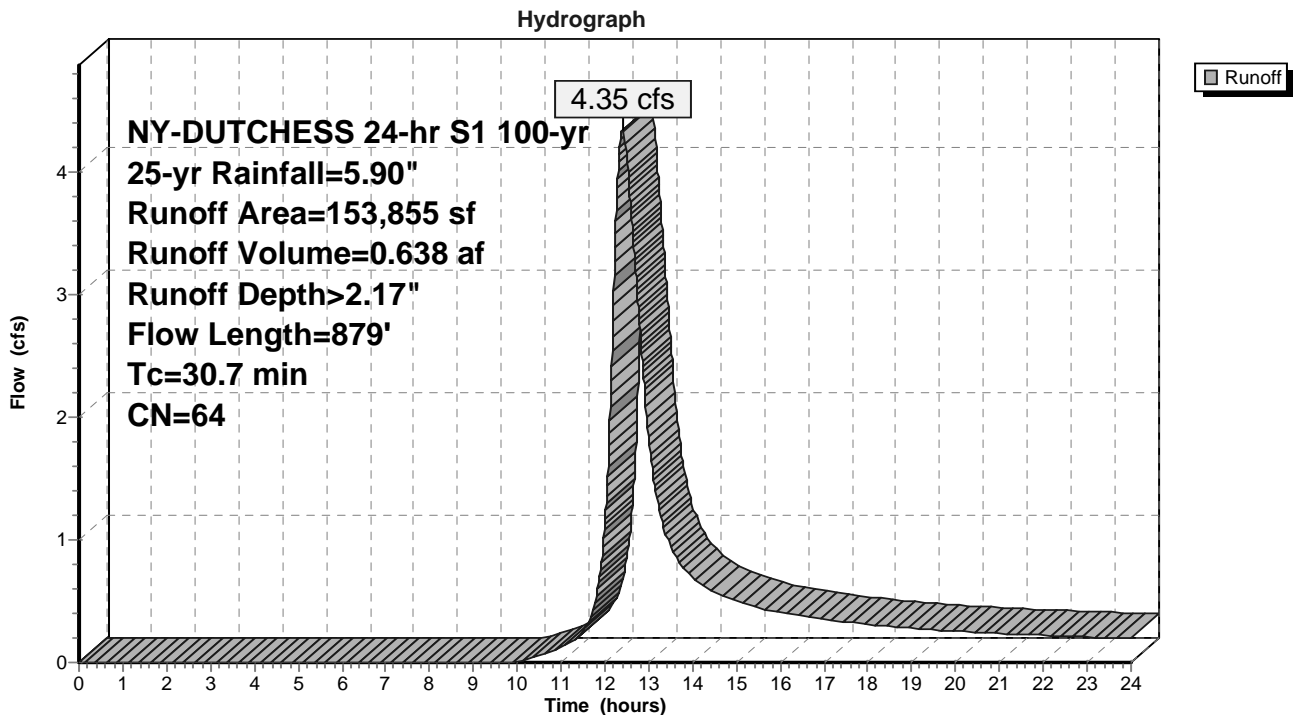
Runoff = 4.35 cfs @ 12.39 hrs, Volume= 0.638 af, Depth> 2.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Area (sf)	CN	Description
55,975	36	Woods, Fair, HSG A
75,670	79	Woods, Fair, HSG D
22,210	80	>75% Grass cover, Good, HSG D
153,855	64	Weighted Average
153,855		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	100	0.0100	0.06		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
2.8	329	0.1500	1.94		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.8	450	0.0140	9.23	29.00	<b>Pipe Channel, Reach C- DP#1</b> 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.012 Concrete pipe, finished
30.7	879	Total			

**Subcatchment 9S: Pre-Development**





# The View - Hydrology Calculations

Prepared by M.A. Day Engineering, PC

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Printed 1/22/2016

Page 7

## Summary for Subcatchment 9S: Pre-Development

Runoff = 8.34 cfs @ 12.38 hrs, Volume= 1.181 af, Depth> 4.01"

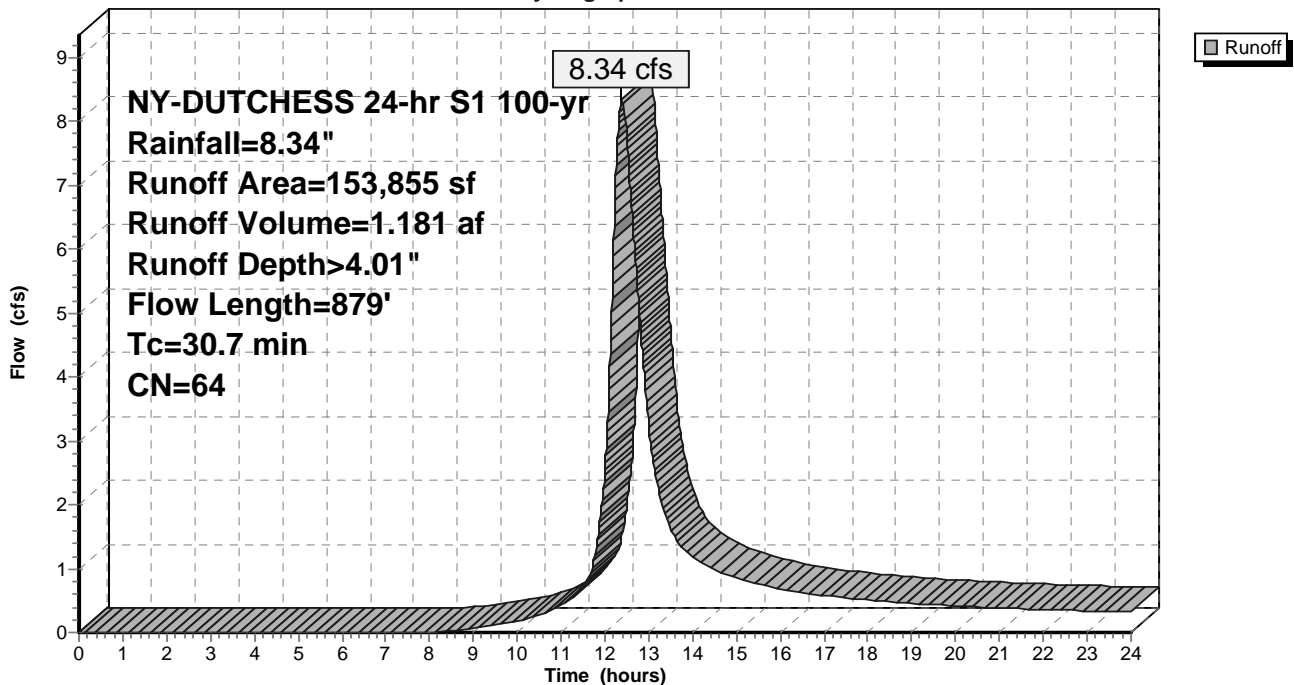
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Area (sf)	CN	Description
55,975	36	Woods, Fair, HSG A
75,670	79	Woods, Fair, HSG D
22,210	80	>75% Grass cover, Good, HSG D
153,855	64	Weighted Average
153,855		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	100	0.0100	0.06		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
2.8	329	0.1500	1.94		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.8	450	0.0140	9.23	29.00	<b>Pipe Channel, Reach C- DP#1</b> 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.012 Concrete pipe, finished
30.7	879	Total			

## Subcatchment 9S: Pre-Development

Hydrograph

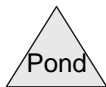
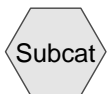
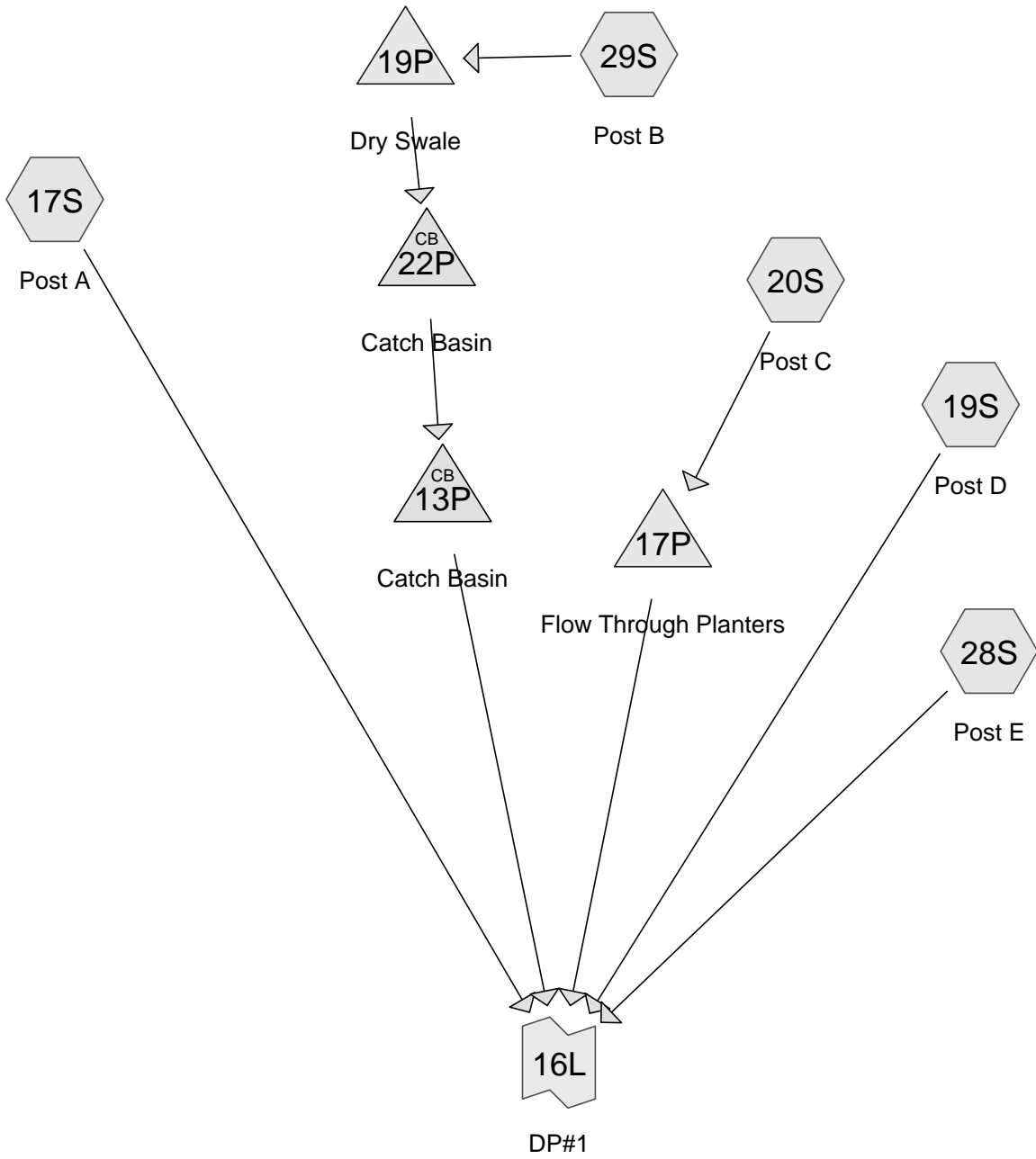




# Appendix B

## Post-Development Cn, Tc Calculations & Post-Development Hydrographs & Summary





**Routing Diagram for The View - Hydrology Calculations**  
 Prepared by M.A. Day Engineering, PC, Printed 1/22/2016  
 HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

# The View - Hydrology Calculations

Prepared by M.A. Day Engineering, PC

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Printed 1/22/2016

Page 2

## Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.776	80	>75% Grass cover, Good, HSG D (19S, 20S, 28S, 29S)
0.006	98	Entrance (19S)
0.038	98	Green Roof (20S, 29S)
0.333	98	Impervious (20S)
0.083	80	Planters, Good, HSG D (20S)
0.105	98	Proposed Exterior Parking Area (17S)
0.029	98	Proposed Walkway (17S)
0.157	98	Roof (29S)
1.276	36	Woods, Fair, HSG A (17S, 29S)
0.724	79	Woods, Fair, HSG D (17S, 29S)
<b>3.527</b>	<b>67</b>	<b>TOTAL AREA</b>

**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 3

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 17S: Post A** Runoff Area=0.901 ac 14.87% Impervious Runoff Depth>0.10"  
 Flow Length=847' Tc=17.6 min CN=55 Runoff=0.01 cfs 0.008 af

**Subcatchment 19S: Post D** Runoff Area=0.136 ac 4.41% Impervious Runoff Depth>1.02"  
 Tc=6.0 min CN=81 Runoff=0.15 cfs 0.012 af

**Subcatchment 20S: Post C** Runoff Area=0.467 ac 75.37% Impervious Runoff Depth>1.97"  
 Tc=6.0 min CN=94 Runoff=1.03 cfs 0.077 af

**Subcatchment 28S: Post E** Runoff Area=0.103 ac 0.00% Impervious Runoff Depth>0.96"  
 Tc=6.0 min CN=80 Runoff=0.11 cfs 0.008 af

**Subcatchment 29S: Post B** Runoff Area=1.920 ac 9.17% Impervious Runoff Depth>0.34"  
 Flow Length=709' Tc=21.3 min CN=65 Runoff=0.26 cfs 0.054 af

**Pond 13P: Catch Basin** Peak Elev=84.32' Inflow=0.10 cfs 0.052 af  
 18.0" Round Culvert n=0.013 L=45.0' S=0.0682 '/' Outflow=0.10 cfs 0.052 af

**Pond 17P: Flow Through Planters** Peak Elev=1.79' Storage=1,184 cf Inflow=1.03 cfs 0.077 af  
 Outflow=0.10 cfs 0.076 af

**Pond 19P: Dry Swale** Peak Elev=105.31' Storage=442 cf Inflow=0.26 cfs 0.054 af  
 Outflow=0.10 cfs 0.052 af

**Pond 22P: Catch Basin** Peak Elev=94.32' Inflow=0.10 cfs 0.052 af  
 18.0" Round Culvert n=0.013 L=62.0' S=0.1402 '/' Outflow=0.10 cfs 0.052 af

**Link 16L: DP#1** Inflow=0.36 cfs 0.155 af  
 Primary=0.36 cfs 0.155 af

**Total Runoff Area = 3.527 ac Runoff Volume = 0.158 af Average Runoff Depth = 0.54"**  
**81.06% Pervious = 2.859 ac 18.94% Impervious = 0.668 ac**

**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 4

**Summary for Subcatchment 17S: Post A**

Runoff = 0.01 cfs @ 12.73 hrs, Volume= 0.008 af, Depth> 0.10"

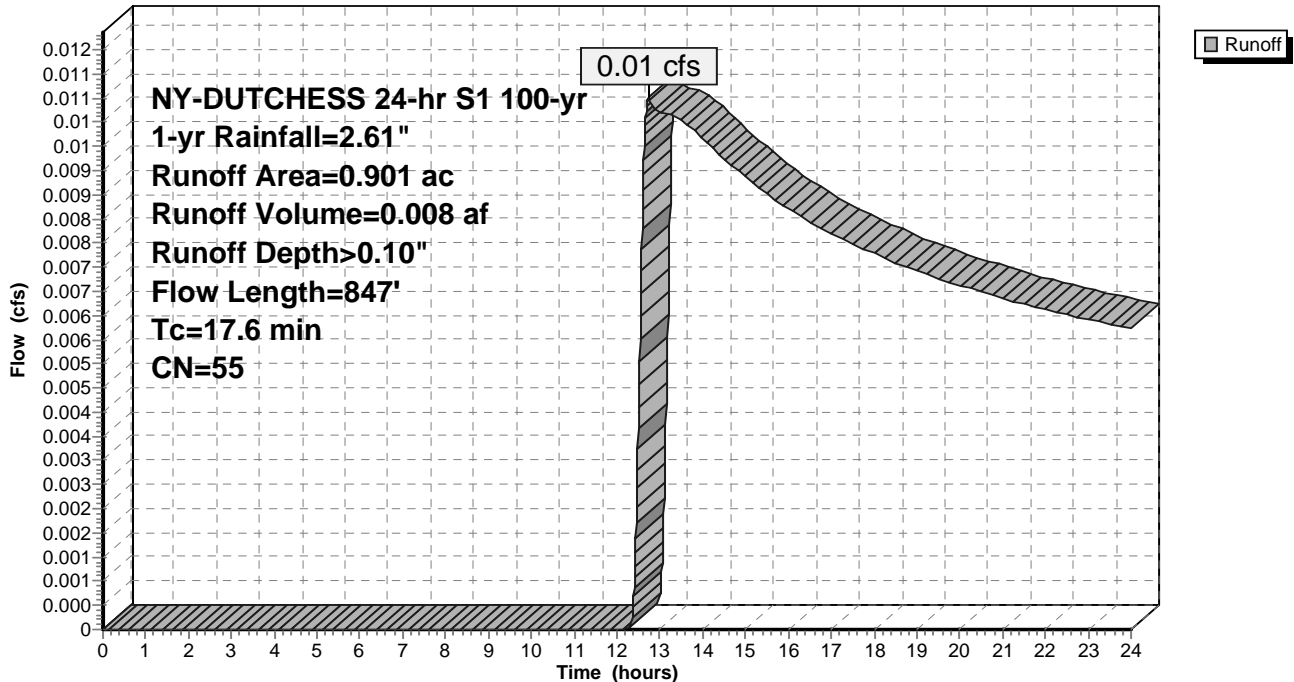
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Area (ac)	CN	Description
0.555	36	Woods, Fair, HSG A
0.212	79	Woods, Fair, HSG D
* 0.029	98	Proposed Walkway
* 0.105	98	Proposed Exterior Parking Area
0.901	55	Weighted Average
0.767		85.13% Pervious Area
0.134		14.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0500	0.12		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
2.6	297	0.1500	1.94		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.8	450	0.0140	9.23	29.00	<b>Pipe Channel, Reach C to DP#1</b> 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.012
17.6	847	Total			

**Subcatchment 17S: Post A**

Hydrograph





**Summary for Subcatchment 19S: Post D**

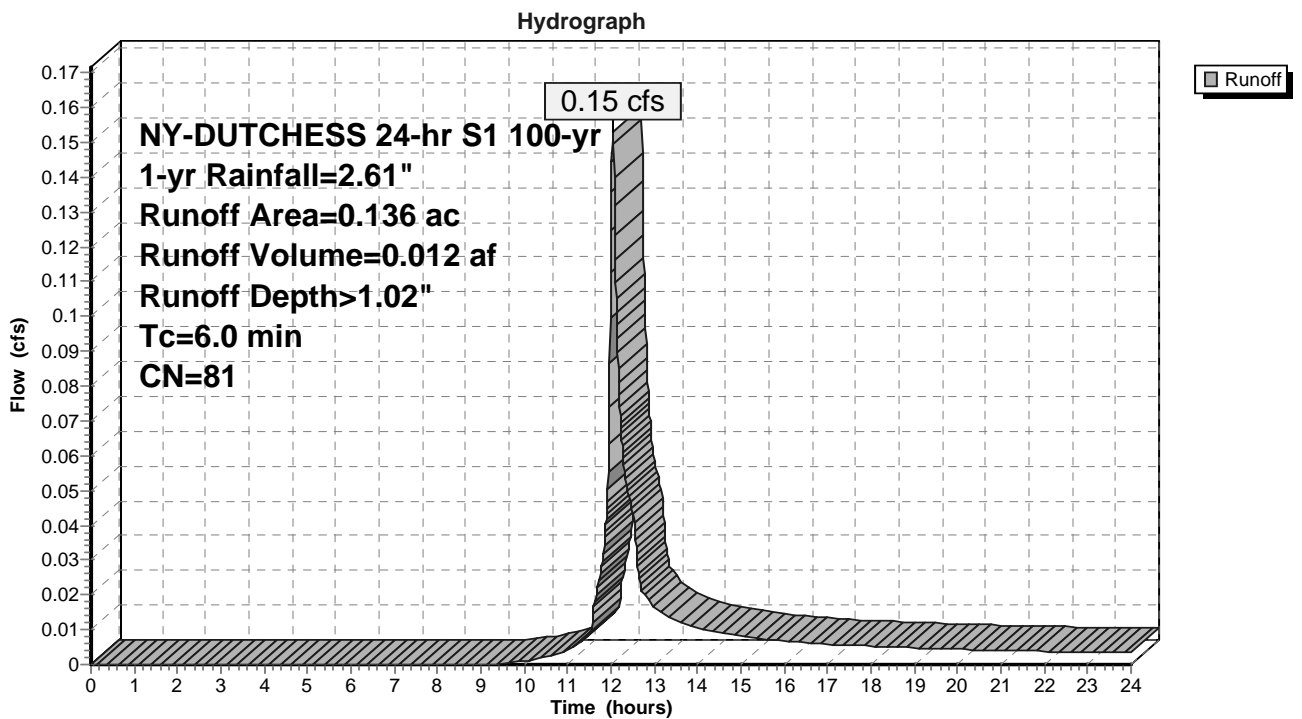
Runoff = 0.15 cfs @ 12.04 hrs, Volume= 0.012 af, Depth> 1.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Area (ac)	CN	Description
0.130	80	>75% Grass cover, Good, HSG D
* 0.006	98	Entrance
0.136	81	Weighted Average
0.130		95.59% Pervious Area
0.006		4.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum

**Subcatchment 19S: Post D**



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 6

**Summary for Subcatchment 20S: Post C**

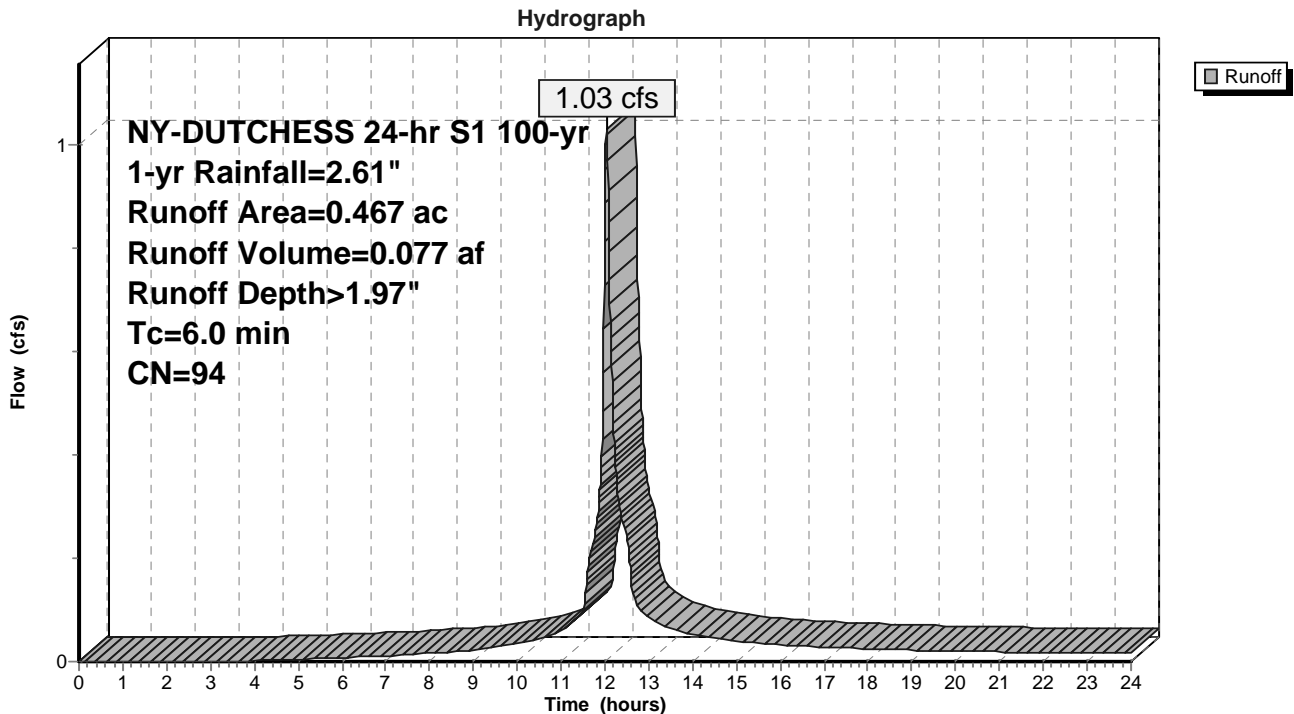
Runoff = 1.03 cfs @ 12.04 hrs, Volume= 0.077 af, Depth> 1.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Area (ac)	CN	Description
* 0.333	98	Impervious
* 0.019	98	Green Roof
* 0.083	80	Planters, Good, HSG D
0.032	80	>75% Grass cover, Good, HSG D
0.467	94	Weighted Average
0.115		24.63% Pervious Area
0.352		75.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum

**Subcatchment 20S: Post C**



**Summary for Subcatchment 28S: Post E**

Runoff = 0.11 cfs @ 12.04 hrs, Volume= 0.008 af, Depth> 0.96"

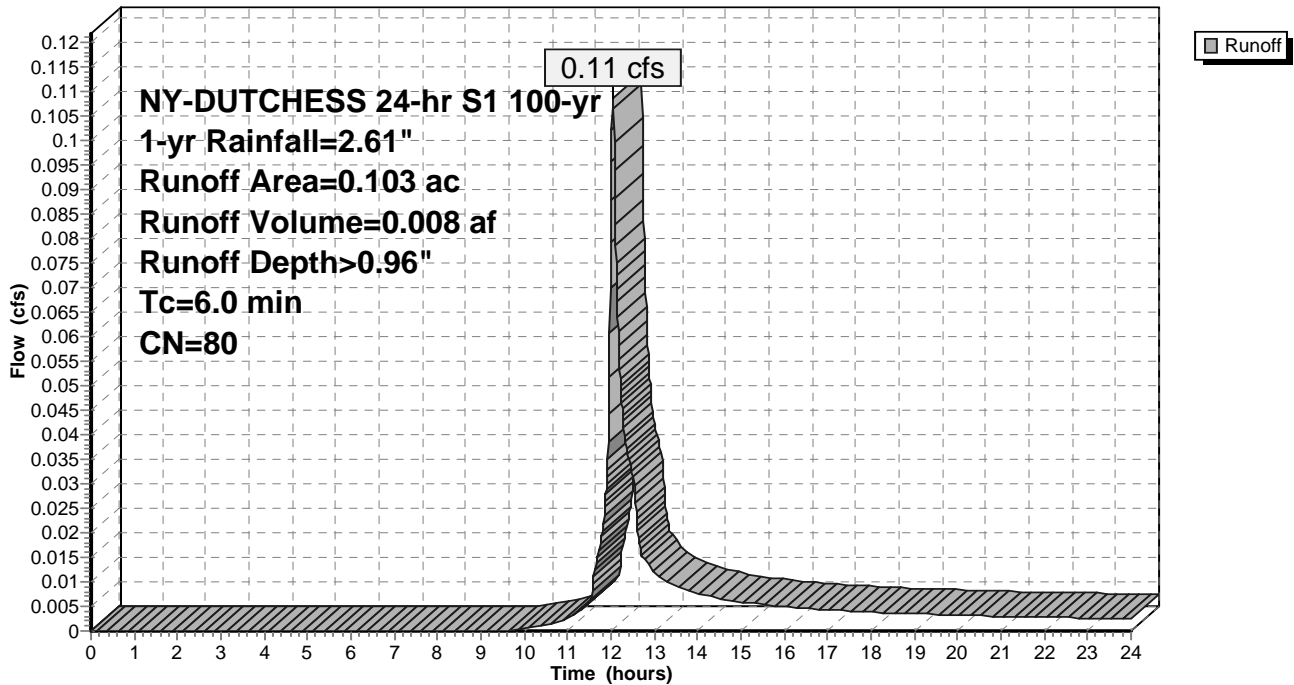
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Area (ac)	CN	Description
0.103	80	>75% Grass cover, Good, HSG D
0.103		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, min

**Subcatchment 28S: Post E**

Hydrograph



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 8

**Summary for Subcatchment 29S: Post B**

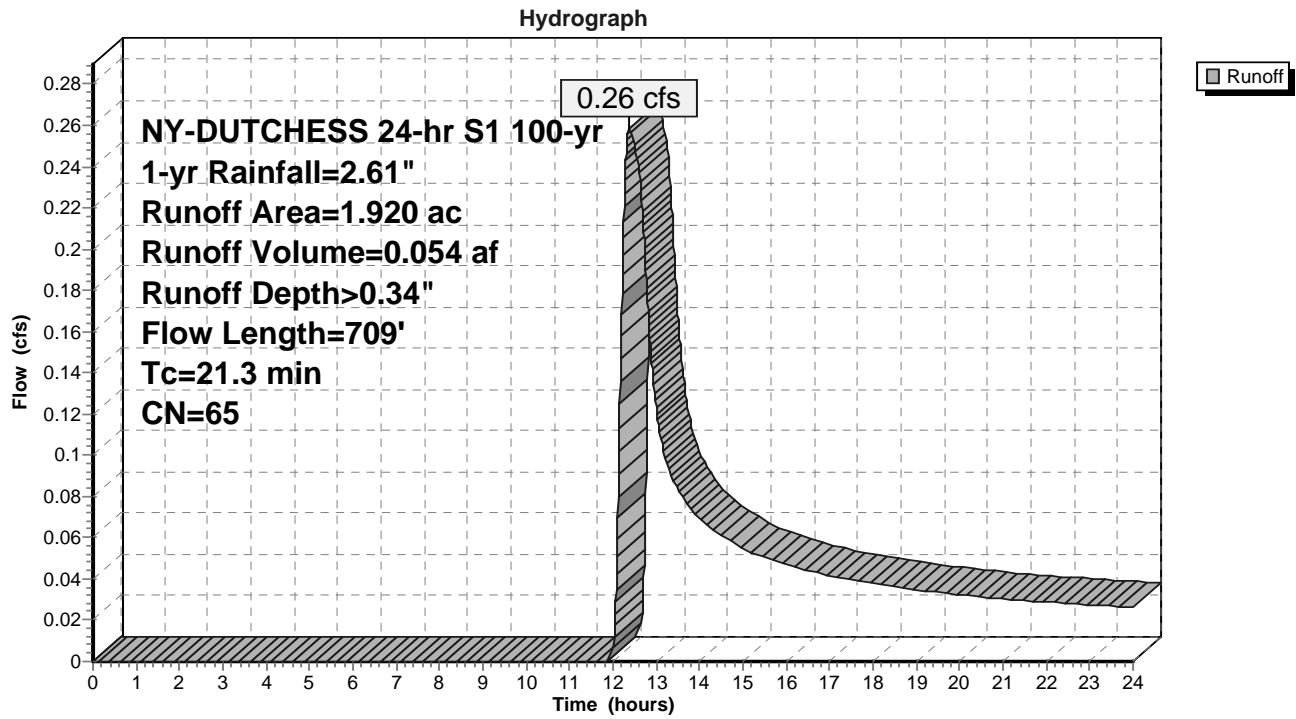
Runoff = 0.26 cfs @ 12.38 hrs, Volume= 0.054 af, Depth> 0.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Area (ac)	CN	Description
0.721	36	Woods, Fair, HSG A
0.511	80	>75% Grass cover, Good, HSG D
0.512	79	Woods, Fair, HSG D
* 0.157	98	Roof
* 0.019	98	Green Roof
1.920	65	Weighted Average
1.744		90.83% Pervious Area
0.176		9.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	100	0.0270	0.09		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
0.9	101	0.1287	1.79		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.1	28	0.1400	6.02		<b>Shallow Concentrated Flow, Reach C-D</b> Unpaved Kv= 16.1 fps
0.6	228	0.0504	6.39	9.59	<b>Parabolic Channel, Reach D-E</b> W=3.00' D=0.75' Area=1.5 sf Perim=3.4' n= 0.030 Earth, grassed & winding
1.4	86	0.0100	1.05	0.63	<b>Trap/Vee/Rect Channel Flow, Reach E-F</b> Bot.W=6.00' D=0.10' Z= 0.3 '/' Top.W=6.06' n= 0.030 Earth, grassed & winding
0.1	59	0.1000	16.65	20.43	<b>Pipe Channel, Reach F-G</b> 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
0.0	62	0.1400	22.24	39.30	<b>Pipe Channel, Reach G-H</b> 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
0.0	45	0.0700	15.73	27.79	<b>Pipe Channel, Reach H-DP#1</b> 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
21.3	709	Total			

### Subcatchment 29S: Post B



**Summary for Pond 13P: Catch Basin**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 0.32" for 1-yr event  
 Inflow = 0.10 cfs @ 13.18 hrs, Volume= 0.052 af  
 Outflow = 0.10 cfs @ 13.18 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.10 cfs @ 13.18 hrs, Volume= 0.052 af

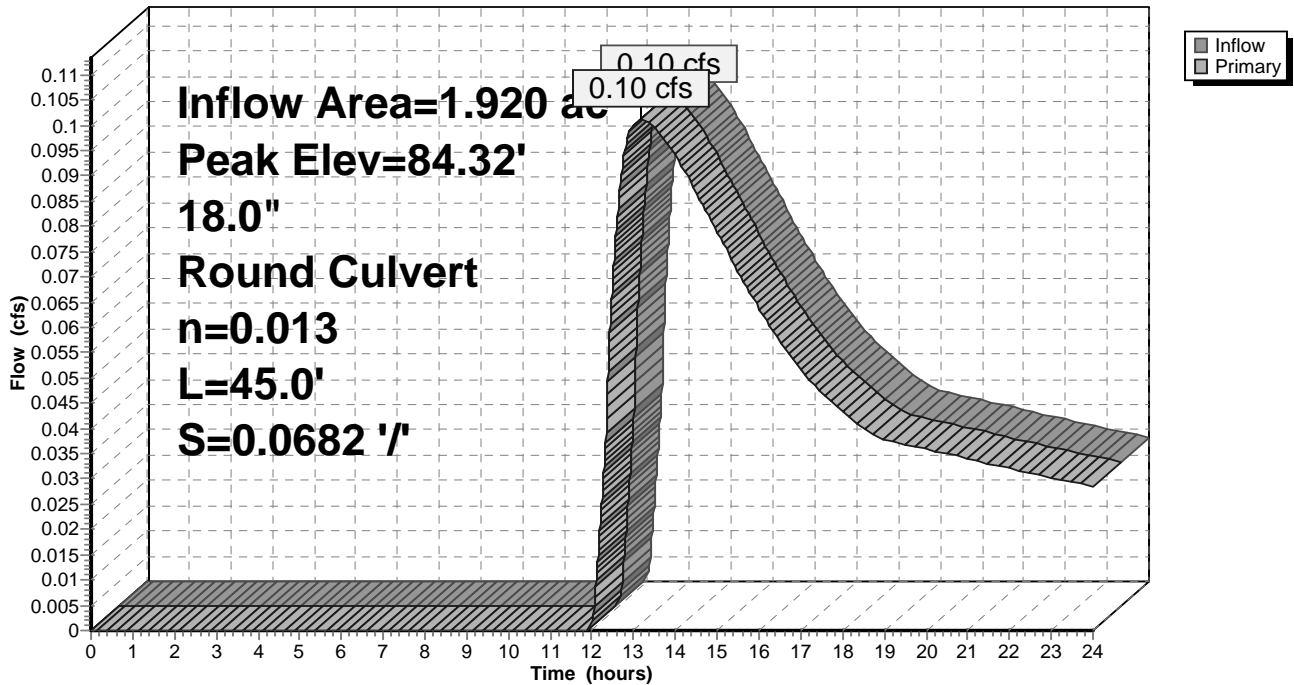
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 84.32' @ 13.18 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	84.17'	<b>18.0" Round CMP_Round 18"</b> L= 45.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 84.17' / 81.10' S= 0.0682 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=0.10 cfs @ 13.18 hrs HW=84.32' (Free Discharge)  
 ↳=CMP\_Round 18" (Inlet Controls 0.10 cfs @ 1.06 fps)

**Pond 13P: Catch Basin**

Hydrograph



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 1-yr Rainfall=2.61"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 11

**Summary for Pond 17P: Flow Through Planters**

Inflow Area = 0.467 ac, 75.37% Impervious, Inflow Depth > 1.97" for 1-yr event  
 Inflow = 1.03 cfs @ 12.04 hrs, Volume= 0.077 af  
 Outflow = 0.10 cfs @ 11.64 hrs, Volume= 0.076 af, Atten= 90%, Lag= 0.0 min  
 Primary = 0.10 cfs @ 11.64 hrs, Volume= 0.076 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 3  
 Peak Elev= 1.79' @ 12.84 hrs Surf.Area= 2,121 sf Storage= 1,184 cf

Plug-Flow detention time= 96.8 min calculated for 0.076 af (99% of inflow)  
 Center-of-Mass det. time= 89.8 min ( 892.4 - 802.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	2,121 cf	<b>Ponding (Prismatic)</b> Listed below (Recalc) 7,424 cf Overall - 5,303 cf Embedded = 2,121 cf
#2	0.00'	848 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) Inside #1 2,121 cf Overall x 40.0% Voids
#3	1.00'	636 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) Inside #1 3,182 cf Overall x 20.0% Voids
		3,606 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	2,121	0	0
3.50	2,121	7,424	7,424

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	2,121	0	0
1.00	2,121	2,121	2,121

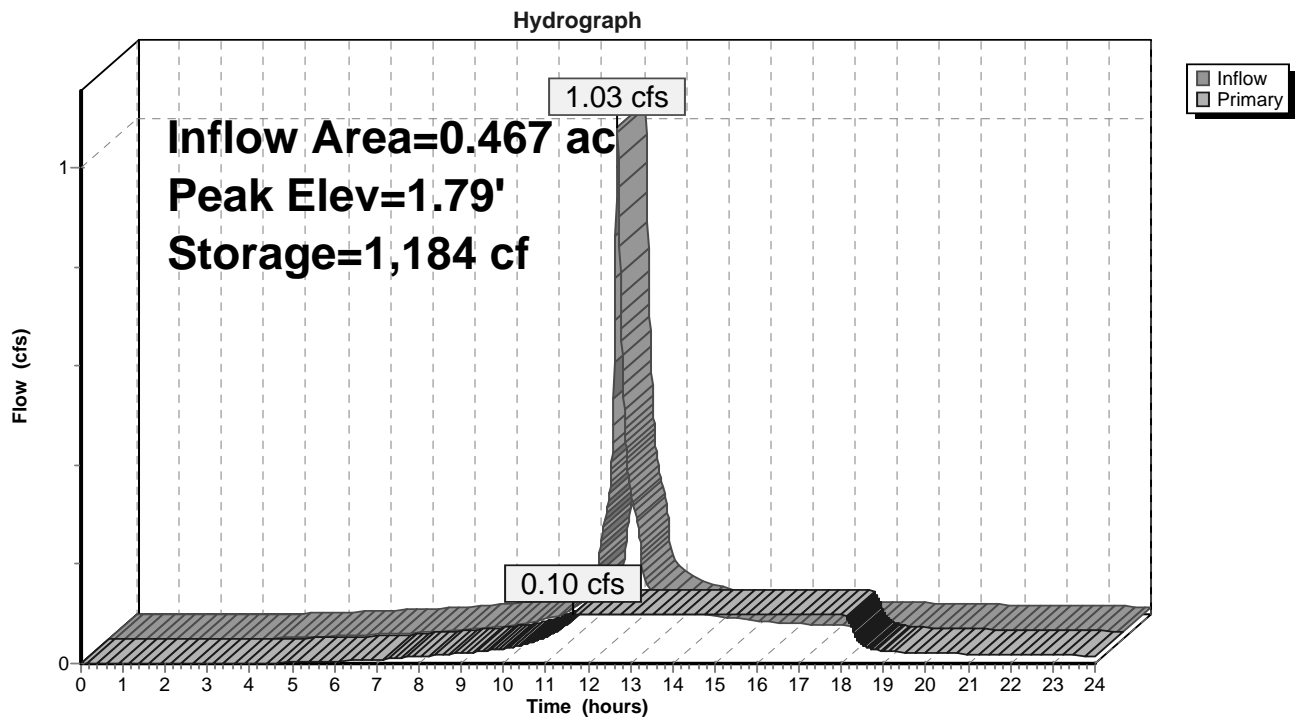
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1.00	2,121	0	0
2.50	2,121	3,182	3,182

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	<b>8.0" Vert. Orifice/Grate X 2.00</b> C= 0.600
#2	Device 1	0.00'	<b>2.000 in/hr Exfiltration (Growing Layer) over Surface area</b>
#3	Device 1	3.30'	<b>6.0" Horiz. Orifice/Grate X 6.00</b> C= 0.600
#4	Primary	3.48'	<b>350.0' long (Profile 18) Broad-Crested Rectangular Weir</b> Head (feet) 0.49 0.98 1.48 1.97 2.46 2.95 3.94 Coef. (English) 2.61 2.64 2.81 2.83 3.06 3.19 3.33

**Primary OutFlow** Max=0.10 cfs @ 11.64 hrs HW=0.14' (Free Discharge)

- 1=Orifice/Grate (Passes 0.10 cfs of 0.14 cfs potential flow)
- 2=Exfiltration (Growing Layer) (Exfiltration Controls 0.10 cfs)
- 3=Orifice/Grate ( Controls 0.00 cfs)
- 4=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

### Pond 17P: Flow Through Planters





**Summary for Pond 19P: Dry Swale**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 0.34" for 1-yr event  
 Inflow = 0.26 cfs @ 12.38 hrs, Volume= 0.054 af  
 Outflow = 0.10 cfs @ 13.18 hrs, Volume= 0.052 af, Atten= 61%, Lag= 48.1 min  
 Primary = 0.10 cfs @ 13.18 hrs, Volume= 0.052 af

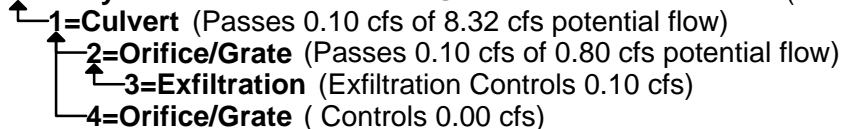
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 105.31' @ 13.18 hrs Surf.Area= 1,458 sf Storage= 442 cf

Plug-Flow detention time= 60.5 min calculated for 0.052 af (97% of inflow)  
 Center-of-Mass det. time= 44.7 min ( 1,005.1 - 960.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	104.50'	6,636 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
104.50	3	0	0
105.00	540	136	136
106.00	3,536	2,038	2,174
107.00	5,389	4,463	6,636

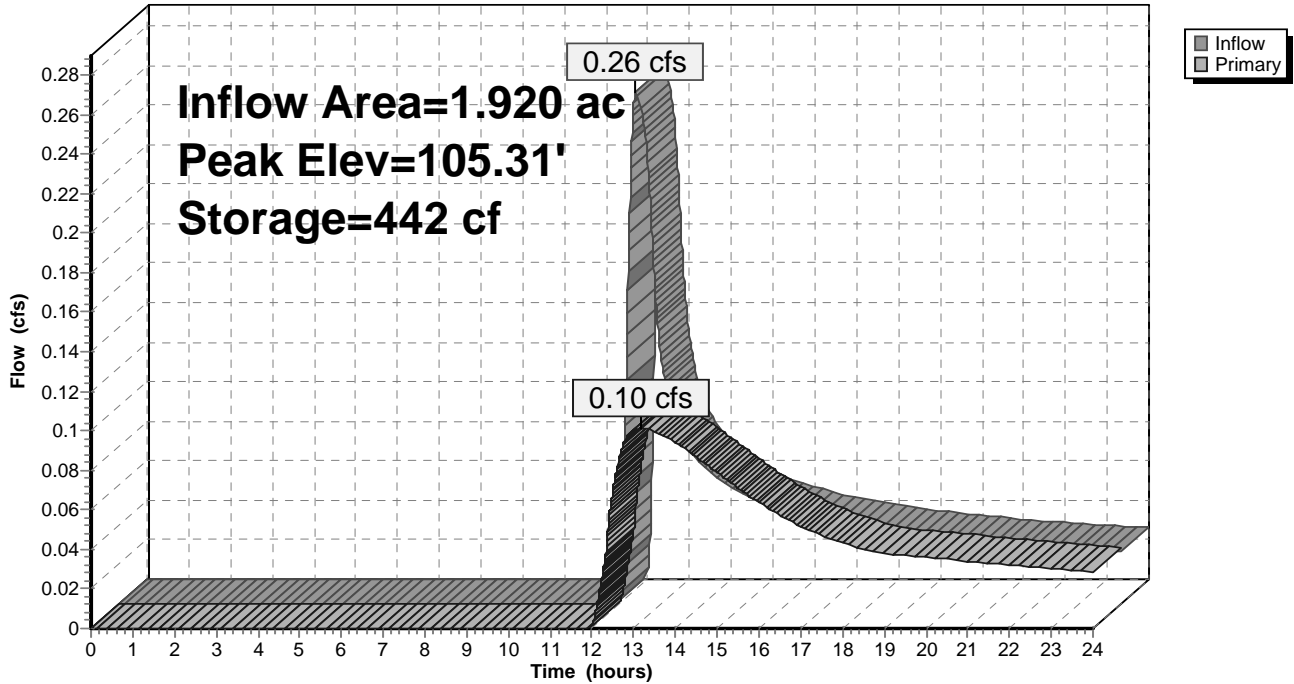
Device	Routing	Invert	Outlet Devices
#1	Primary	101.50'	<b>15.0" Round Culvert</b> L= 58.5' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 101.50' / 95.50' S= 0.1026 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Device 1	101.50'	<b>4.0" Vert. Orifice/Grate</b> C= 0.600
#3	Device 2	104.50'	<b>3.000 in/hr Exfiltration over Surface area</b>
#4	Device 1	106.67'	<b>2.0" x 2.0" Horiz. Orifice/Grate X 9.00 columns</b> X 9 rows C= 0.600 in 24.0" x 24.0" Grate (56% open area) Limited to weir flow at low heads

**Primary OutFlow** Max=0.10 cfs @ 13.18 hrs HW=105.31' (Free Discharge)



### Pond 19P: Dry Swale

Hydrograph



**Summary for Pond 22P: Catch Basin**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 0.32" for 1-yr event  
 Inflow = 0.10 cfs @ 13.18 hrs, Volume= 0.052 af  
 Outflow = 0.10 cfs @ 13.18 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.10 cfs @ 13.18 hrs, Volume= 0.052 af

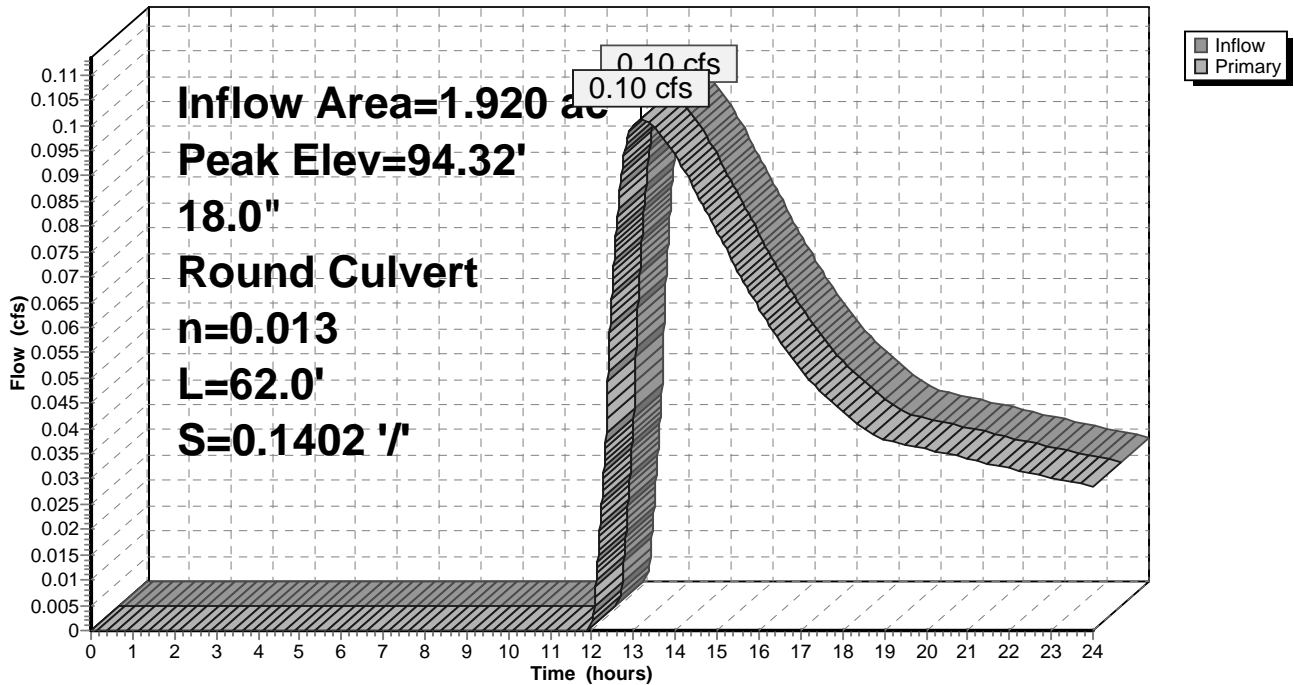
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 94.32' @ 13.18 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	94.17'	<b>18.0" Round Culvert</b> L= 62.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 94.17' / 85.48' S= 0.1402 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=0.10 cfs @ 13.18 hrs HW=94.32' (Free Discharge)  
 ←**1=Culvert** (Inlet Controls 0.10 cfs @ 1.06 fps)

**Pond 22P: Catch Basin**

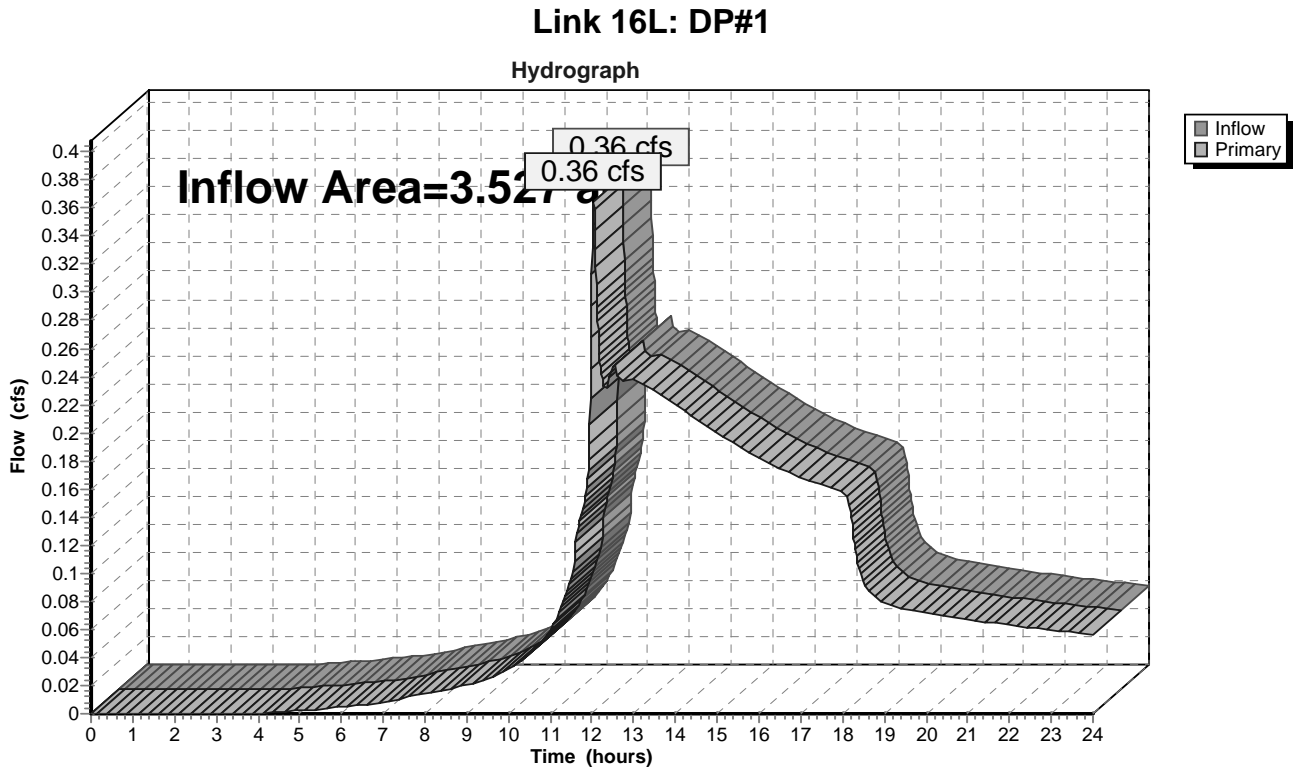
Hydrograph



### Summary for Link 16L: DP#1

Inflow Area = 3.527 ac, 18.94% Impervious, Inflow Depth > 0.53" for 1-yr event  
Inflow = 0.36 cfs @ 12.04 hrs, Volume= 0.155 af  
Primary = 0.36 cfs @ 12.04 hrs, Volume= 0.155 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 17

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 17S: Post A</b>	Runoff Area=0.901 ac 14.87% Impervious Runoff Depth>0.24" Flow Length=847' Tc=17.6 min CN=55 Runoff=0.06 cfs 0.018 af
<b>Subcatchment 19S: Post D</b>	Runoff Area=0.136 ac 4.41% Impervious Runoff Depth>1.43" Tc=6.0 min CN=81 Runoff=0.22 cfs 0.016 af
<b>Subcatchment 20S: Post C</b>	Runoff Area=0.467 ac 75.37% Impervious Runoff Depth>2.50" Tc=6.0 min CN=94 Runoff=1.29 cfs 0.097 af
<b>Subcatchment 28S: Post E</b>	Runoff Area=0.103 ac 0.00% Impervious Runoff Depth>1.37" Tc=6.0 min CN=80 Runoff=0.16 cfs 0.012 af
<b>Subcatchment 29S: Post B</b>	Runoff Area=1.920 ac 9.17% Impervious Runoff Depth>0.57" Flow Length=709' Tc=21.3 min CN=65 Runoff=0.57 cfs 0.092 af
<b>Pond 13P: Catch Basin</b>	Peak Elev=84.37' Inflow=0.16 cfs 0.089 af 18.0" Round Culvert n=0.013 L=45.0' S=0.0682 '/' Outflow=0.16 cfs 0.089 af
<b>Pond 17P: Flow Through Planters</b>	Peak Elev=2.56' Storage=1,610 cf Inflow=1.29 cfs 0.097 af Outflow=0.10 cfs 0.096 af
<b>Pond 19P: Dry Swale</b>	Peak Elev=105.61' Storage=1,014 cf Inflow=0.57 cfs 0.092 af Outflow=0.16 cfs 0.089 af
<b>Pond 22P: Catch Basin</b>	Peak Elev=94.37' Inflow=0.16 cfs 0.089 af 18.0" Round Culvert n=0.013 L=62.0' S=0.1402 '/' Outflow=0.16 cfs 0.089 af
<b>Link 16L: DP#1</b>	Inflow=0.49 cfs 0.231 af Primary=0.49 cfs 0.231 af

**Total Runoff Area = 3.527 ac Runoff Volume = 0.235 af Average Runoff Depth = 0.80"**  
**81.06% Pervious = 2.859 ac 18.94% Impervious = 0.668 ac**

**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 18

**Summary for Subcatchment 17S: Post A**

Runoff = 0.06 cfs @ 12.59 hrs, Volume= 0.018 af, Depth> 0.24"

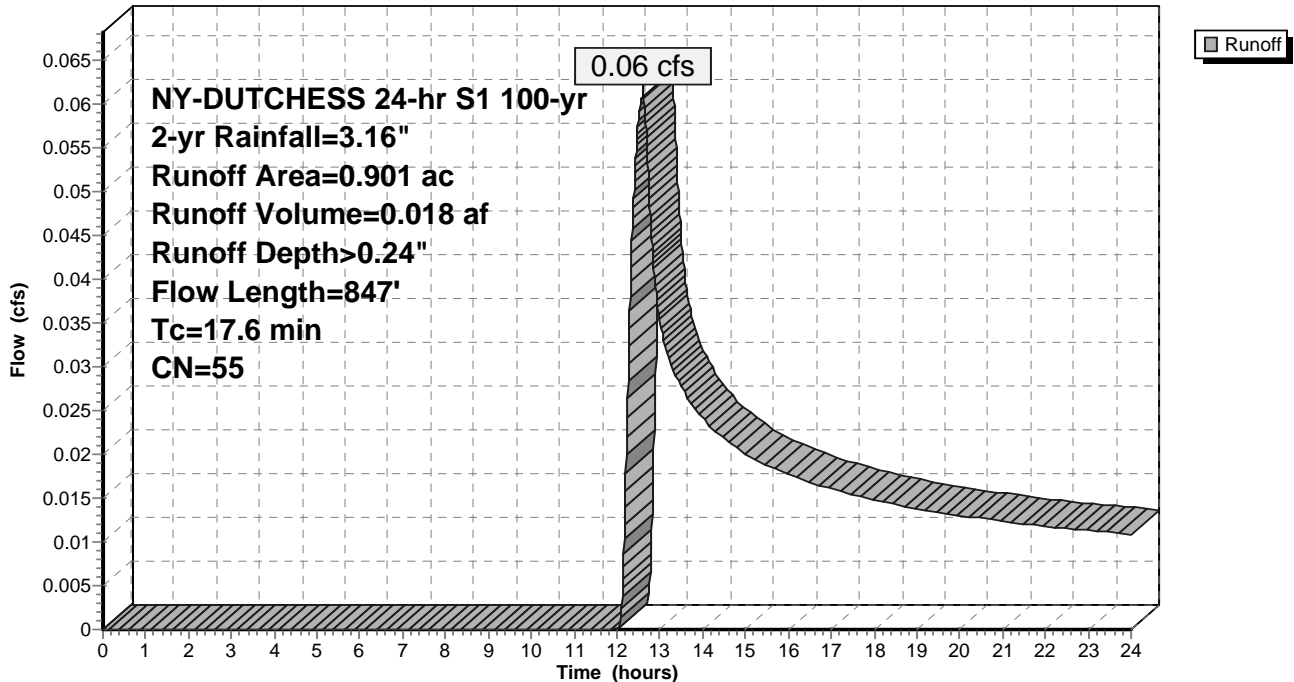
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Area (ac)	CN	Description
0.555	36	Woods, Fair, HSG A
0.212	79	Woods, Fair, HSG D
* 0.029	98	Proposed Walkway
* 0.105	98	Proposed Exterior Parking Area
0.901	55	Weighted Average
0.767		85.13% Pervious Area
0.134		14.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0500	0.12		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
2.6	297	0.1500	1.94		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.8	450	0.0140	9.23	29.00	<b>Pipe Channel, Reach C to DP#1</b> 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.012
17.6	847	Total			

**Subcatchment 17S: Post A**

Hydrograph



**Summary for Subcatchment 19S: Post D**

Runoff = 0.22 cfs @ 12.04 hrs, Volume= 0.016 af, Depth> 1.43"

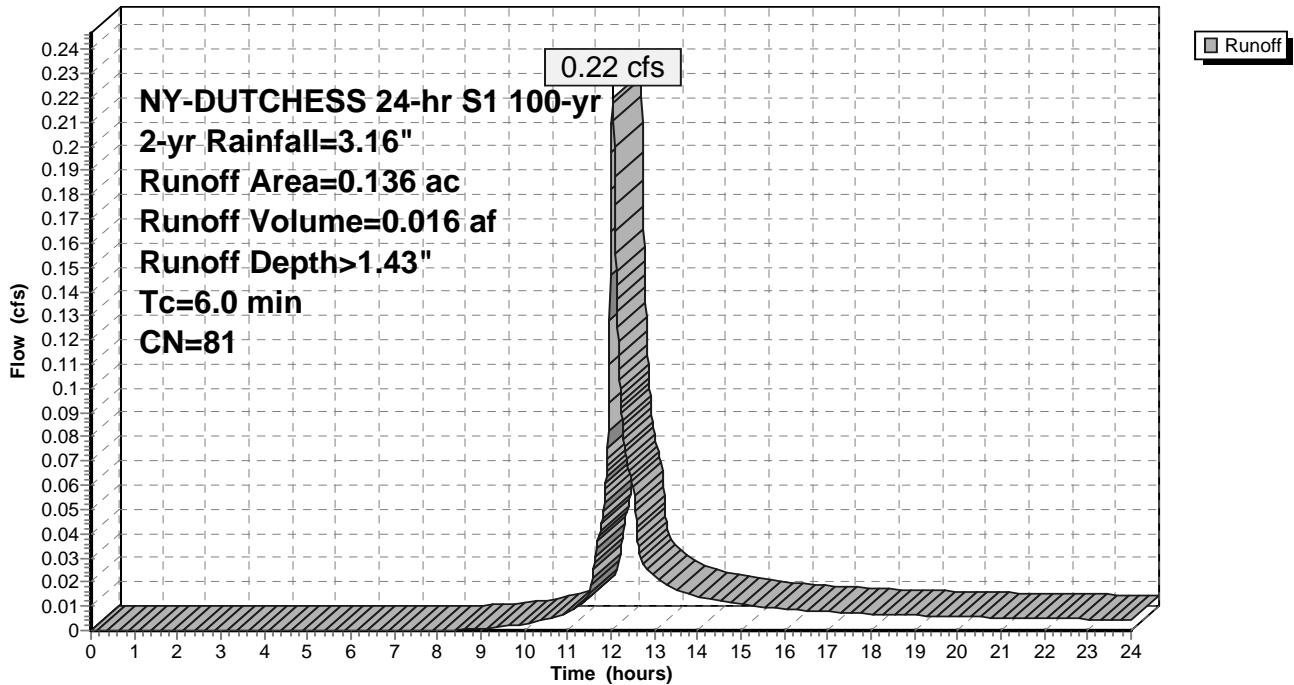
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Area (ac)	CN	Description
0.130	80	>75% Grass cover, Good, HSG D
* 0.006	98	Entrance
0.136	81	Weighted Average
0.130		95.59% Pervious Area
0.006		4.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum

**Subcatchment 19S: Post D**

Hydrograph



**Summary for Subcatchment 20S: Post C**

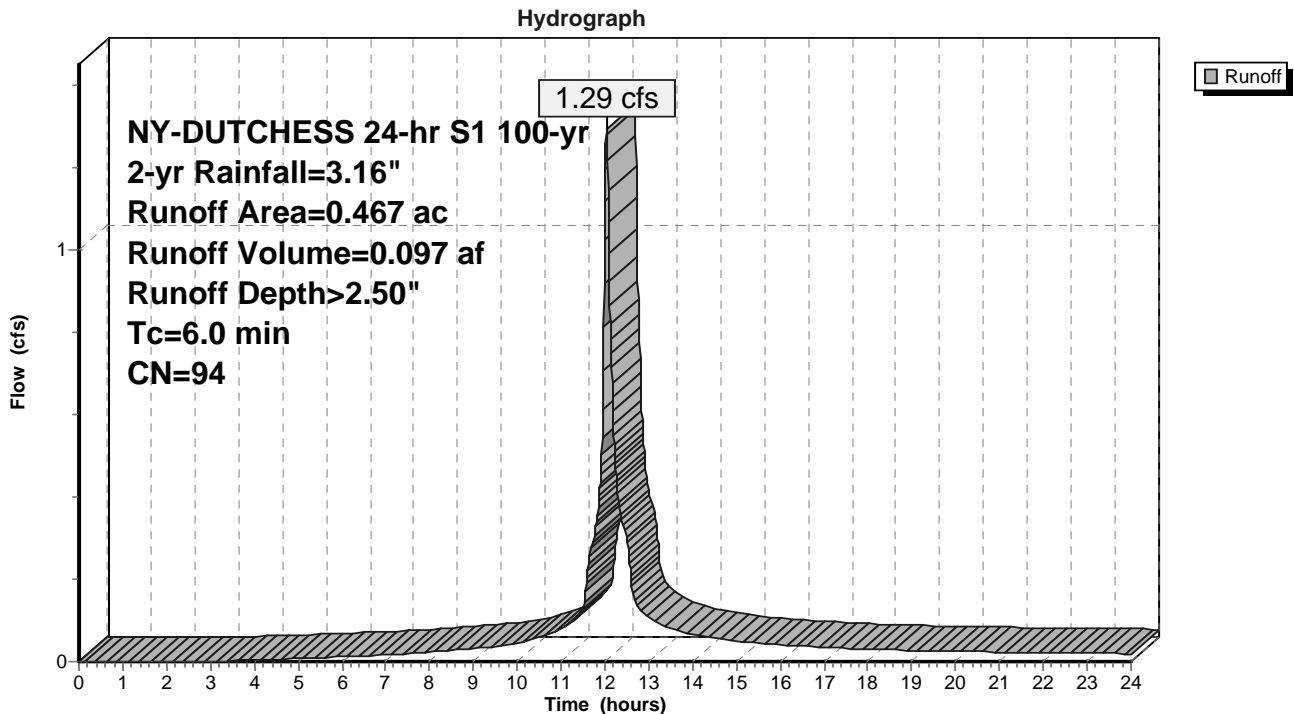
Runoff = 1.29 cfs @ 12.04 hrs, Volume= 0.097 af, Depth> 2.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Area (ac)	CN	Description
* 0.333	98	Impervious
* 0.019	98	Green Roof
* 0.083	80	Planters, Good, HSG D
0.032	80	>75% Grass cover, Good, HSG D
0.467	94	Weighted Average
0.115		24.63% Pervious Area
0.352		75.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum

**Subcatchment 20S: Post C**





**Summary for Subcatchment 28S: Post E**

Runoff = 0.16 cfs @ 12.04 hrs, Volume= 0.012 af, Depth> 1.37"

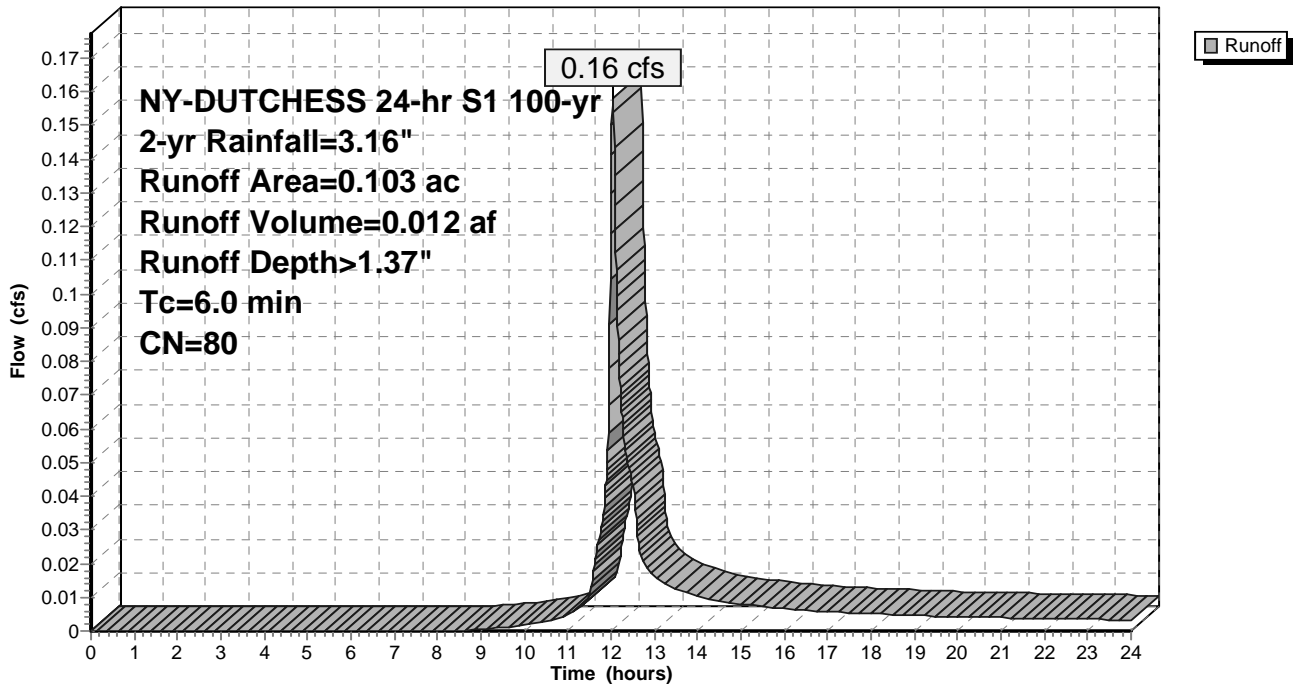
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Area (ac)	CN	Description
0.103	80	>75% Grass cover, Good, HSG D
0.103		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, min

**Subcatchment 28S: Post E**

Hydrograph



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 22

**Summary for Subcatchment 29S: Post B**

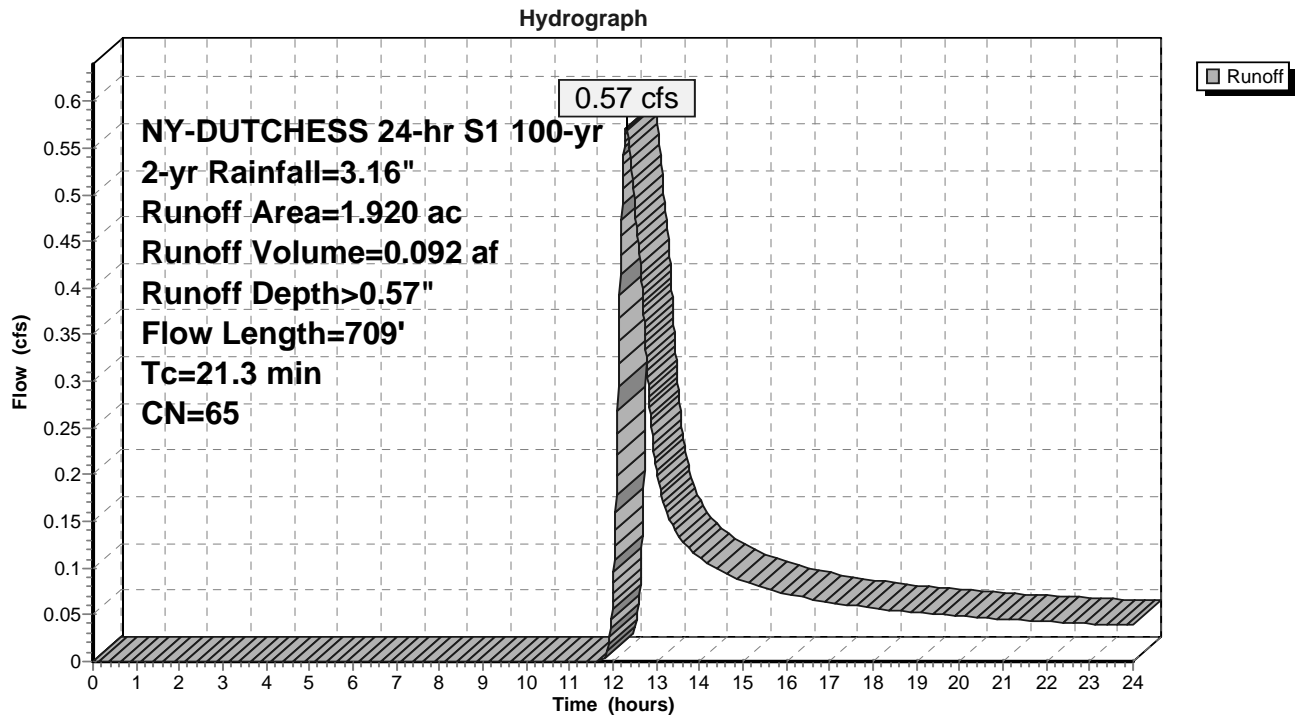
Runoff = 0.57 cfs @ 12.31 hrs, Volume= 0.092 af, Depth> 0.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Area (ac)	CN	Description
0.721	36	Woods, Fair, HSG A
0.511	80	>75% Grass cover, Good, HSG D
0.512	79	Woods, Fair, HSG D
* 0.157	98	Roof
* 0.019	98	Green Roof
1.920	65	Weighted Average
1.744		90.83% Pervious Area
0.176		9.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	100	0.0270	0.09		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
0.9	101	0.1287	1.79		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.1	28	0.1400	6.02		<b>Shallow Concentrated Flow, Reach C-D</b> Unpaved Kv= 16.1 fps
0.6	228	0.0504	6.39	9.59	<b>Parabolic Channel, Reach D-E</b> W=3.00' D=0.75' Area=1.5 sf Perim=3.4' n= 0.030 Earth, grassed & winding
1.4	86	0.0100	1.05	0.63	<b>Trap/Vee/Rect Channel Flow, Reach E-F</b> Bot.W=6.00' D=0.10' Z= 0.3 '/' Top.W=6.06' n= 0.030 Earth, grassed & winding
0.1	59	0.1000	16.65	20.43	<b>Pipe Channel, Reach F-G</b> 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
0.0	62	0.1400	22.24	39.30	<b>Pipe Channel, Reach G-H</b> 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
0.0	45	0.0700	15.73	27.79	<b>Pipe Channel, Reach H-DP#1</b> 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
21.3	709	Total			

### Subcatchment 29S: Post B



**Summary for Pond 13P: Catch Basin**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 0.55" for 2-yr event  
 Inflow = 0.16 cfs @ 13.21 hrs, Volume= 0.089 af  
 Outflow = 0.16 cfs @ 13.21 hrs, Volume= 0.089 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.16 cfs @ 13.21 hrs, Volume= 0.089 af

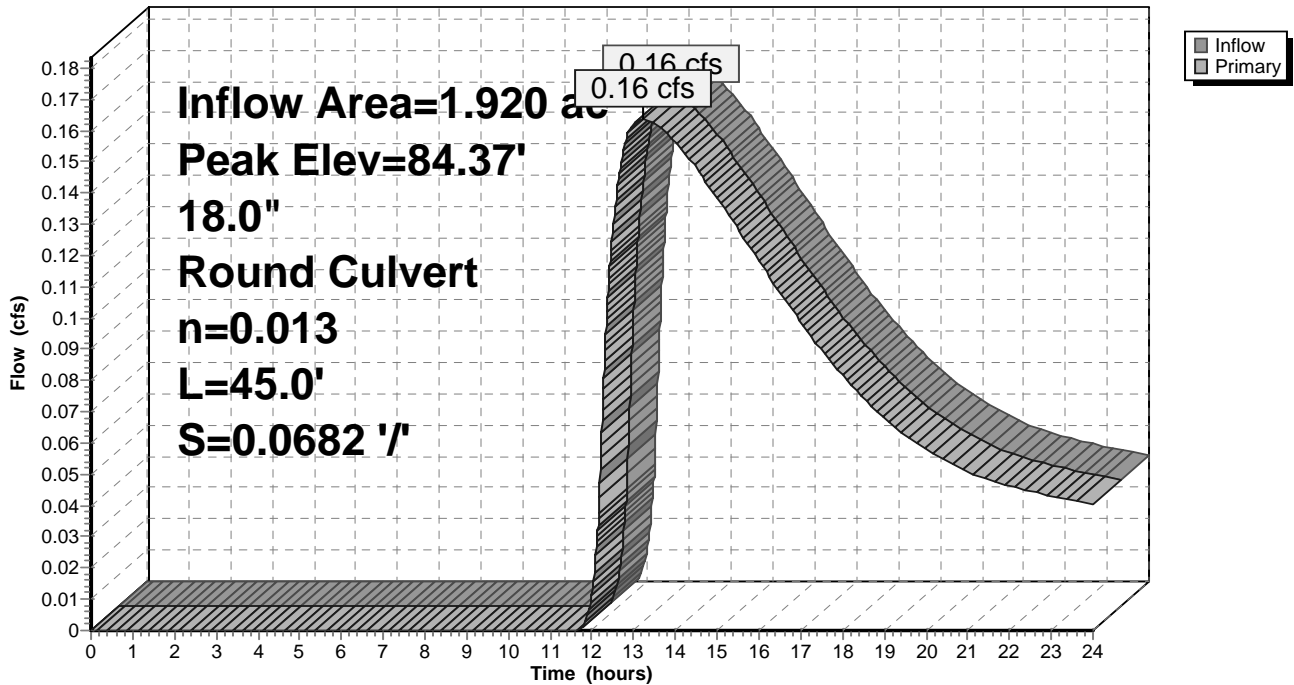
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 84.37' @ 13.21 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	84.17'	<b>18.0" Round CMP_Round 18"</b> L= 45.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 84.17' / 81.10' S= 0.0682 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=0.16 cfs @ 13.21 hrs HW=84.37' (Free Discharge)  
 ↳=CMP\_Round 18" (Inlet Controls 0.16 cfs @ 1.19 fps)

**Pond 13P: Catch Basin**

Hydrograph



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 25

**Summary for Pond 17P: Flow Through Planters**

Inflow Area = 0.467 ac, 75.37% Impervious, Inflow Depth > 2.50" for 2-yr event  
 Inflow = 1.29 cfs @ 12.04 hrs, Volume= 0.097 af  
 Outflow = 0.10 cfs @ 11.53 hrs, Volume= 0.096 af, Atten= 92%, Lag= 0.0 min  
 Primary = 0.10 cfs @ 11.53 hrs, Volume= 0.096 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 3  
 Peak Elev= 2.56' @ 13.12 hrs Surf.Area= 2,121 sf Storage= 1,610 cf

Plug-Flow detention time= 134.2 min calculated for 0.096 af (99% of inflow)  
 Center-of-Mass det. time= 128.0 min ( 922.7 - 794.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	2,121 cf	<b>Ponding (Prismatic)</b> Listed below (Recalc) 7,424 cf Overall - 5,303 cf Embedded = 2,121 cf
#2	0.00'	848 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) Inside #1 2,121 cf Overall x 40.0% Voids
#3	1.00'	636 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) Inside #1 3,182 cf Overall x 20.0% Voids
		3,606 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	2,121	0	0
3.50	2,121	7,424	7,424

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	2,121	0	0
1.00	2,121	2,121	2,121

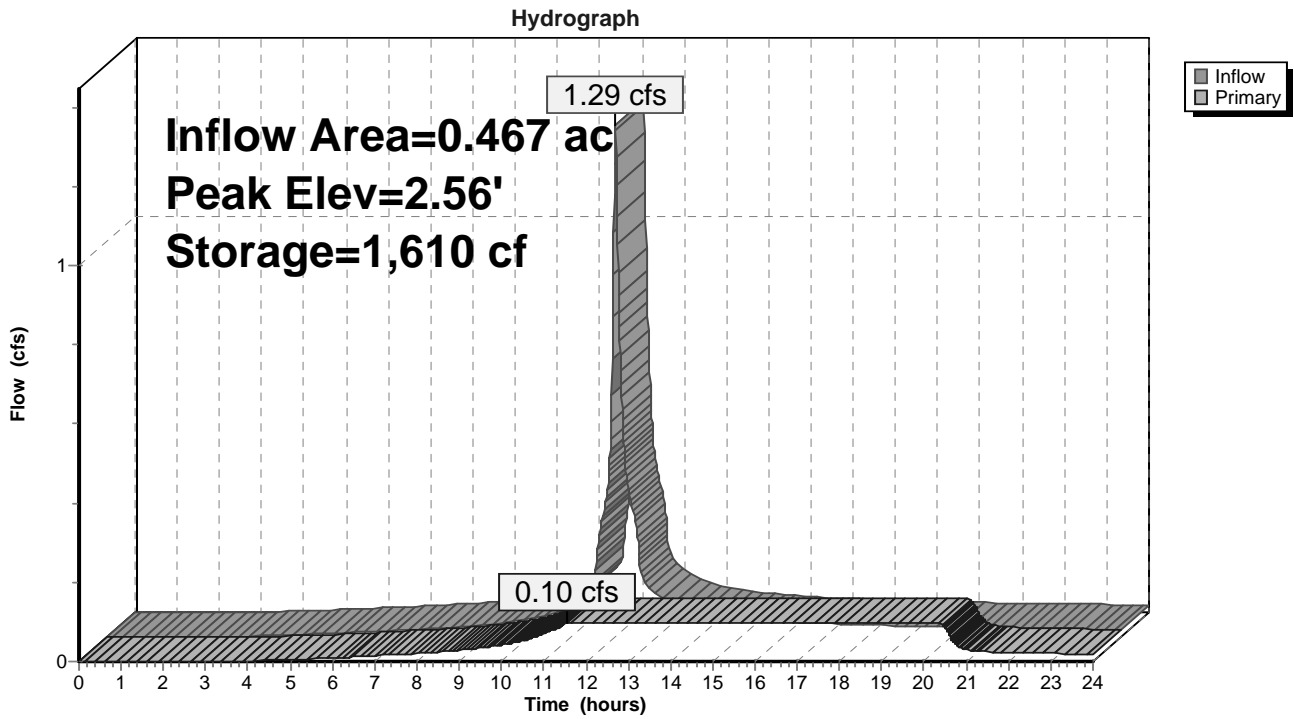
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1.00	2,121	0	0
2.50	2,121	3,182	3,182

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	<b>8.0" Vert. Orifice/Grate X 2.00</b> C= 0.600
#2	Device 1	0.00'	<b>2.000 in/hr Exfiltration (Growing Layer) over Surface area</b>
#3	Device 1	3.30'	<b>6.0" Horiz. Orifice/Grate X 6.00</b> C= 0.600
#4	Primary	3.48'	<b>350.0' long (Profile 18) Broad-Crested Rectangular Weir</b> Head (feet) 0.49 0.98 1.48 1.97 2.46 2.95 3.94 Coef. (English) 2.61 2.64 2.81 2.83 3.06 3.19 3.33

**Primary OutFlow** Max=0.10 cfs @ 11.53 hrs HW=0.14' (Free Discharge)

- 1=Orifice/Grate (Passes 0.10 cfs of 0.14 cfs potential flow)
- 2=Exfiltration (Growing Layer) (Exfiltration Controls 0.10 cfs)
- 3=Orifice/Grate ( Controls 0.00 cfs)
- 4=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

### Pond 17P: Flow Through Planters



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 2-yr Rainfall=3.16"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 27

**Summary for Pond 19P: Dry Swale**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 0.57" for 2-yr event  
 Inflow = 0.57 cfs @ 12.31 hrs, Volume= 0.092 af  
 Outflow = 0.16 cfs @ 13.21 hrs, Volume= 0.089 af, Atten= 71%, Lag= 53.9 min  
 Primary = 0.16 cfs @ 13.21 hrs, Volume= 0.089 af

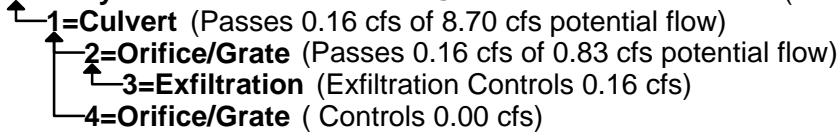
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 105.61' @ 13.21 hrs Surf.Area= 2,357 sf Storage= 1,014 cf

Plug-Flow detention time= 78.1 min calculated for 0.089 af (96% of inflow)  
 Center-of-Mass det. time= 60.4 min ( 995.4 - 934.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	104.50'	6,636 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
104.50	3	0	0
105.00	540	136	136
106.00	3,536	2,038	2,174
107.00	5,389	4,463	6,636

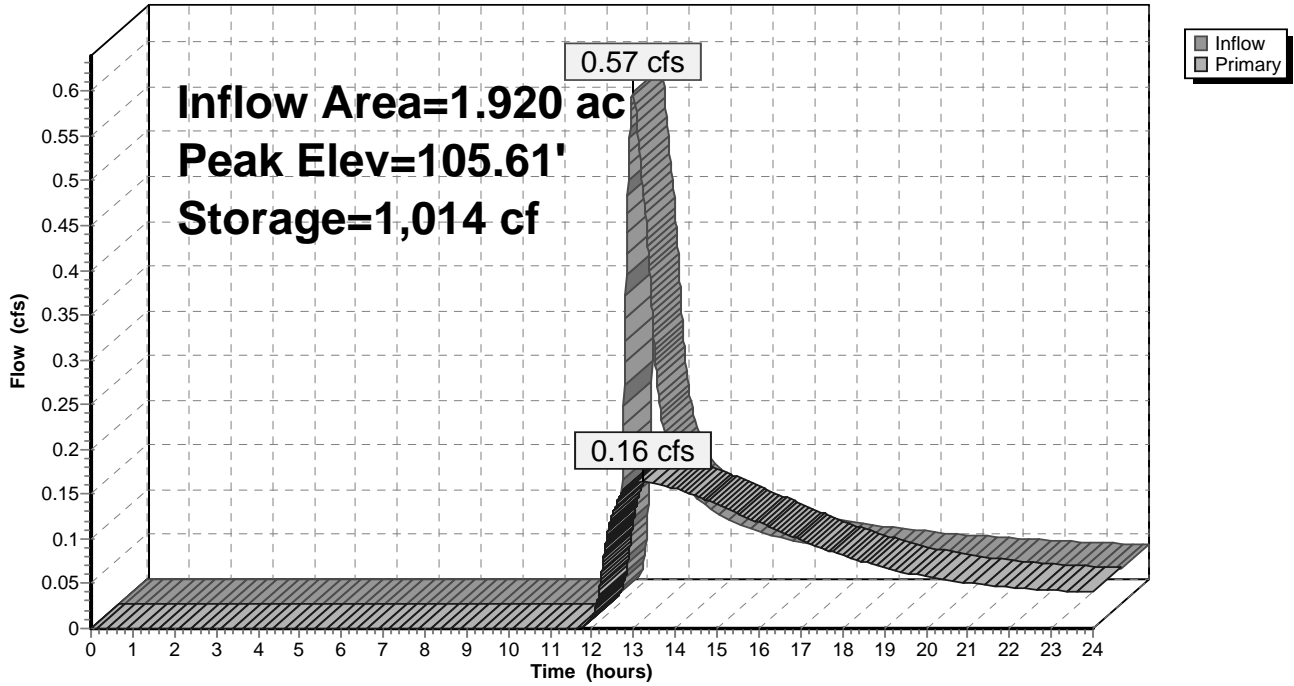
Device	Routing	Invert	Outlet Devices
#1	Primary	101.50'	<b>15.0" Round Culvert</b> L= 58.5' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 101.50' / 95.50' S= 0.1026 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Device 1	101.50'	<b>4.0" Vert. Orifice/Grate</b> C= 0.600
#3	Device 2	104.50'	<b>3.000 in/hr Exfiltration over Surface area</b>
#4	Device 1	106.67'	<b>2.0" x 2.0" Horiz. Orifice/Grate X 9.00 columns</b> X 9 rows C= 0.600 in 24.0" x 24.0" Grate (56% open area) Limited to weir flow at low heads

**Primary OutFlow** Max=0.16 cfs @ 13.21 hrs HW=105.61' (Free Discharge)



### Pond 19P: Dry Swale

Hydrograph





**Summary for Pond 22P: Catch Basin**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 0.55" for 2-yr event  
 Inflow = 0.16 cfs @ 13.21 hrs, Volume= 0.089 af  
 Outflow = 0.16 cfs @ 13.21 hrs, Volume= 0.089 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.16 cfs @ 13.21 hrs, Volume= 0.089 af

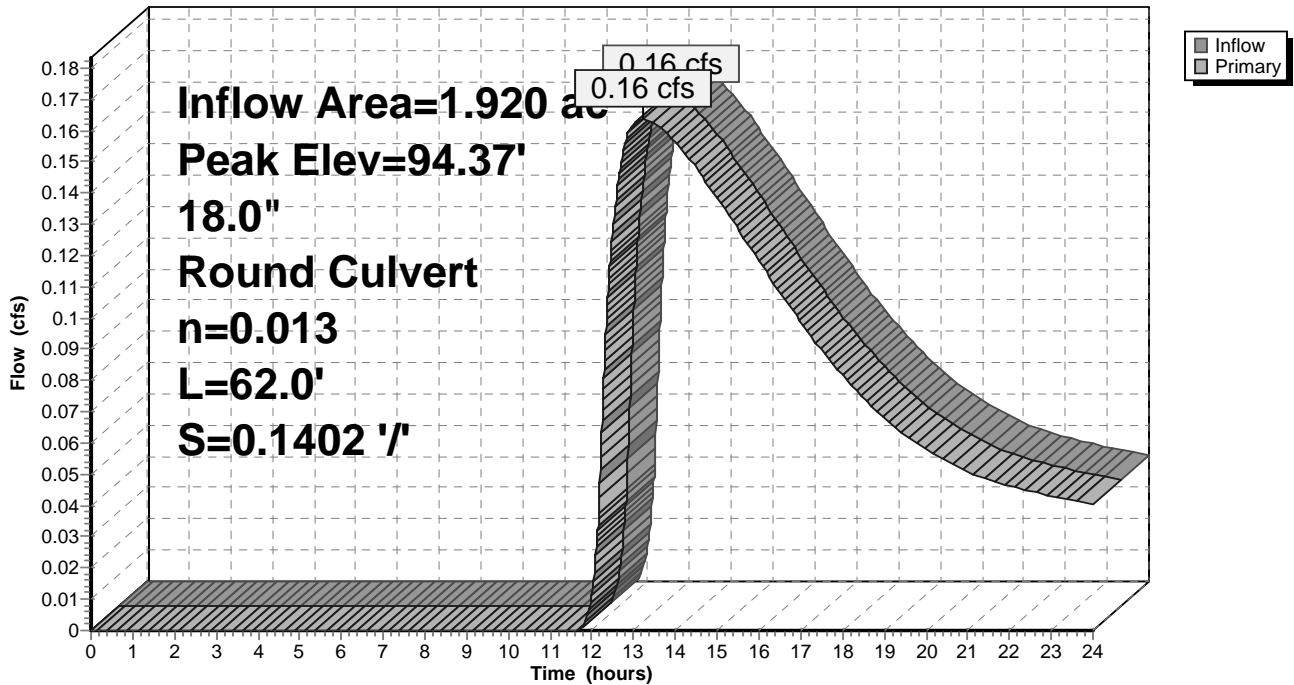
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 94.37' @ 13.21 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	94.17'	<b>18.0" Round Culvert</b> L= 62.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 94.17' / 85.48' S= 0.1402 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=0.16 cfs @ 13.21 hrs HW=94.37' (Free Discharge)  
 ← **1=Culvert** (Inlet Controls 0.16 cfs @ 1.19 fps)

**Pond 22P: Catch Basin**

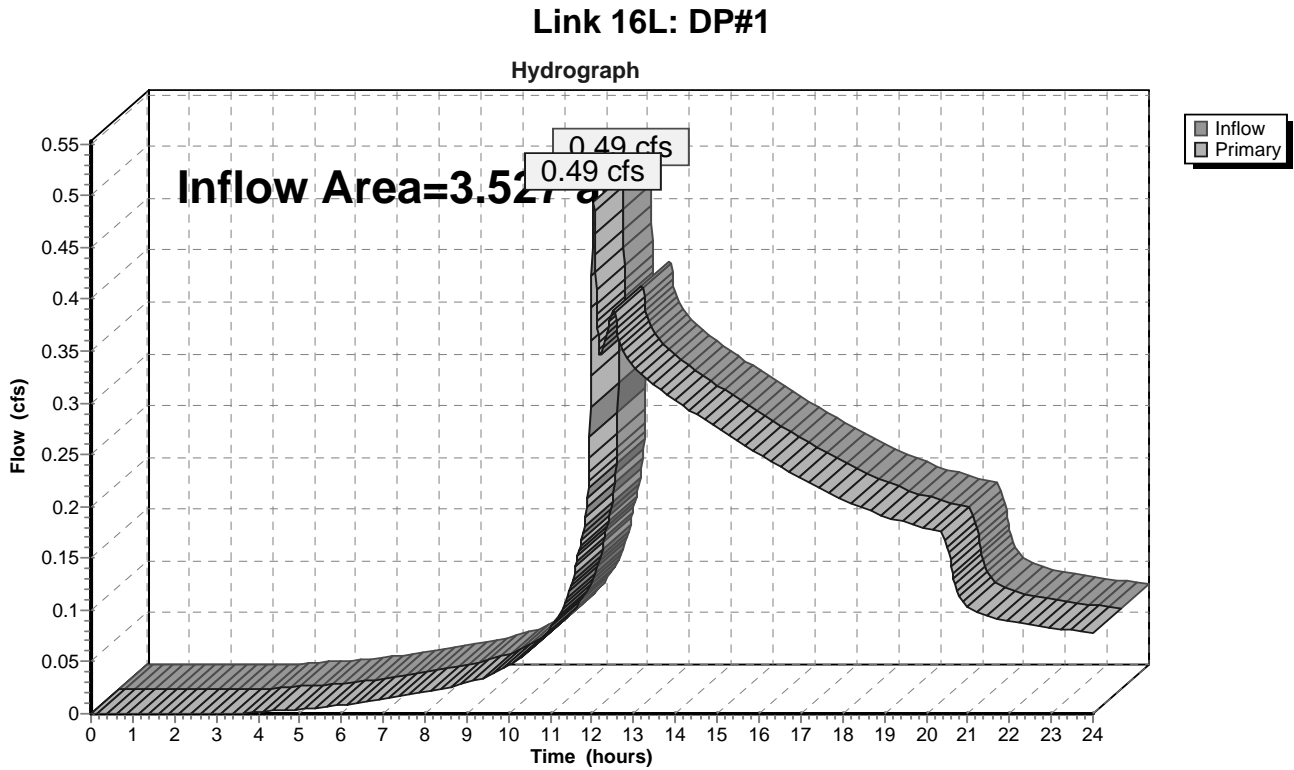
Hydrograph



### Summary for Link 16L: DP#1

Inflow Area = 3.527 ac, 18.94% Impervious, Inflow Depth > 0.79" for 2-yr event  
Inflow = 0.49 cfs @ 12.04 hrs, Volume= 0.231 af  
Primary = 0.49 cfs @ 12.04 hrs, Volume= 0.231 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 31

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 17S: Post A</b>	Runoff Area=0.901 ac 14.87% Impervious Runoff Depth>0.83" Flow Length=847' Tc=17.6 min CN=55 Runoff=0.41 cfs 0.062 af
<b>Subcatchment 19S: Post D</b>	Runoff Area=0.136 ac 4.41% Impervious Runoff Depth>2.72" Tc=6.0 min CN=81 Runoff=0.42 cfs 0.031 af
<b>Subcatchment 20S: Post C</b>	Runoff Area=0.467 ac 75.37% Impervious Runoff Depth>4.01" Tc=6.0 min CN=94 Runoff=2.02 cfs 0.156 af
<b>Subcatchment 28S: Post E</b>	Runoff Area=0.103 ac 0.00% Impervious Runoff Depth>2.63" Tc=6.0 min CN=80 Runoff=0.31 cfs 0.023 af
<b>Subcatchment 29S: Post B</b>	Runoff Area=1.920 ac 9.17% Impervious Runoff Depth>1.44" Flow Length=709' Tc=21.3 min CN=65 Runoff=1.79 cfs 0.231 af
<b>Pond 13P: Catch Basin</b>	Peak Elev=84.44' Inflow=0.30 cfs 0.220 af 18.0" Round Culvert n=0.013 L=45.0' S=0.0682 '/' Outflow=0.30 cfs 0.220 af
<b>Pond 17P: Flow Through Planters</b>	Peak Elev=3.20' Storage=2,977 cf Inflow=2.02 cfs 0.156 af Outflow=0.10 cfs 0.130 af
<b>Pond 19P: Dry Swale</b>	Peak Elev=106.40' Storage=3,732 cf Inflow=1.79 cfs 0.231 af Outflow=0.30 cfs 0.220 af
<b>Pond 22P: Catch Basin</b>	Peak Elev=94.44' Inflow=0.30 cfs 0.220 af 18.0" Round Culvert n=0.013 L=62.0' S=0.1402 '/' Outflow=0.30 cfs 0.220 af
<b>Link 16L: DP#1</b>	Inflow=1.06 cfs 0.465 af Primary=1.06 cfs 0.465 af

**Total Runoff Area = 3.527 ac Runoff Volume = 0.502 af Average Runoff Depth = 1.71"**  
**81.06% Pervious = 2.859 ac 18.94% Impervious = 0.668 ac**

**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 32

**Summary for Subcatchment 17S: Post A**

Runoff = 0.41 cfs @ 12.26 hrs, Volume= 0.062 af, Depth> 0.83"

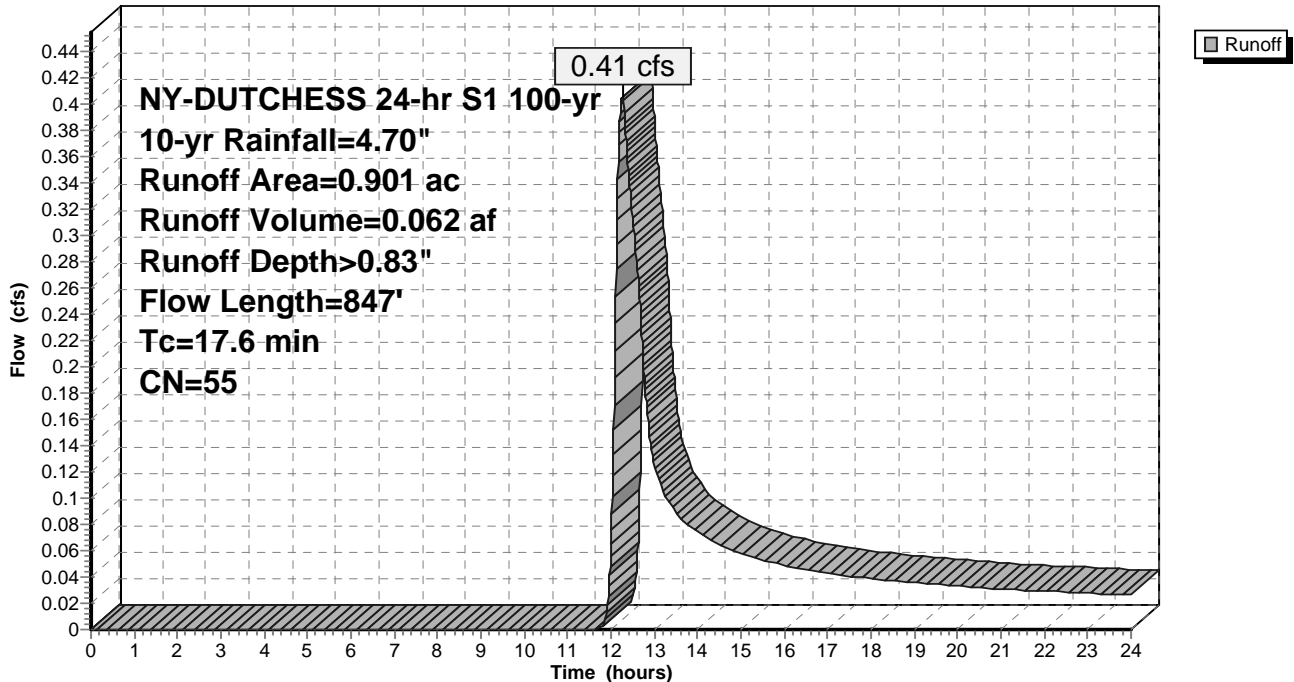
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Area (ac)	CN	Description
0.555	36	Woods, Fair, HSG A
0.212	79	Woods, Fair, HSG D
* 0.029	98	Proposed Walkway
* 0.105	98	Proposed Exterior Parking Area
0.901	55	Weighted Average
0.767		85.13% Pervious Area
0.134		14.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0500	0.12		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
2.6	297	0.1500	1.94		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.8	450	0.0140	9.23	29.00	<b>Pipe Channel, Reach C to DP#1</b> 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.012
17.6	847	Total			

**Subcatchment 17S: Post A**

Hydrograph



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 33

**Summary for Subcatchment 19S: Post D**

Runoff = 0.42 cfs @ 12.04 hrs, Volume= 0.031 af, Depth> 2.72"

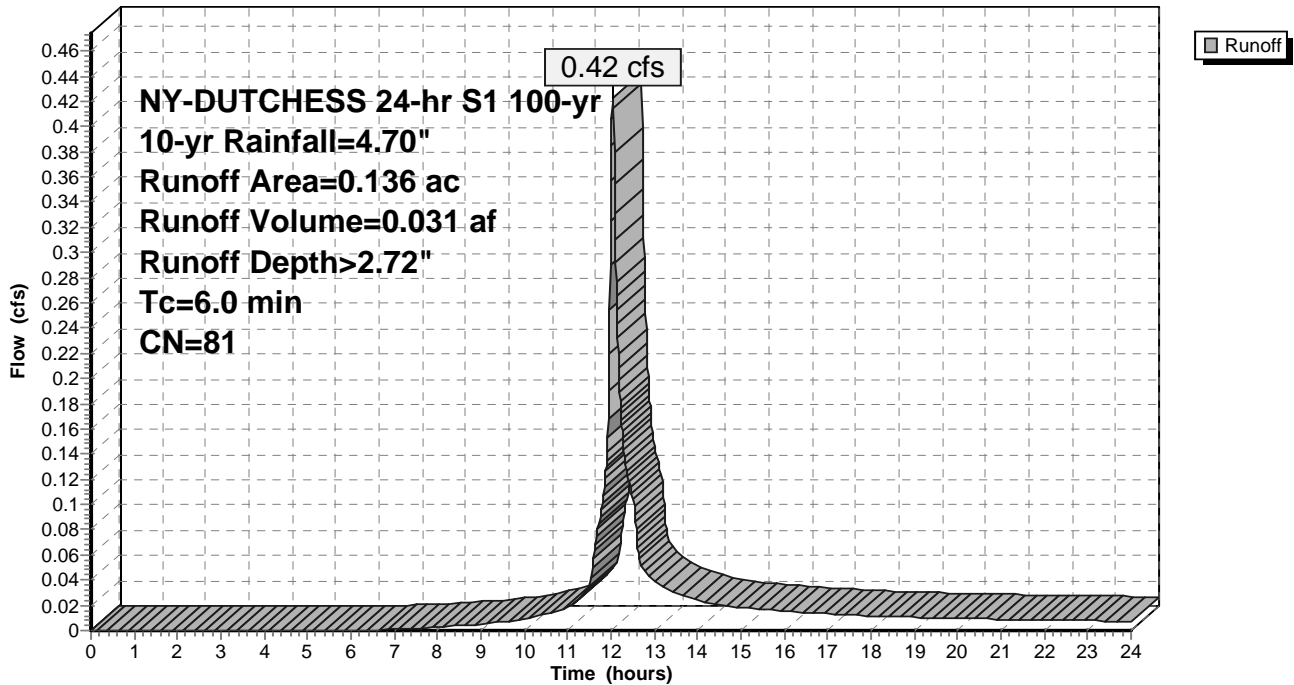
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Area (ac)	CN	Description
0.130	80	>75% Grass cover, Good, HSG D
* 0.006	98	Entrance
0.136	81	Weighted Average
0.130		95.59% Pervious Area
0.006		4.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum

**Subcatchment 19S: Post D**

Hydrograph



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 34

**Summary for Subcatchment 20S: Post C**

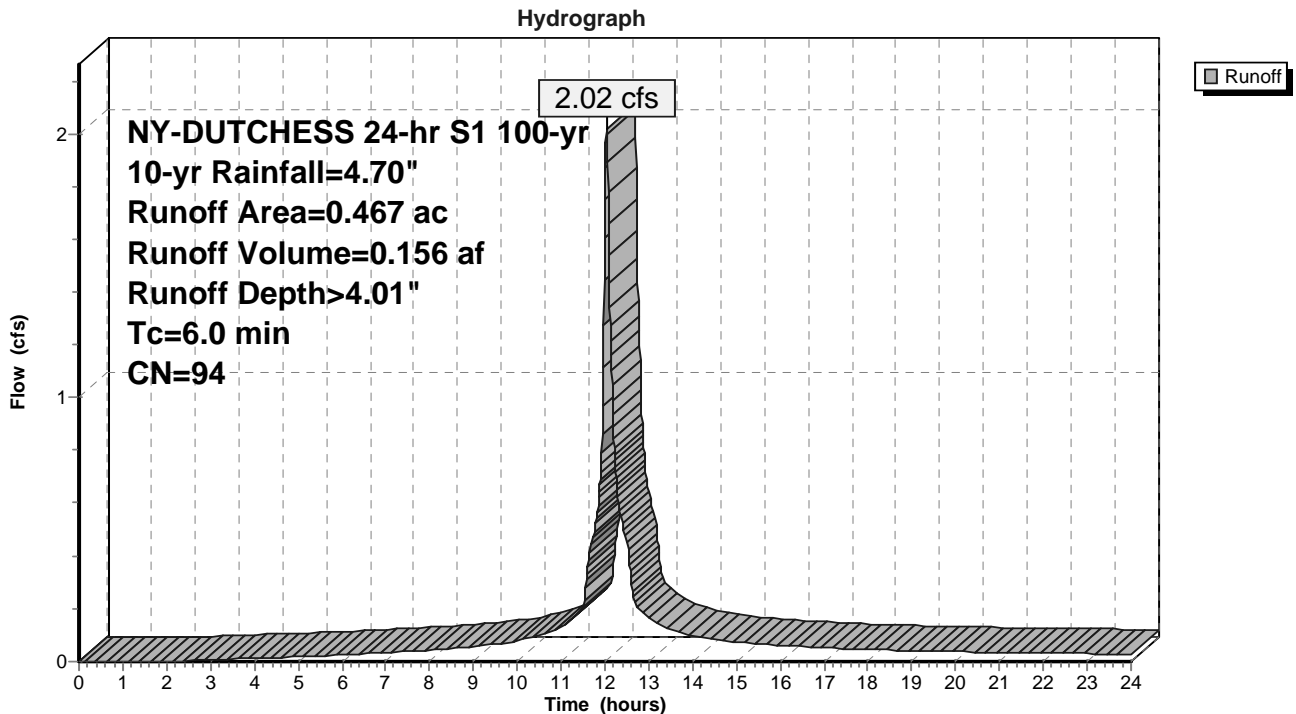
Runoff = 2.02 cfs @ 12.04 hrs, Volume= 0.156 af, Depth> 4.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Area (ac)	CN	Description
* 0.333	98	Impervious
* 0.019	98	Green Roof
* 0.083	80	Planters, Good, HSG D
0.032	80	>75% Grass cover, Good, HSG D
0.467	94	Weighted Average
0.115		24.63% Pervious Area
0.352		75.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum

**Subcatchment 20S: Post C**



**Summary for Subcatchment 28S: Post E**

Runoff = 0.31 cfs @ 12.04 hrs, Volume= 0.023 af, Depth> 2.63"

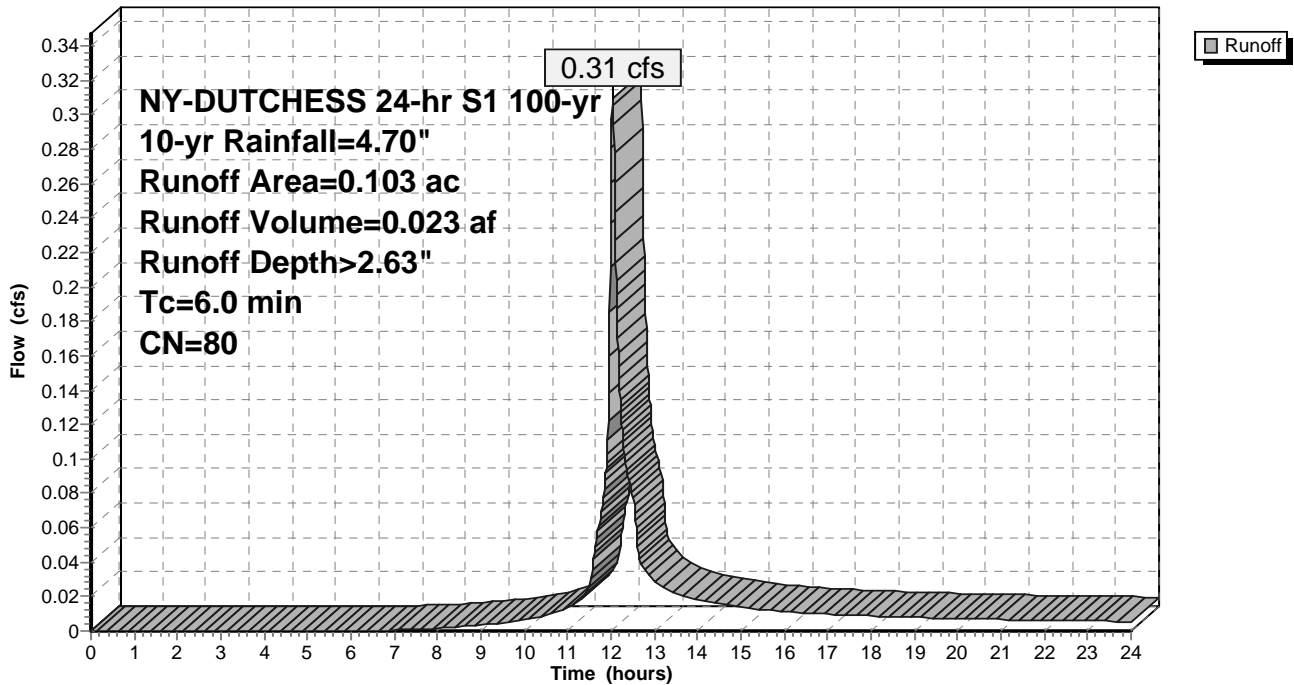
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Area (ac)	CN	Description
0.103	80	>75% Grass cover, Good, HSG D
0.103		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, min

**Subcatchment 28S: Post E**

Hydrograph



**Summary for Subcatchment 29S: Post B**

Runoff = 1.79 cfs @ 12.28 hrs, Volume= 0.231 af, Depth> 1.44"

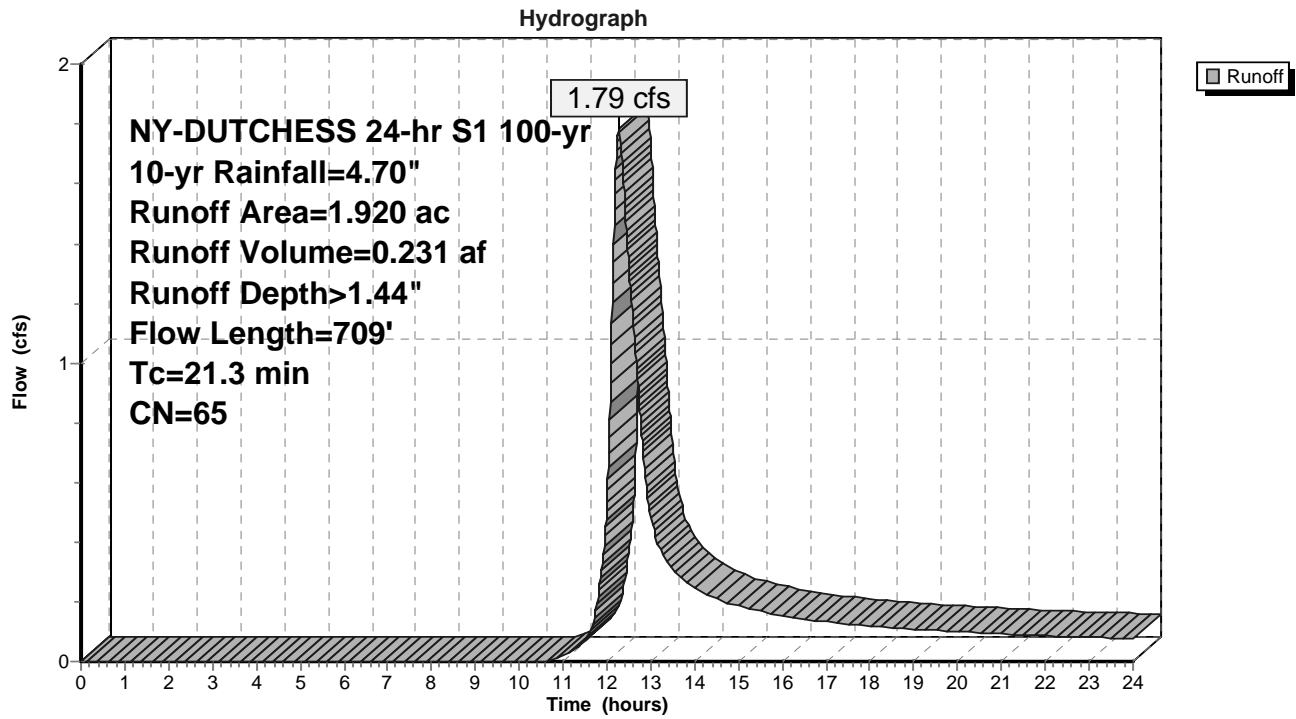
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Area (ac)	CN	Description
0.721	36	Woods, Fair, HSG A
0.511	80	>75% Grass cover, Good, HSG D
0.512	79	Woods, Fair, HSG D
* 0.157	98	Roof
* 0.019	98	Green Roof
1.920	65	Weighted Average
1.744		90.83% Pervious Area
0.176		9.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	100	0.0270	0.09		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
0.9	101	0.1287	1.79		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.1	28	0.1400	6.02		<b>Shallow Concentrated Flow, Reach C-D</b> Unpaved Kv= 16.1 fps
0.6	228	0.0504	6.39	9.59	<b>Parabolic Channel, Reach D-E</b> W=3.00' D=0.75' Area=1.5 sf Perim=3.4' n= 0.030 Earth, grassed & winding
1.4	86	0.0100	1.05	0.63	<b>Trap/Vee/Rect Channel Flow, Reach E-F</b> Bot.W=6.00' D=0.10' Z= 0.3 '/' Top.W=6.06' n= 0.030 Earth, grassed & winding
0.1	59	0.1000	16.65	20.43	<b>Pipe Channel, Reach F-G</b> 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
0.0	62	0.1400	22.24	39.30	<b>Pipe Channel, Reach G-H</b> 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
0.0	45	0.0700	15.73	27.79	<b>Pipe Channel, Reach H-DP#1</b> 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
21.3	709	Total			



### Subcatchment 29S: Post B



**Summary for Pond 13P: Catch Basin**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 1.37" for 10-yr event  
 Inflow = 0.30 cfs @ 13.56 hrs, Volume= 0.220 af  
 Outflow = 0.30 cfs @ 13.56 hrs, Volume= 0.220 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.30 cfs @ 13.56 hrs, Volume= 0.220 af

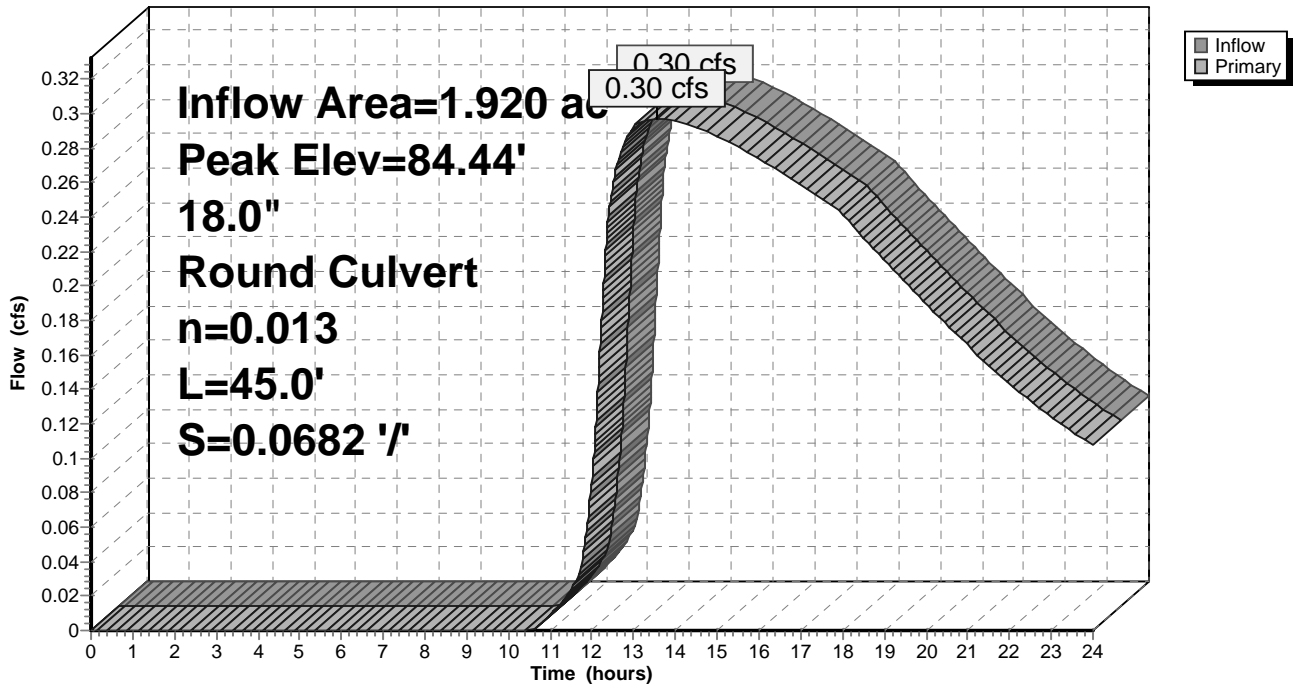
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 84.44' @ 13.56 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	84.17'	<b>18.0" Round CMP_Round 18"</b> L= 45.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 84.17' / 81.10' S= 0.0682 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=0.30 cfs @ 13.56 hrs HW=84.44' (Free Discharge)  
 ↳=CMP\_Round 18" (Inlet Controls 0.30 cfs @ 1.39 fps)

**Pond 13P: Catch Basin**

Hydrograph



**Summary for Pond 17P: Flow Through Planters**

Inflow Area =      0.467 ac, 75.37% Impervious, Inflow Depth > 4.01" for 10-yr event  
 Inflow      =      2.02 cfs @ 12.04 hrs, Volume=      0.156 af  
 Outflow      =      0.10 cfs @ 10.82 hrs, Volume=      0.130 af, Atten= 95%, Lag= 0.0 min  
 Primary      =      0.10 cfs @ 10.82 hrs, Volume=      0.130 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 3  
 Peak Elev= 3.20' @ 14.01 hrs Surf.Area= 2,121 sf Storage= 2,977 cf

Plug-Flow detention time= 247.7 min calculated for 0.130 af (83% of inflow)  
 Center-of-Mass det. time= 169.3 min ( 949.2 - 779.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	2,121 cf	<b>Ponding (Prismatic)</b> Listed below (Recalc) 7,424 cf Overall - 5,303 cf Embedded = 2,121 cf
#2	0.00'	848 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) Inside #1 2,121 cf Overall x 40.0% Voids
#3	1.00'	636 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) Inside #1 3,182 cf Overall x 20.0% Voids
		3,606 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	2,121	0	0
3.50	2,121	7,424	7,424

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	2,121	0	0
1.00	2,121	2,121	2,121

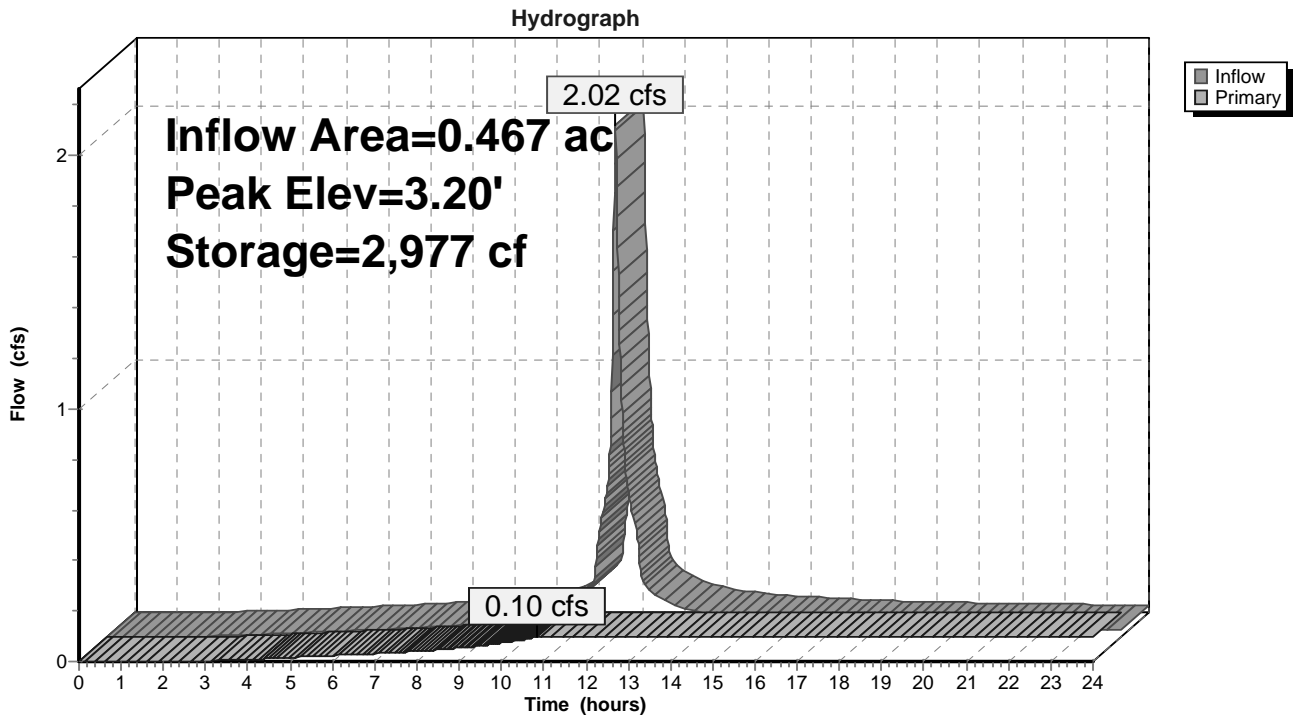
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1.00	2,121	0	0
2.50	2,121	3,182	3,182

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	<b>8.0" Vert. Orifice/Grate X 2.00</b> C= 0.600
#2	Device 1	0.00'	<b>2.000 in/hr Exfiltration (Growing Layer) over Surface area</b>
#3	Device 1	3.30'	<b>6.0" Horiz. Orifice/Grate X 6.00</b> C= 0.600
#4	Primary	3.48'	<b>350.0' long (Profile 18) Broad-Crested Rectangular Weir</b> Head (feet) 0.49 0.98 1.48 1.97 2.46 2.95 3.94 Coef. (English) 2.61 2.64 2.81 2.83 3.06 3.19 3.33

**Primary OutFlow** Max=0.10 cfs @ 10.82 hrs HW=0.14' (Free Discharge)

- 1=Orifice/Grate (Passes 0.10 cfs of 0.14 cfs potential flow)
- 2=Exfiltration (Growing Layer) (Exfiltration Controls 0.10 cfs)
- 3=Orifice/Grate ( Controls 0.00 cfs)
- 4=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

### Pond 17P: Flow Through Planters



**Summary for Pond 19P: Dry Swale**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 1.44" for 10-yr event  
 Inflow = 1.79 cfs @ 12.28 hrs, Volume= 0.231 af  
 Outflow = 0.30 cfs @ 13.56 hrs, Volume= 0.220 af, Atten= 83%, Lag= 77.1 min  
 Primary = 0.30 cfs @ 13.56 hrs, Volume= 0.220 af

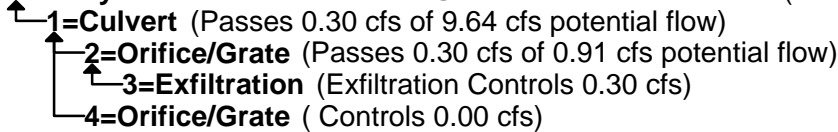
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 106.40' @ 13.56 hrs Surf.Area= 4,275 sf Storage= 3,732 cf

Plug-Flow detention time= 152.0 min calculated for 0.220 af (95% of inflow)  
 Center-of-Mass det. time= 127.0 min ( 1,025.5 - 898.5 )

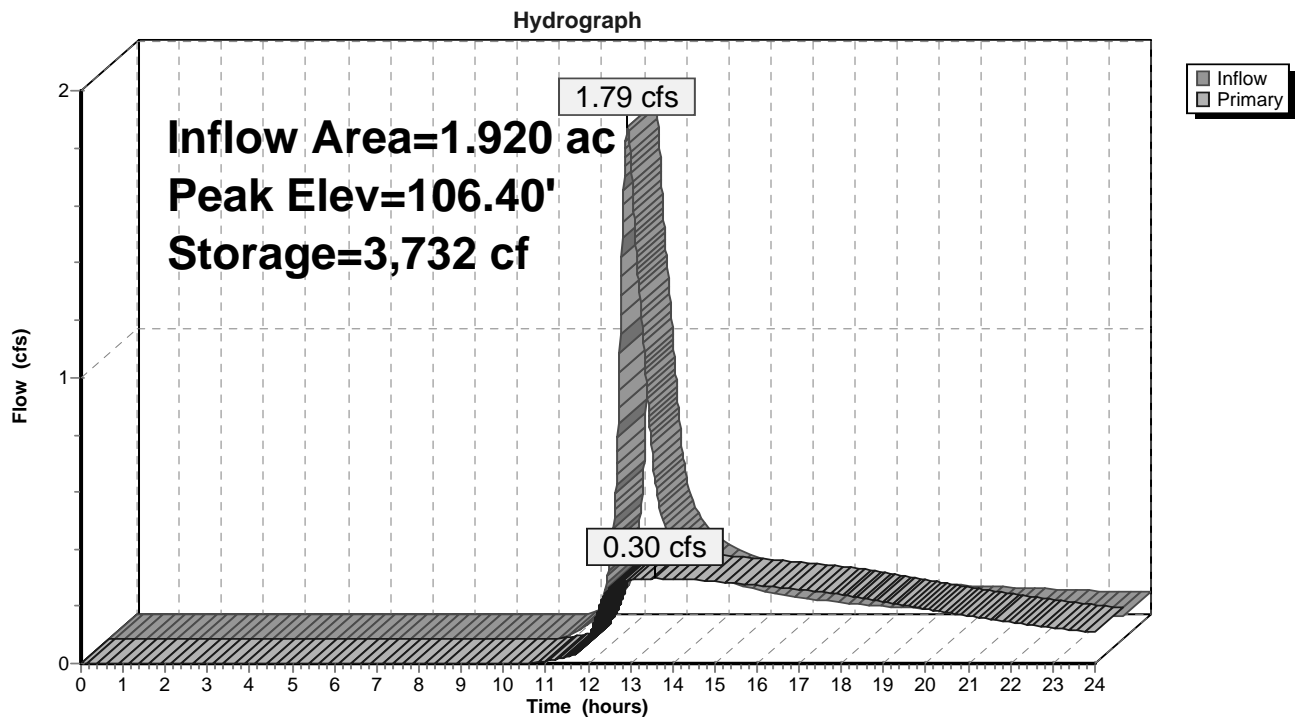
Volume	Invert	Avail.Storage	Storage Description
#1	104.50'	6,636 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
104.50	3	0	0
105.00	540	136	136
106.00	3,536	2,038	2,174
107.00	5,389	4,463	6,636

Device	Routing	Invert	Outlet Devices
#1	Primary	101.50'	<b>15.0" Round Culvert</b> L= 58.5' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 101.50' / 95.50' S= 0.1026 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Device 1	101.50'	<b>4.0" Vert. Orifice/Grate</b> C= 0.600
#3	Device 2	104.50'	<b>3.000 in/hr Exfiltration over Surface area</b>
#4	Device 1	106.67'	<b>2.0" x 2.0" Horiz. Orifice/Grate X 9.00 columns</b> X 9 rows C= 0.600 in 24.0" x 24.0" Grate (56% open area) Limited to weir flow at low heads

**Primary OutFlow** Max=0.30 cfs @ 13.56 hrs HW=106.40' (Free Discharge)



### Pond 19P: Dry Swale



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 10-yr Rainfall=4.70"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 43

**Summary for Pond 22P: Catch Basin**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 1.37" for 10-yr event  
 Inflow = 0.30 cfs @ 13.56 hrs, Volume= 0.220 af  
 Outflow = 0.30 cfs @ 13.56 hrs, Volume= 0.220 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.30 cfs @ 13.56 hrs, Volume= 0.220 af

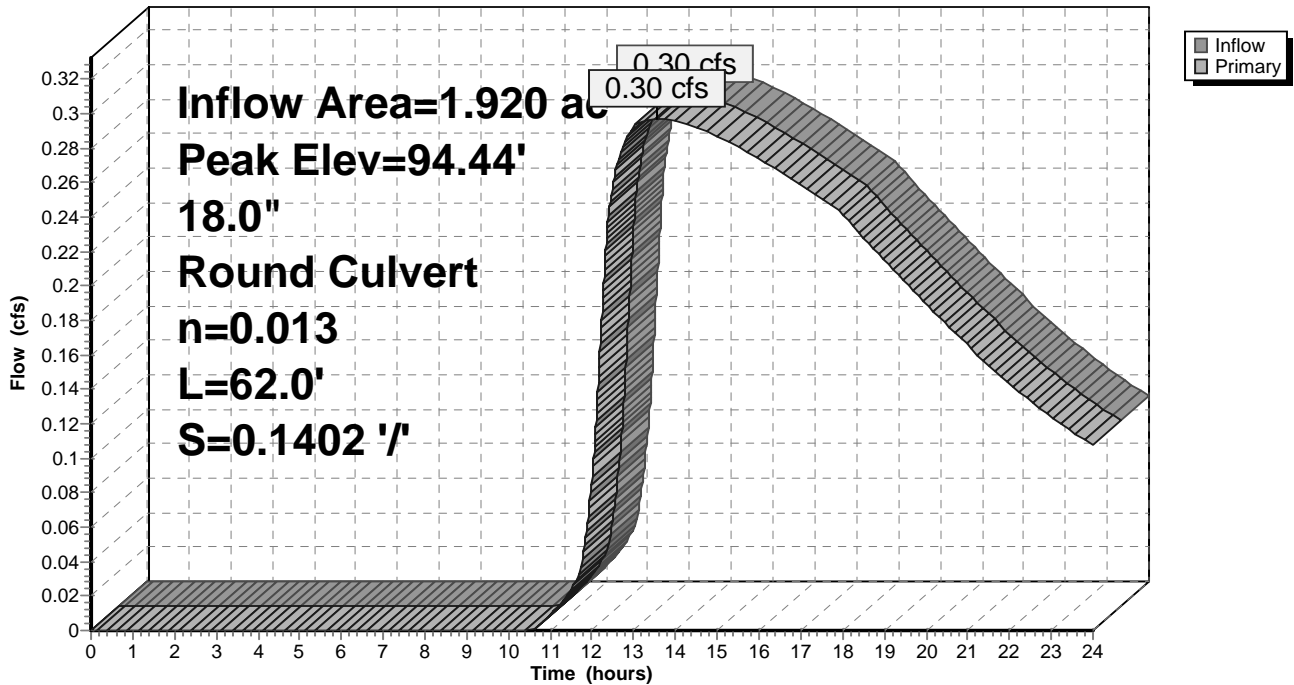
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 94.44' @ 13.56 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	94.17'	<b>18.0" Round Culvert</b> L= 62.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 94.17' / 85.48' S= 0.1402 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=0.30 cfs @ 13.56 hrs HW=94.44' (Free Discharge)  
 ←1=Culvert (Inlet Controls 0.30 cfs @ 1.39 fps)

**Pond 22P: Catch Basin**

Hydrograph



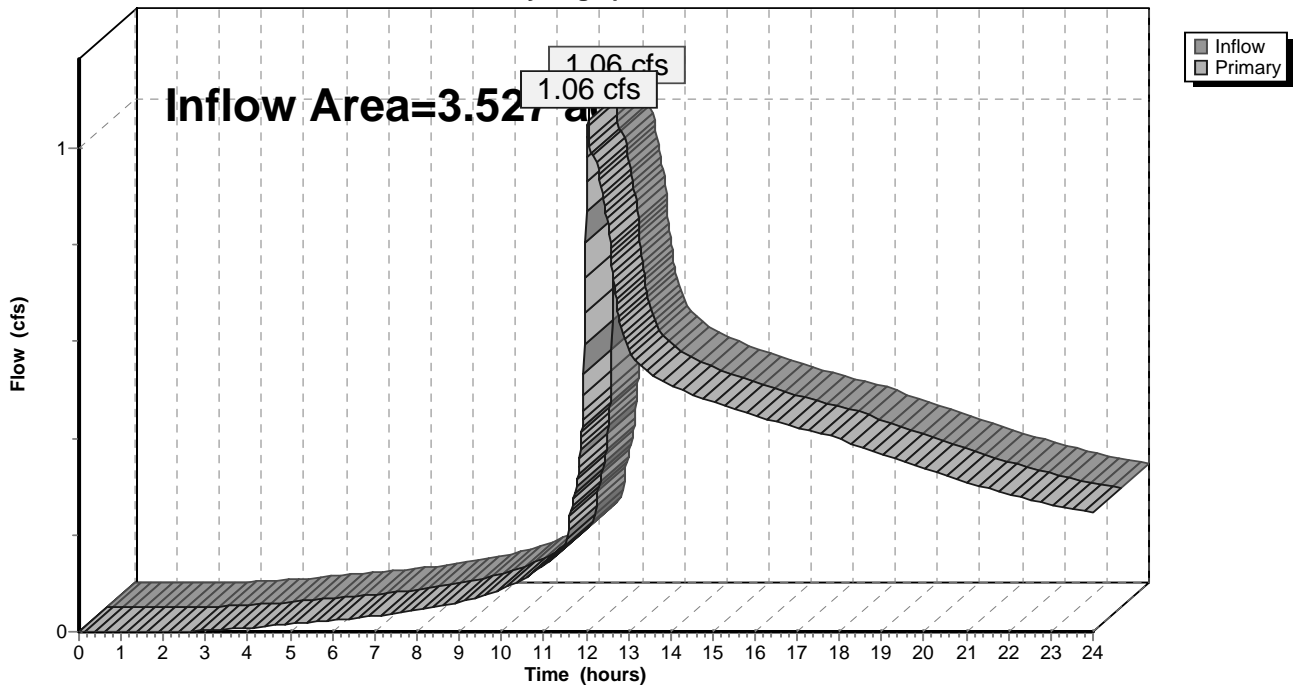
### Summary for Link 16L: DP#1

Inflow Area = 3.527 ac, 18.94% Impervious, Inflow Depth > 1.58" for 10-yr event  
Inflow = 1.06 cfs @ 12.05 hrs, Volume= 0.465 af  
Primary = 1.06 cfs @ 12.05 hrs, Volume= 0.465 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

### Link 16L: DP#1

Hydrograph





**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 45

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 17S: Post A</b>	Runoff Area=0.901 ac 14.87% Impervious Runoff Depth>1.45" Flow Length=847' Tc=17.6 min CN=55 Runoff=0.85 cfs 0.109 af
<b>Subcatchment 19S: Post D</b>	Runoff Area=0.136 ac 4.41% Impervious Runoff Depth>3.79" Tc=6.0 min CN=81 Runoff=0.59 cfs 0.043 af
<b>Subcatchment 20S: Post C</b>	Runoff Area=0.467 ac 75.37% Impervious Runoff Depth>5.19" Tc=6.0 min CN=94 Runoff=2.58 cfs 0.202 af
<b>Subcatchment 28S: Post E</b>	Runoff Area=0.103 ac 0.00% Impervious Runoff Depth>3.69" Tc=6.0 min CN=80 Runoff=0.43 cfs 0.032 af
<b>Subcatchment 29S: Post B</b>	Runoff Area=1.920 ac 9.17% Impervious Runoff Depth>2.26" Flow Length=709' Tc=21.3 min CN=65 Runoff=2.93 cfs 0.362 af
<b>Pond 13P: Catch Basin</b>	Peak Elev=84.73' Inflow=1.20 cfs 0.332 af 18.0" Round Culvert n=0.013 L=45.0' S=0.0682 '/' Outflow=1.20 cfs 0.332 af
<b>Pond 17P: Flow Through Planters</b>	Peak Elev=3.32' Storage=3,217 cf Inflow=2.58 cfs 0.202 af Outflow=0.70 cfs 0.162 af
<b>Pond 19P: Dry Swale</b>	Peak Elev=106.77' Storage=5,456 cf Inflow=2.93 cfs 0.362 af Outflow=1.20 cfs 0.332 af
<b>Pond 22P: Catch Basin</b>	Peak Elev=94.73' Inflow=1.20 cfs 0.332 af 18.0" Round Culvert n=0.013 L=62.0' S=0.1402 '/' Outflow=1.20 cfs 0.332 af
<b>Link 16L: DP#1</b>	Inflow=2.01 cfs 0.678 af Primary=2.01 cfs 0.678 af

**Total Runoff Area = 3.527 ac Runoff Volume = 0.747 af Average Runoff Depth = 2.54"**  
**81.06% Pervious = 2.859 ac 18.94% Impervious = 0.668 ac**

**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 46

**Summary for Subcatchment 17S: Post A**

Runoff = 0.85 cfs @ 12.22 hrs, Volume= 0.109 af, Depth> 1.45"

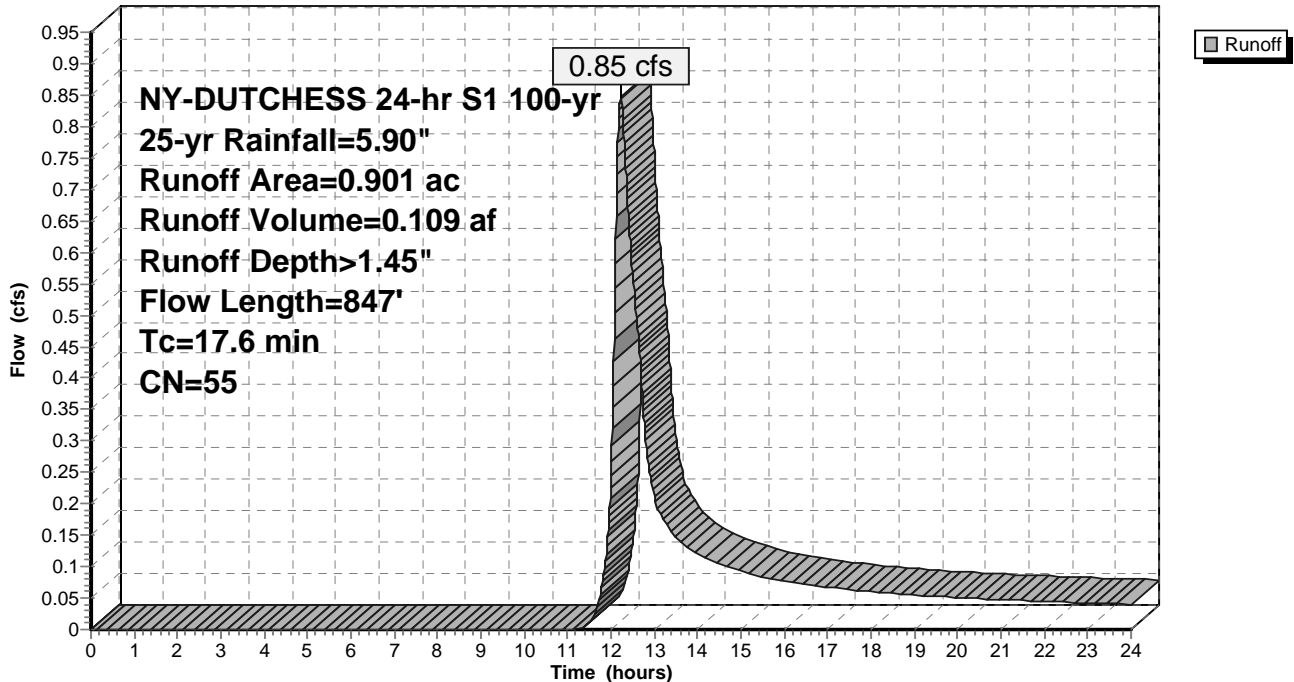
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Area (ac)	CN	Description
0.555	36	Woods, Fair, HSG A
0.212	79	Woods, Fair, HSG D
* 0.029	98	Proposed Walkway
* 0.105	98	Proposed Exterior Parking Area
0.901	55	Weighted Average
0.767		85.13% Pervious Area
0.134		14.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0500	0.12		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
2.6	297	0.1500	1.94		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.8	450	0.0140	9.23	29.00	<b>Pipe Channel, Reach C to DP#1</b> 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.012
17.6	847	Total			

**Subcatchment 17S: Post A**

Hydrograph



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 47

**Summary for Subcatchment 19S: Post D**

Runoff = 0.59 cfs @ 12.04 hrs, Volume= 0.043 af, Depth> 3.79"

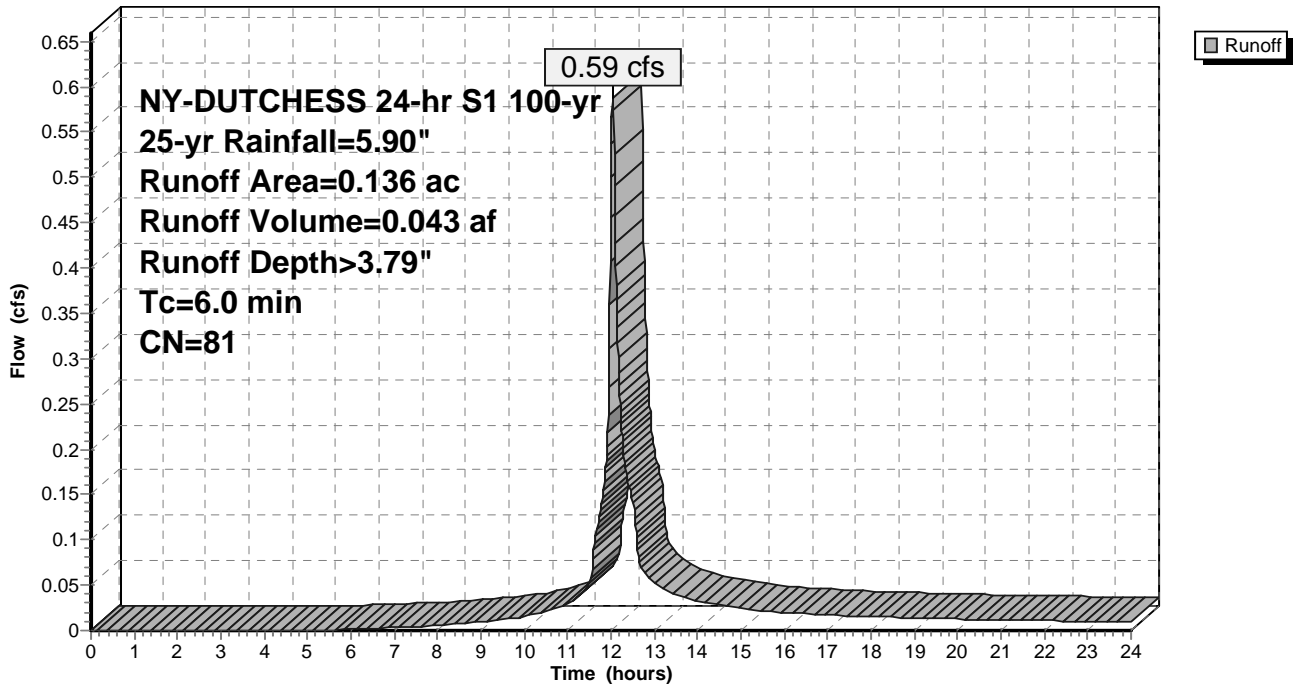
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Area (ac)	CN	Description
0.130	80	>75% Grass cover, Good, HSG D
* 0.006	98	Entrance
0.136	81	Weighted Average
0.130		95.59% Pervious Area
0.006		4.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum

**Subcatchment 19S: Post D**

Hydrograph



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 48

**Summary for Subcatchment 20S: Post C**

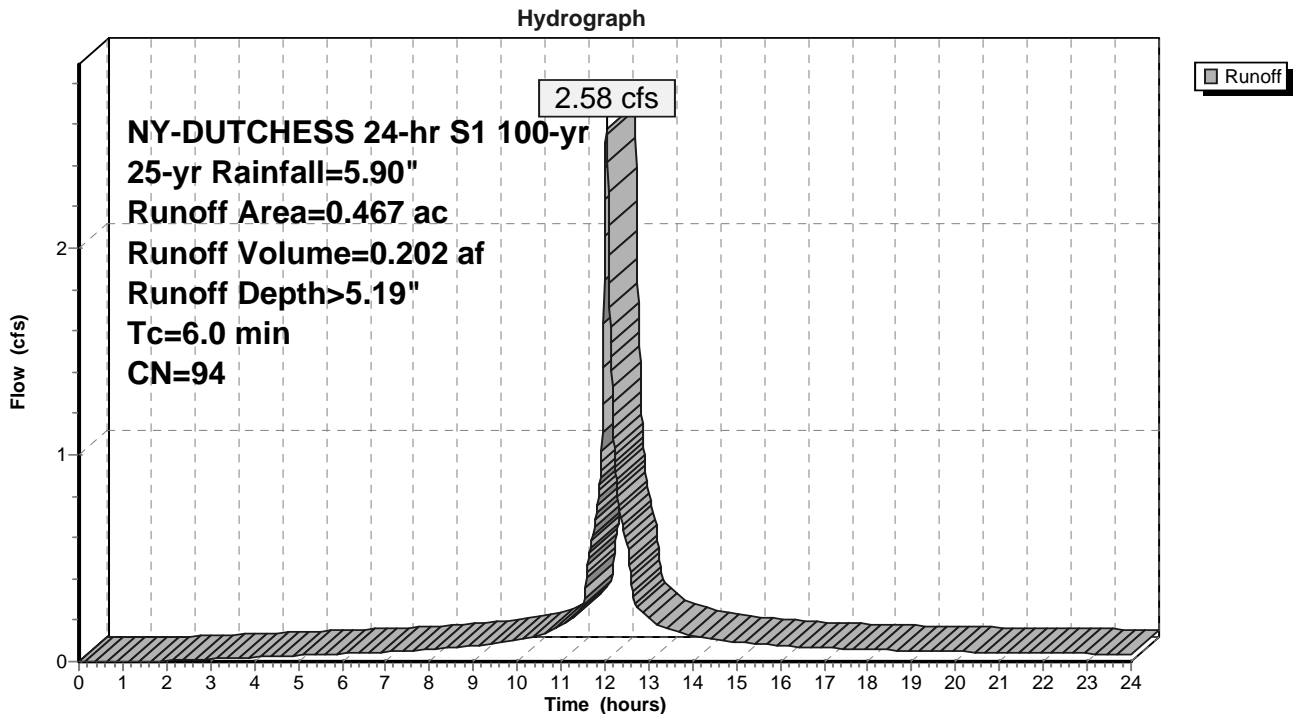
Runoff = 2.58 cfs @ 12.04 hrs, Volume= 0.202 af, Depth> 5.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Area (ac)	CN	Description
* 0.333	98	Impervious
* 0.019	98	Green Roof
* 0.083	80	Planters, Good, HSG D
0.032	80	>75% Grass cover, Good, HSG D
0.467	94	Weighted Average
0.115		24.63% Pervious Area
0.352		75.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum

**Subcatchment 20S: Post C**



**The View - Hydrology Calculations**

NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 49

**Summary for Subcatchment 28S: Post E**

Runoff = 0.43 cfs @ 12.04 hrs, Volume= 0.032 af, Depth> 3.69"

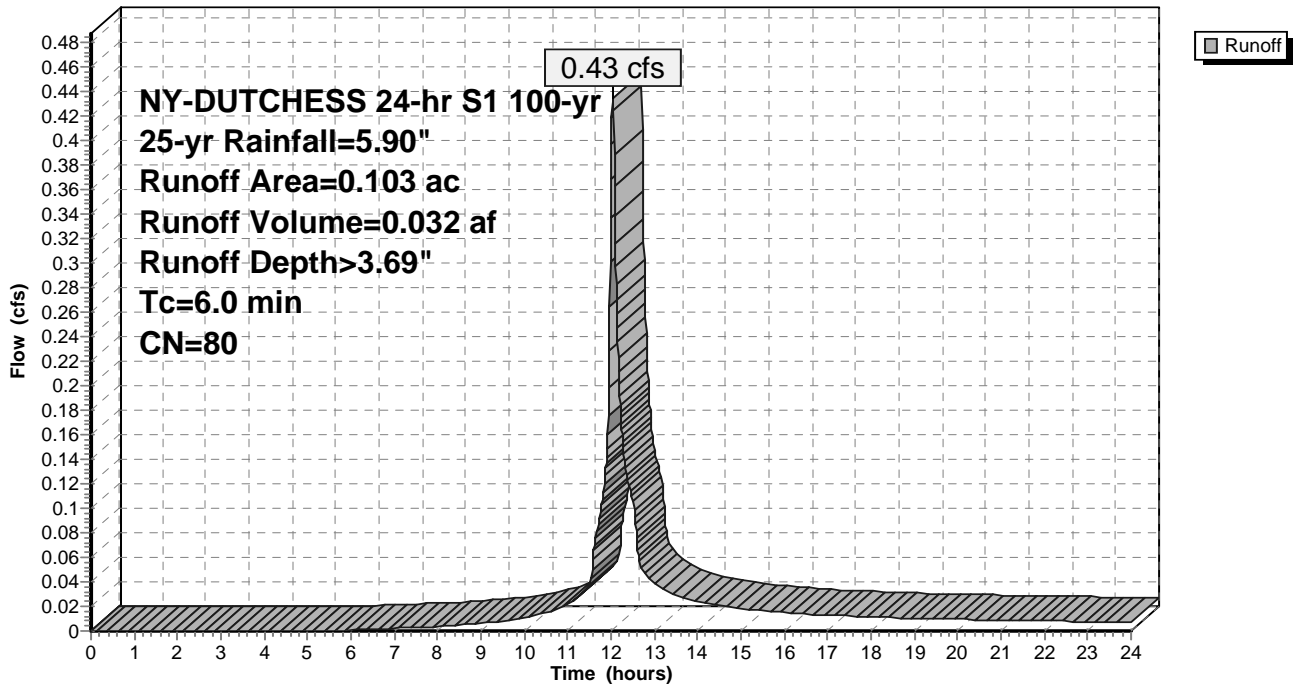
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Area (ac)	CN	Description
0.103	80	>75% Grass cover, Good, HSG D
0.103		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, min

**Subcatchment 28S: Post E**

Hydrograph



**Summary for Subcatchment 29S: Post B**

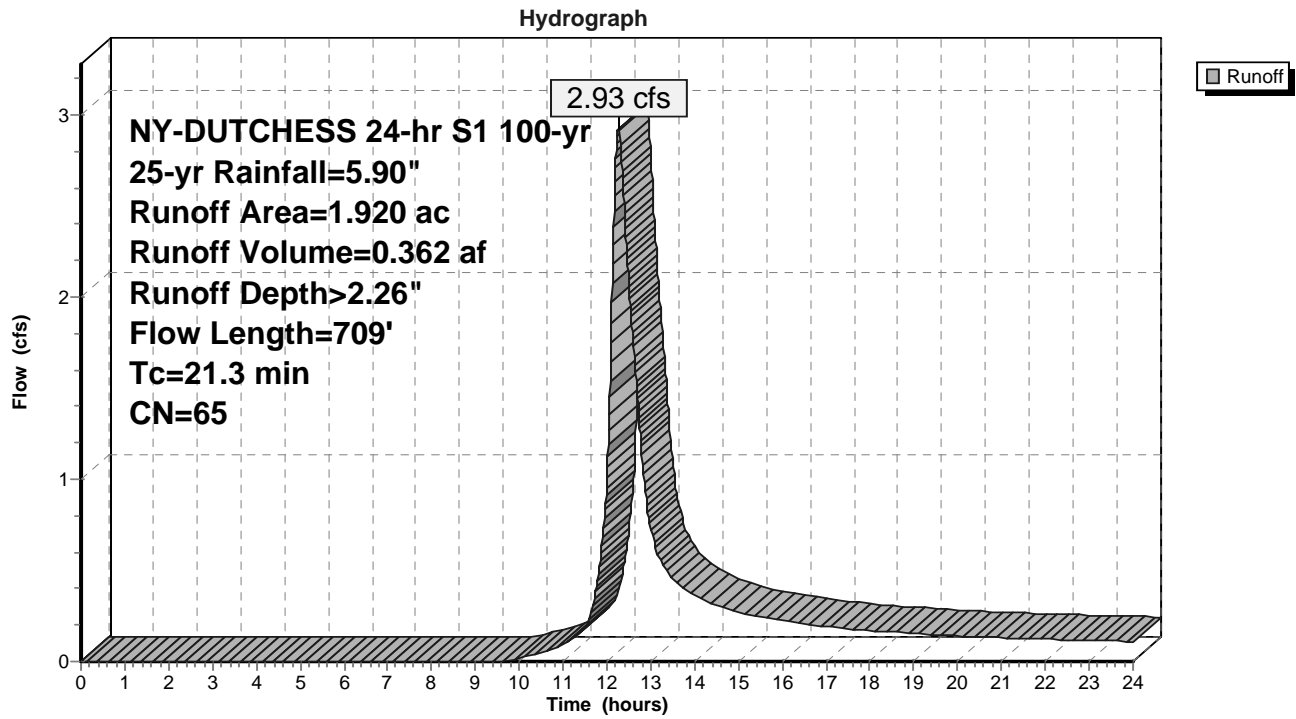
Runoff = 2.93 cfs @ 12.26 hrs, Volume= 0.362 af, Depth> 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr 25-yr Rainfall=5.90"

Area (ac)	CN	Description
0.721	36	Woods, Fair, HSG A
0.511	80	>75% Grass cover, Good, HSG D
0.512	79	Woods, Fair, HSG D
* 0.157	98	Roof
* 0.019	98	Green Roof
1.920	65	Weighted Average
1.744		90.83% Pervious Area
0.176		9.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	100	0.0270	0.09		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
0.9	101	0.1287	1.79		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.1	28	0.1400	6.02		<b>Shallow Concentrated Flow, Reach C-D</b> Unpaved Kv= 16.1 fps
0.6	228	0.0504	6.39	9.59	<b>Parabolic Channel, Reach D-E</b> W=3.00' D=0.75' Area=1.5 sf Perim=3.4' n= 0.030 Earth, grassed & winding
1.4	86	0.0100	1.05	0.63	<b>Trap/Vee/Rect Channel Flow, Reach E-F</b> Bot.W=6.00' D=0.10' Z= 0.3 '/' Top.W=6.06' n= 0.030 Earth, grassed & winding
0.1	59	0.1000	16.65	20.43	<b>Pipe Channel, Reach F-G</b> 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
0.0	62	0.1400	22.24	39.30	<b>Pipe Channel, Reach G-H</b> 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
0.0	45	0.0700	15.73	27.79	<b>Pipe Channel, Reach H-DP#1</b> 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
21.3	709	Total			

### Subcatchment 29S: Post B



**Summary for Pond 13P: Catch Basin**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 2.08" for 25-yr event  
 Inflow = 1.20 cfs @ 12.77 hrs, Volume= 0.332 af  
 Outflow = 1.20 cfs @ 12.77 hrs, Volume= 0.332 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.20 cfs @ 12.77 hrs, Volume= 0.332 af

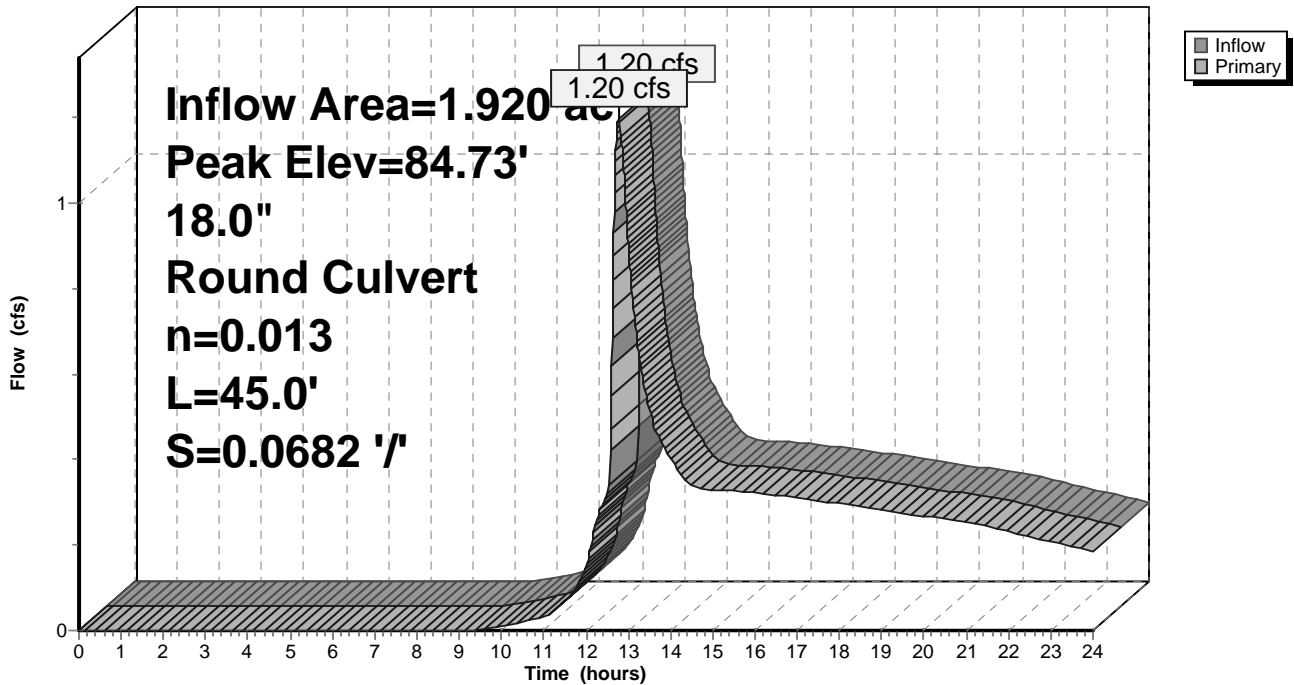
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 84.73' @ 12.77 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	84.17'	<b>18.0" Round CMP_Round 18"</b> L= 45.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 84.17' / 81.10' S= 0.0682 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=1.20 cfs @ 12.77 hrs HW=84.73' (Free Discharge)  
 ↳1=CMP\_Round 18" (Inlet Controls 1.20 cfs @ 2.01 fps)

**Pond 13P: Catch Basin**

Hydrograph





**Summary for Pond 17P: Flow Through Planters**

Inflow Area = 0.467 ac, 75.37% Impervious, Inflow Depth > 5.19" for 25-yr event  
 Inflow = 2.58 cfs @ 12.04 hrs, Volume= 0.202 af  
 Outflow = 0.70 cfs @ 12.36 hrs, Volume= 0.162 af, Atten= 73%, Lag= 19.6 min  
 Primary = 0.70 cfs @ 12.36 hrs, Volume= 0.162 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 3  
 Peak Elev= 3.32' @ 12.36 hrs Surf.Area= 2,121 sf Storage= 3,217 cf

Plug-Flow detention time= 211.7 min calculated for 0.162 af (80% of inflow)  
 Center-of-Mass det. time= 123.6 min ( 896.0 - 772.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	2,121 cf	<b>Ponding (Prismatic)</b> Listed below (Recalc) 7,424 cf Overall - 5,303 cf Embedded = 2,121 cf
#2	0.00'	848 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) Inside #1 2,121 cf Overall x 40.0% Voids
#3	1.00'	636 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) Inside #1 3,182 cf Overall x 20.0% Voids
		3,606 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	2,121	0	0
3.50	2,121	7,424	7,424

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	2,121	0	0
1.00	2,121	2,121	2,121

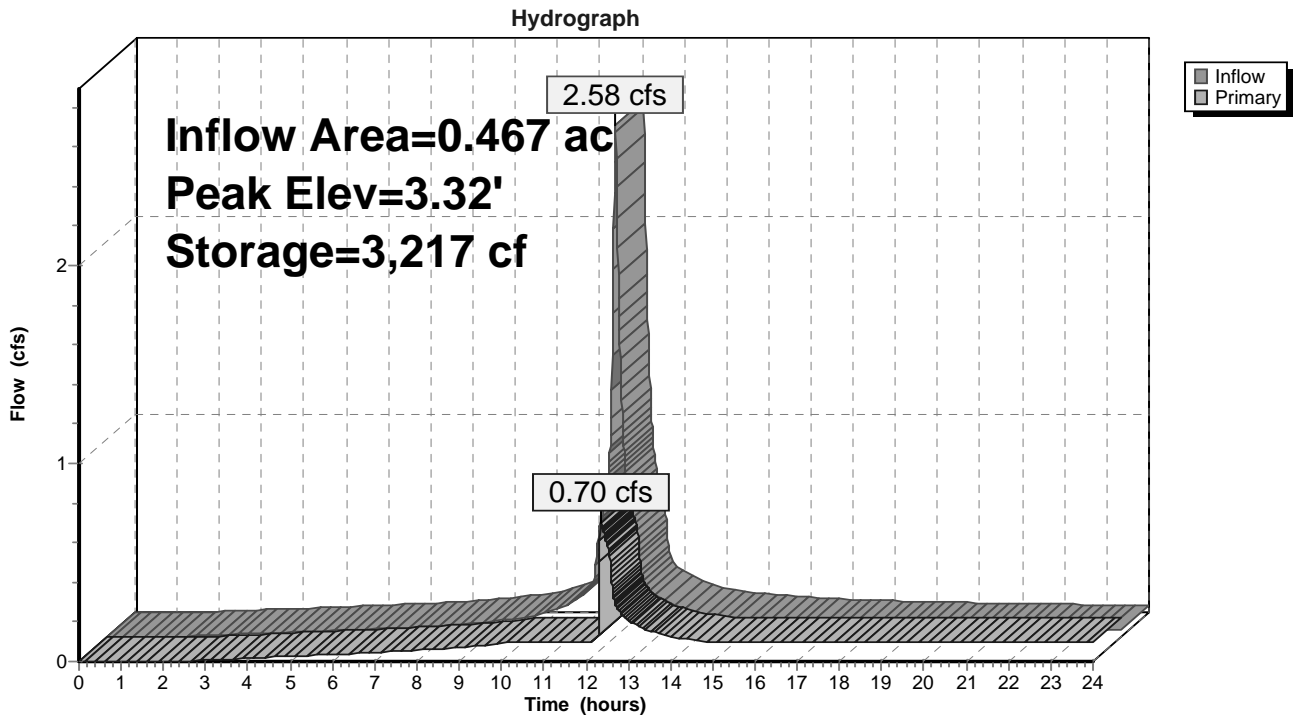
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1.00	2,121	0	0
2.50	2,121	3,182	3,182

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	<b>8.0" Vert. Orifice/Grate X 2.00</b> C= 0.600
#2	Device 1	0.00'	<b>2.000 in/hr Exfiltration (Growing Layer) over Surface area</b>
#3	Device 1	3.30'	<b>6.0" Horiz. Orifice/Grate X 6.00</b> C= 0.600
#4	Primary	3.48'	<b>350.0' long (Profile 18) Broad-Crested Rectangular Weir</b> Head (feet) 0.49 0.98 1.48 1.97 2.46 2.95 3.94 Coef. (English) 2.61 2.64 2.81 2.83 3.06 3.19 3.33

**Primary OutFlow** Max=0.83 cfs @ 12.36 hrs HW=3.32' (Free Discharge)

- 1=Orifice/Grate (Passes 0.83 cfs of 5.81 cfs potential flow)
- 2=Exfiltration (Growing Layer) (Exfiltration Controls 0.10 cfs)
- 3=Orifice/Grate (Orifice Controls 0.73 cfs @ 0.62 fps)
- 4=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

### Pond 17P: Flow Through Planters



**Summary for Pond 19P: Dry Swale**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 2.26" for 25-yr event  
 Inflow = 2.93 cfs @ 12.26 hrs, Volume= 0.362 af  
 Outflow = 1.20 cfs @ 12.77 hrs, Volume= 0.332 af, Atten= 59%, Lag= 30.7 min  
 Primary = 1.20 cfs @ 12.77 hrs, Volume= 0.332 af

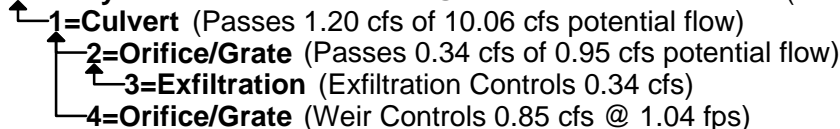
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 106.77' @ 12.77 hrs Surf.Area= 4,966 sf Storage= 5,456 cf

Plug-Flow detention time= 166.4 min calculated for 0.332 af (92% of inflow)  
 Center-of-Mass det. time= 125.3 min ( 1,007.9 - 882.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	104.50'	6,636 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
104.50	3	0	0
105.00	540	136	136
106.00	3,536	2,038	2,174
107.00	5,389	4,463	6,636

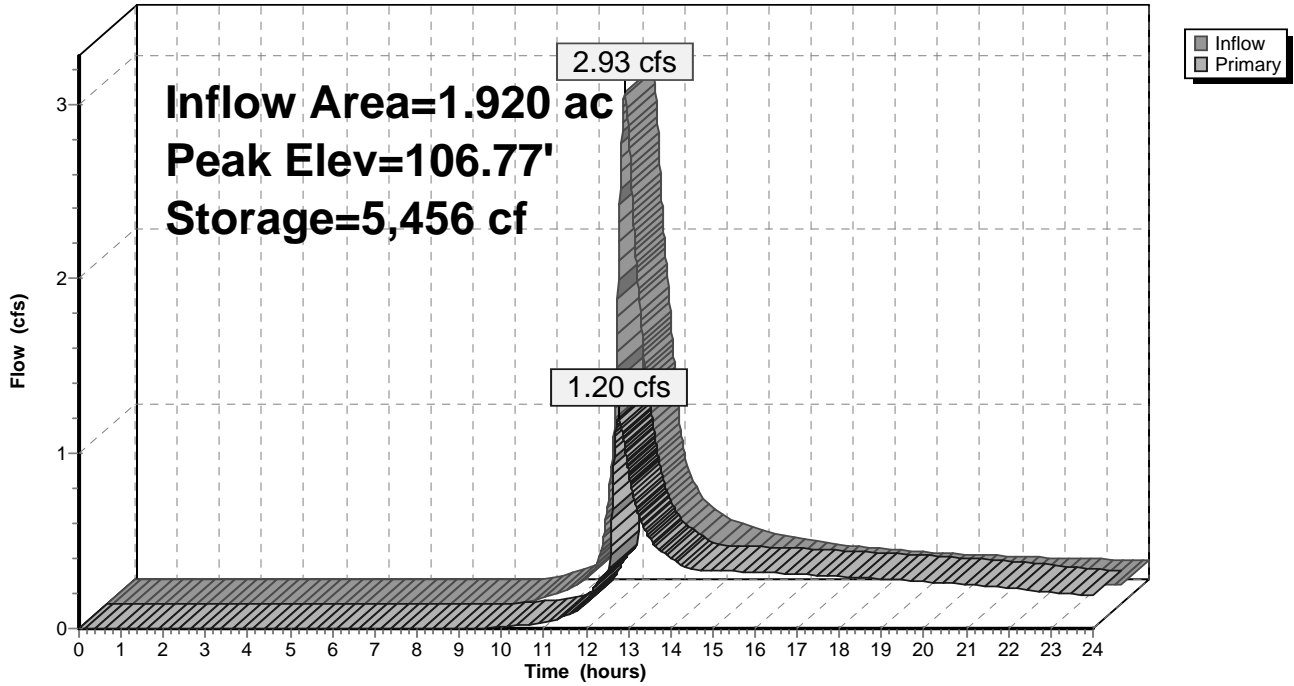
Device	Routing	Invert	Outlet Devices
#1	Primary	101.50'	<b>15.0" Round Culvert</b> L= 58.5' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 101.50' / 95.50' S= 0.1026 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Device 1	101.50'	<b>4.0" Vert. Orifice/Grate</b> C= 0.600
#3	Device 2	104.50'	<b>3.000 in/hr Exfiltration over Surface area</b>
#4	Device 1	106.67'	<b>2.0" x 2.0" Horiz. Orifice/Grate X 9.00 columns</b> X 9 rows C= 0.600 in 24.0" x 24.0" Grate (56% open area) Limited to weir flow at low heads

**Primary OutFlow** Max=1.20 cfs @ 12.77 hrs HW=106.77' (Free Discharge)



### Pond 19P: Dry Swale

Hydrograph



**Summary for Pond 22P: Catch Basin**

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 2.08" for 25-yr event  
 Inflow = 1.20 cfs @ 12.77 hrs, Volume= 0.332 af  
 Outflow = 1.20 cfs @ 12.77 hrs, Volume= 0.332 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.20 cfs @ 12.77 hrs, Volume= 0.332 af

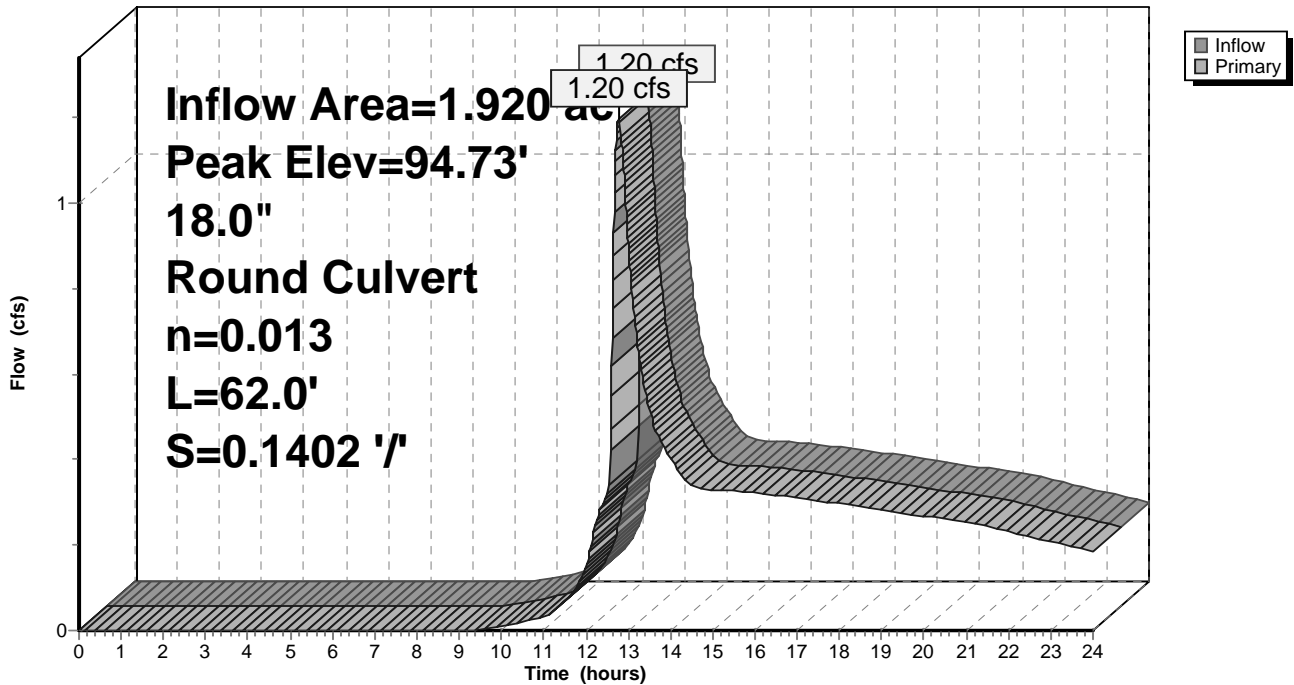
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 94.73' @ 12.77 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	94.17'	<b>18.0" Round Culvert</b> L= 62.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 94.17' / 85.48' S= 0.1402 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=1.20 cfs @ 12.77 hrs HW=94.73' (Free Discharge)  
 ←1=Culvert (Inlet Controls 1.20 cfs @ 2.01 fps)

**Pond 22P: Catch Basin**

Hydrograph



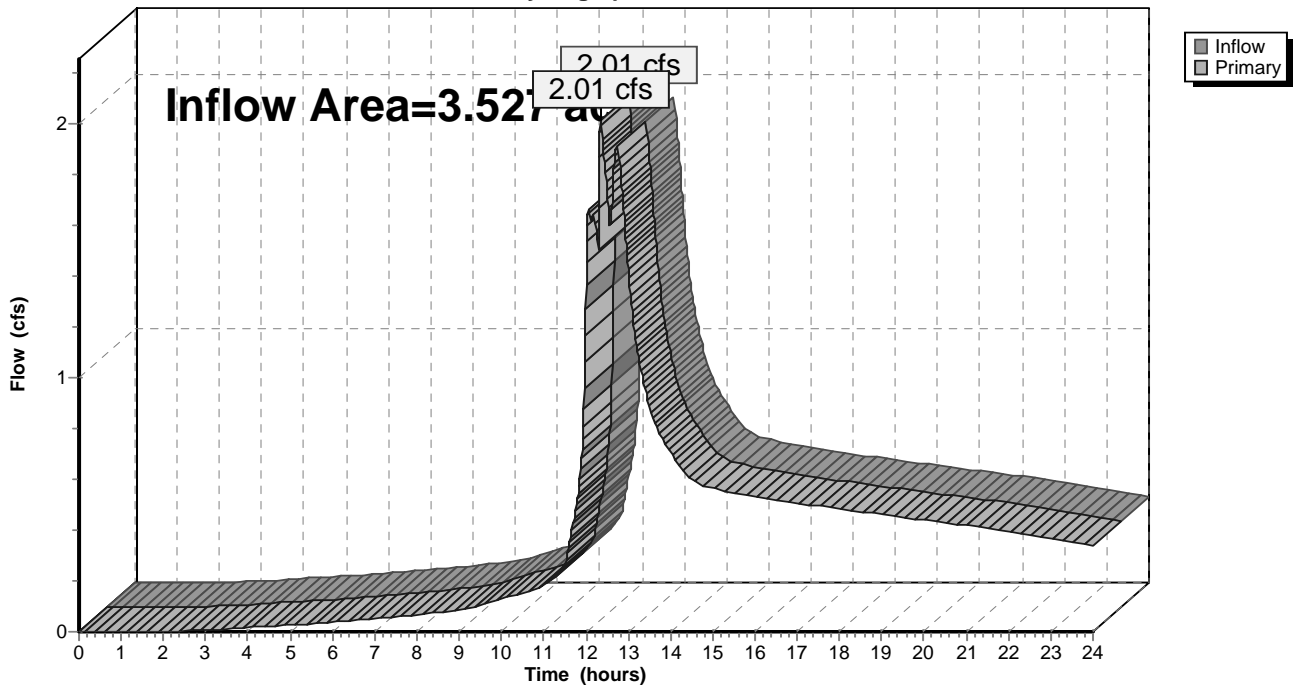
### Summary for Link 16L: DP#1

Inflow Area = 3.527 ac, 18.94% Impervious, Inflow Depth > 2.31" for 25-yr event  
Inflow = 2.01 cfs @ 12.35 hrs, Volume= 0.678 af  
Primary = 2.01 cfs @ 12.35 hrs, Volume= 0.678 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

### Link 16L: DP#1

Hydrograph



# The View - Hydrology Calculations

NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 59

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 17S: Post A</b>	Runoff Area=0.901 ac 14.87% Impervious Runoff Depth>3.00" Flow Length=847' Tc=17.6 min CN=55 Runoff=1.96 cfs 0.225 af
<b>Subcatchment 19S: Post D</b>	Runoff Area=0.136 ac 4.41% Impervious Runoff Depth>6.05" Tc=6.0 min CN=81 Runoff=0.93 cfs 0.069 af
<b>Subcatchment 20S: Post C</b>	Runoff Area=0.467 ac 75.37% Impervious Runoff Depth>7.61" Tc=6.0 min CN=94 Runoff=3.71 cfs 0.296 af
<b>Subcatchment 28S: Post E</b>	Runoff Area=0.103 ac 0.00% Impervious Runoff Depth>5.94" Tc=6.0 min CN=80 Runoff=0.69 cfs 0.051 af
<b>Subcatchment 29S: Post B</b>	Runoff Area=1.920 ac 9.17% Impervious Runoff Depth>4.14" Flow Length=709' Tc=21.3 min CN=65 Runoff=5.53 cfs 0.663 af
<b>Pond 13P: Catch Basin</b>	Peak Elev=85.39' Inflow=4.58 cfs 0.595 af 18.0" Round Culvert n=0.013 L=45.0' S=0.0682 '/' Outflow=4.58 cfs 0.595 af
<b>Pond 17P: Flow Through Planters</b>	Peak Elev=3.46' Storage=3,525 cf Inflow=3.71 cfs 0.296 af Outflow=2.38 cfs 0.241 af
<b>Pond 19P: Dry Swale</b>	Peak Elev=106.97' Storage=6,452 cf Inflow=5.53 cfs 0.663 af Outflow=4.58 cfs 0.595 af
<b>Pond 22P: Catch Basin</b>	Peak Elev=95.39' Inflow=4.58 cfs 0.595 af 18.0" Round Culvert n=0.013 L=62.0' S=0.1402 '/' Outflow=4.58 cfs 0.595 af
<b>Link 16L: DP#1</b>	Inflow=7.60 cfs 1.181 af Primary=7.60 cfs 1.181 af

**Total Runoff Area = 3.527 ac Runoff Volume = 1.304 af Average Runoff Depth = 4.44"**  
**81.06% Pervious = 2.859 ac 18.94% Impervious = 0.668 ac**

**The View - Hydrology Calculations**

Prepared by M.A. Day Engineering, PC

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Printed 1/22/2016

Page 60

**Summary for Subcatchment 17S: Post A**

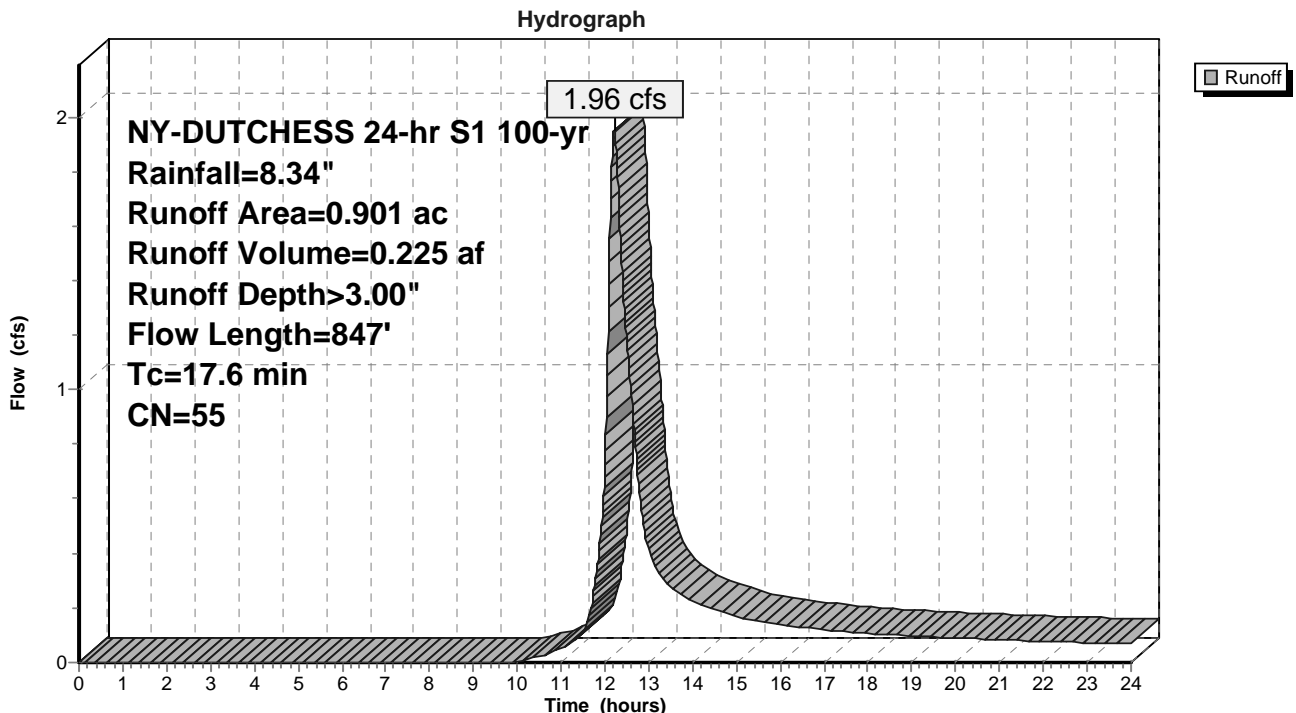
Runoff = 1.96 cfs @ 12.22 hrs, Volume= 0.225 af, Depth> 3.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Area (ac)	CN	Description
0.555	36	Woods, Fair, HSG A
0.212	79	Woods, Fair, HSG D
* 0.029	98	Proposed Walkway
* 0.105	98	Proposed Exterior Parking Area
0.901	55	Weighted Average
0.767		85.13% Pervious Area
0.134		14.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0500	0.12		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
2.6	297	0.1500	1.94		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.8	450	0.0140	9.23	29.00	<b>Pipe Channel, Reach C to DP#1</b> 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.012
17.6	847	Total			

**Subcatchment 17S: Post A**





**The View - Hydrology Calculations**

Prepared by M.A. Day Engineering, PC

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Printed 1/22/2016

Page 61

**Summary for Subcatchment 19S: Post D**

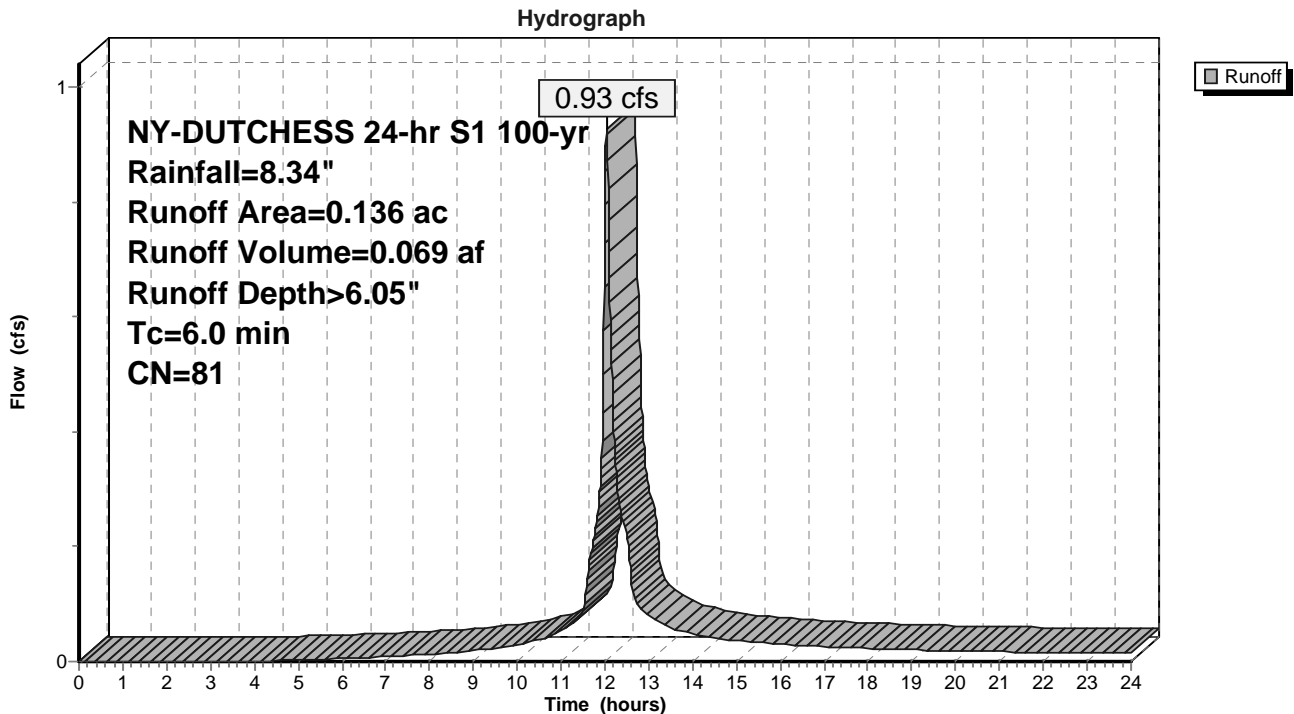
Runoff = 0.93 cfs @ 12.04 hrs, Volume= 0.069 af, Depth> 6.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Area (ac)	CN	Description
0.130	80	>75% Grass cover, Good, HSG D
* 0.006	98	Entrance
0.136	81	Weighted Average
0.130		95.59% Pervious Area
0.006		4.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum

**Subcatchment 19S: Post D**



**The View - Hydrology Calculations**

Prepared by M.A. Day Engineering, PC

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Printed 1/22/2016

Page 62

**Summary for Subcatchment 20S: Post C**

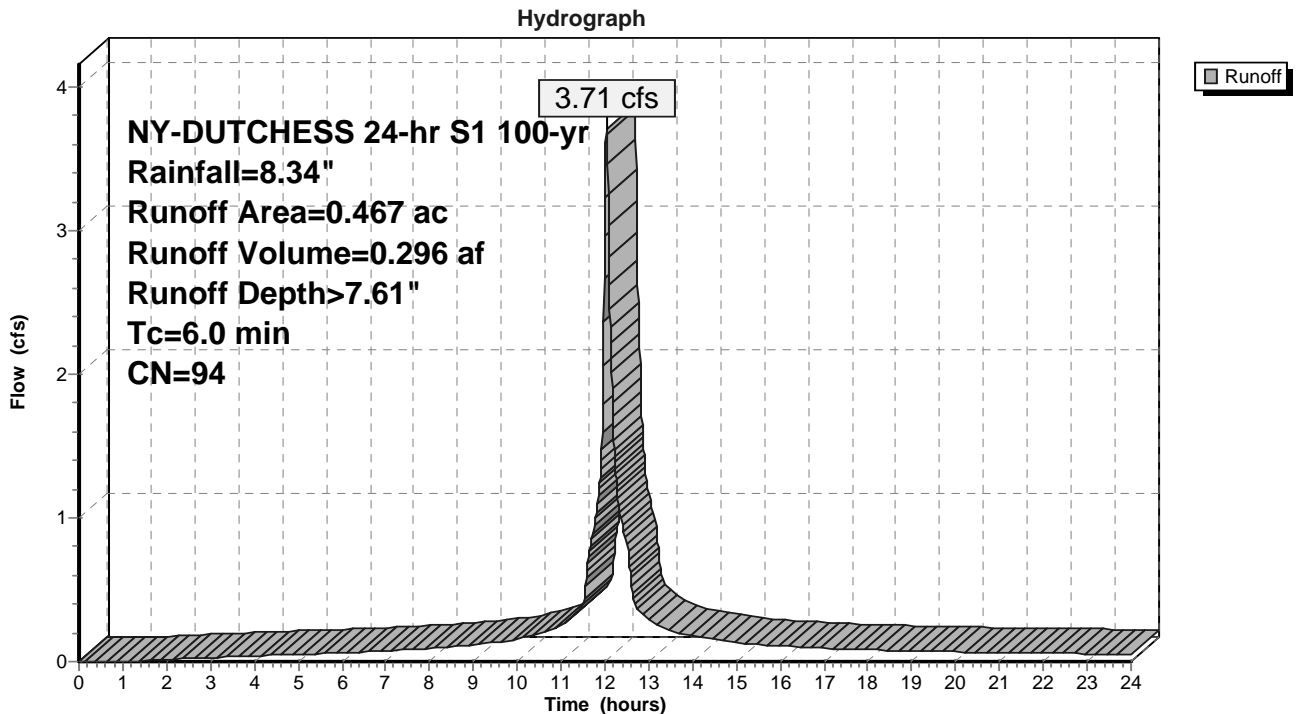
Runoff = 3.71 cfs @ 12.04 hrs, Volume= 0.296 af, Depth> 7.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Area (ac)	CN	Description
* 0.333	98	Impervious
* 0.019	98	Green Roof
* 0.083	80	Planters, Good, HSG D
0.032	80	>75% Grass cover, Good, HSG D
0.467	94	Weighted Average
0.115		24.63% Pervious Area
0.352		75.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum

**Subcatchment 20S: Post C**



# The View - Hydrology Calculations

Prepared by M.A. Day Engineering, PC

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Printed 1/22/2016

Page 63

## Summary for Subcatchment 28S: Post E

Runoff = 0.69 cfs @ 12.04 hrs, Volume= 0.051 af, Depth> 5.94"

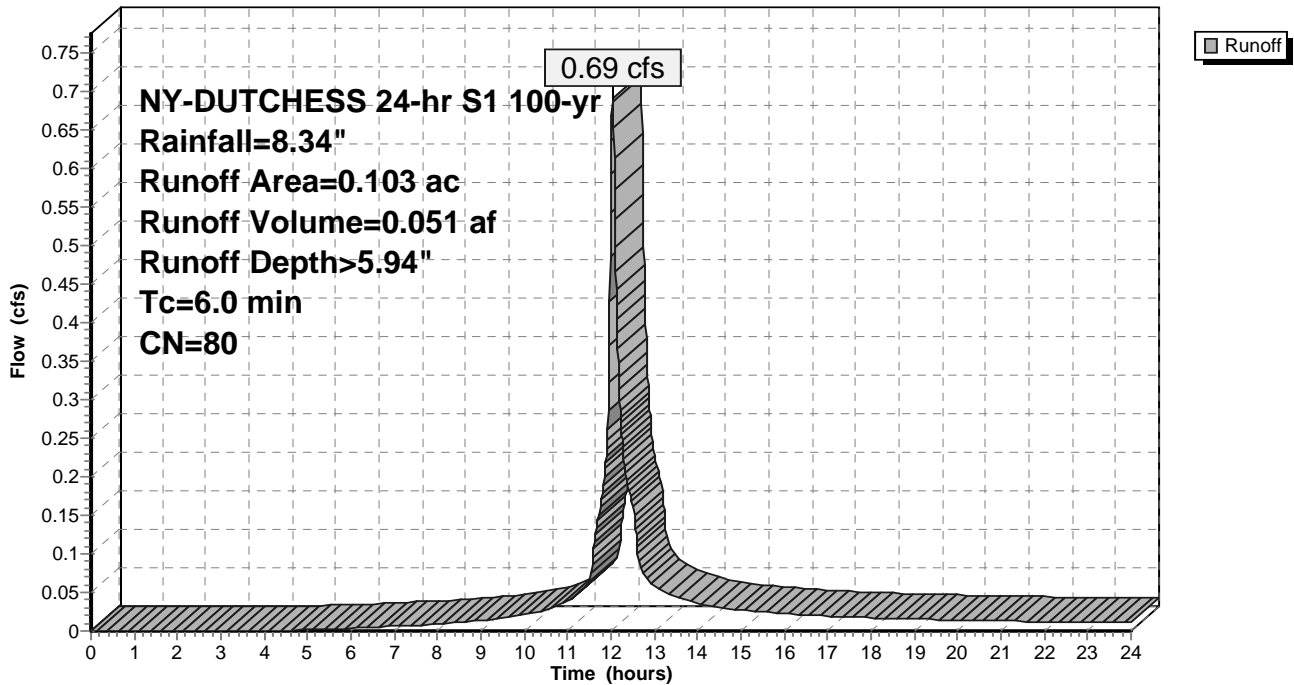
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Area (ac)	CN	Description
0.103	80	>75% Grass cover, Good, HSG D
0.103		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, min

## Subcatchment 28S: Post E

Hydrograph



# The View - Hydrology Calculations

Prepared by M.A. Day Engineering, PC

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Printed 1/22/2016

Page 64

## Summary for Subcatchment 29S: Post B

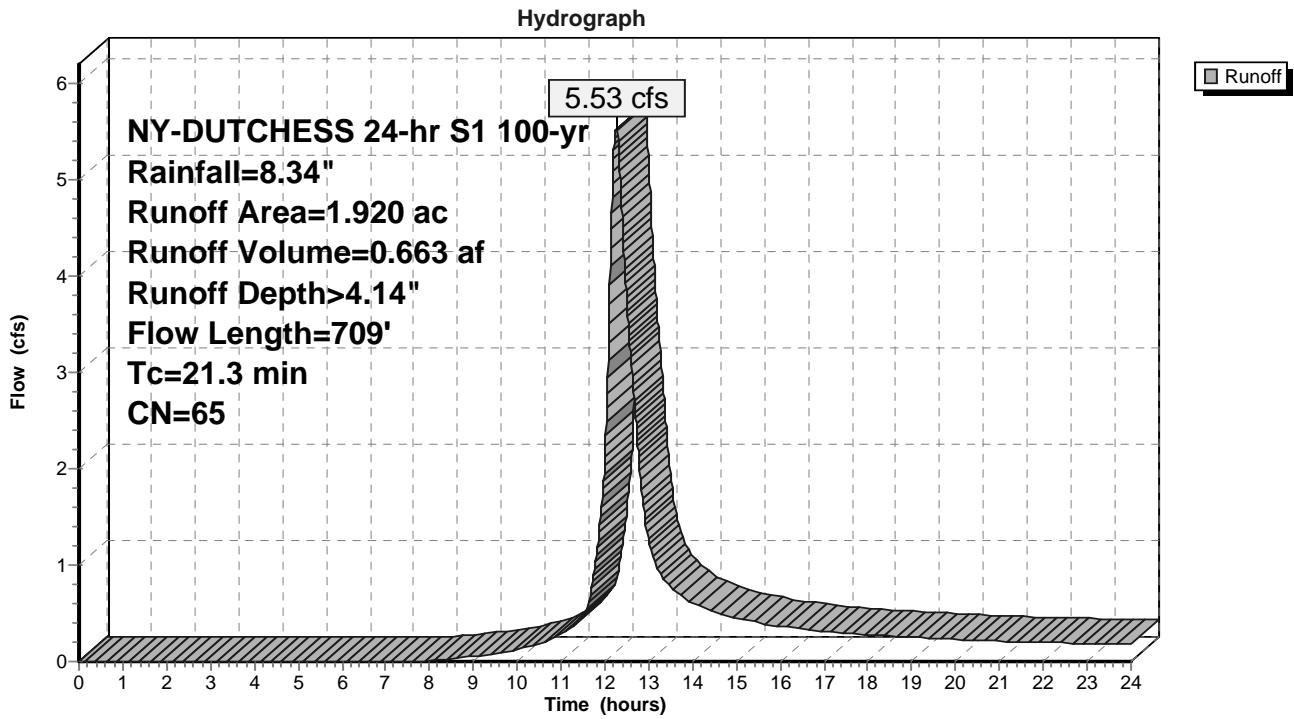
Runoff = 5.53 cfs @ 12.26 hrs, Volume= 0.663 af, Depth> 4.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Area (ac)	CN	Description
0.721	36	Woods, Fair, HSG A
0.511	80	>75% Grass cover, Good, HSG D
0.512	79	Woods, Fair, HSG D
* 0.157	98	Roof
* 0.019	98	Green Roof
1.920	65	Weighted Average
1.744		90.83% Pervious Area
0.176		9.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	100	0.0270	0.09		<b>Sheet Flow, Reach A-B</b> Woods: Light underbrush n= 0.400 P2= 3.50"
0.9	101	0.1287	1.79		<b>Shallow Concentrated Flow, Reach B-C</b> Woodland Kv= 5.0 fps
0.1	28	0.1400	6.02		<b>Shallow Concentrated Flow, Reach C-D</b> Unpaved Kv= 16.1 fps
0.6	228	0.0504	6.39	9.59	<b>Parabolic Channel, Reach D-E</b> W=3.00' D=0.75' Area=1.5 sf Perim=3.4' n= 0.030 Earth, grassed & winding
1.4	86	0.0100	1.05	0.63	<b>Trap/Vee/Rect Channel Flow, Reach E-F</b> Bot.W=6.00' D=0.10' Z= 0.3 '/' Top.W=6.06' n= 0.030 Earth, grassed & winding
0.1	59	0.1000	16.65	20.43	<b>Pipe Channel, Reach F-G</b> 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013 Corrugated PE, smooth interior
0.0	62	0.1400	22.24	39.30	<b>Pipe Channel, Reach G-H</b> 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
0.0	45	0.0700	15.73	27.79	<b>Pipe Channel, Reach H-DP#1</b> 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
21.3	709	Total			

### Subcatchment 29S: Post B



# The View - Hydrology Calculations

Prepared by M.A. Day Engineering, PC

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Printed 1/22/2016

Page 66

## Summary for Pond 13P: Catch Basin

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 3.72" for 100-yr event  
Inflow = 4.58 cfs @ 12.39 hrs, Volume= 0.595 af  
Outflow = 4.58 cfs @ 12.39 hrs, Volume= 0.595 af, Atten= 0%, Lag= 0.0 min  
Primary = 4.58 cfs @ 12.39 hrs, Volume= 0.595 af

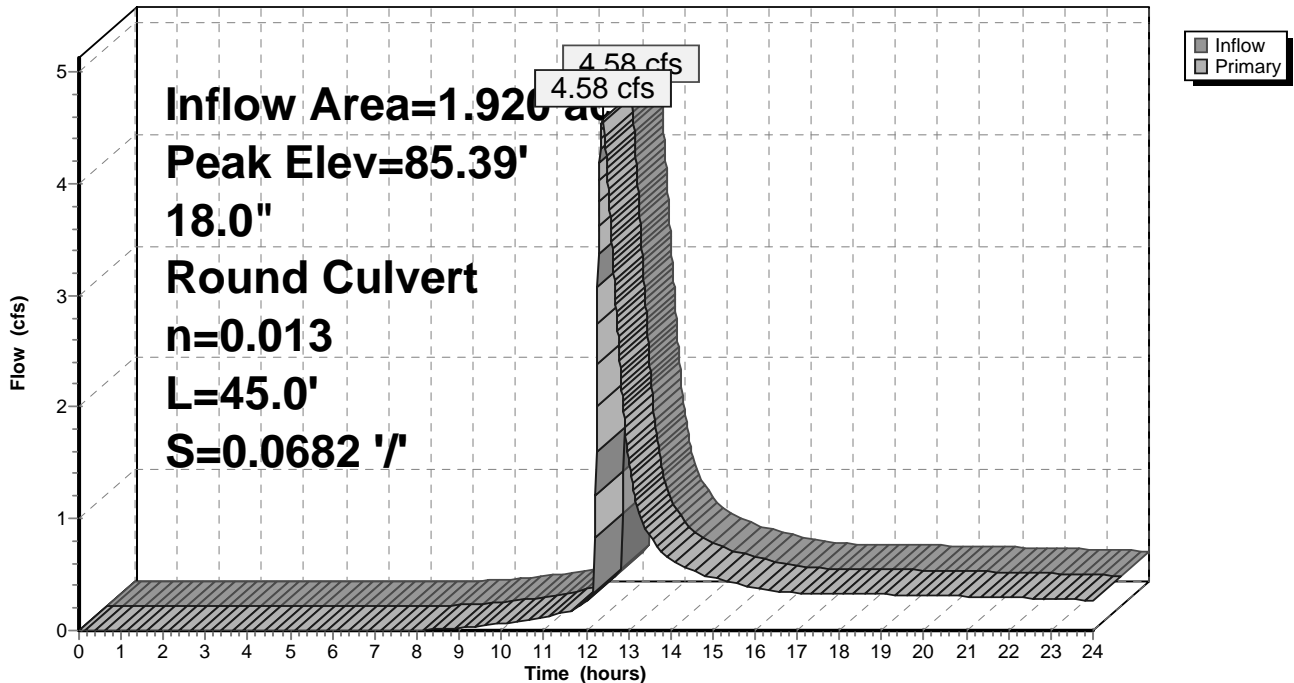
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
Peak Elev= 85.39' @ 12.39 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	84.17'	<b>18.0" Round CMP_Round 18"</b> L= 45.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 84.17' / 81.10' S= 0.0682 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=4.57 cfs @ 12.39 hrs HW=85.39' (Free Discharge)  
←1=CMP\_Round 18" (Inlet Controls 4.57 cfs @ 2.97 fps)

## Pond 13P: Catch Basin

Hydrograph



# The View - Hydrology Calculations

NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 67

## Summary for Pond 17P: Flow Through Planters

Inflow Area = 0.467 ac, 75.37% Impervious, Inflow Depth > 7.61" for 100-yr event  
 Inflow = 3.71 cfs @ 12.04 hrs, Volume= 0.296 af  
 Outflow = 2.38 cfs @ 12.12 hrs, Volume= 0.241 af, Atten= 36%, Lag= 4.8 min  
 Primary = 2.38 cfs @ 12.12 hrs, Volume= 0.241 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 3  
 Peak Elev= 3.46' @ 12.12 hrs Surf.Area= 2,121 sf Storage= 3,525 cf

Plug-Flow detention time= 150.1 min calculated for 0.241 af (81% of inflow)  
 Center-of-Mass det. time= 65.1 min ( 827.4 - 762.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	2,121 cf	<b>Ponding (Prismatic)</b> Listed below (Recalc) 7,424 cf Overall - 5,303 cf Embedded = 2,121 cf
#2	0.00'	848 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) Inside #1 2,121 cf Overall x 40.0% Voids
#3	1.00'	636 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) Inside #1 3,182 cf Overall x 20.0% Voids
		3,606 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	2,121	0	0
3.50	2,121	7,424	7,424

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	2,121	0	0
1.00	2,121	2,121	2,121

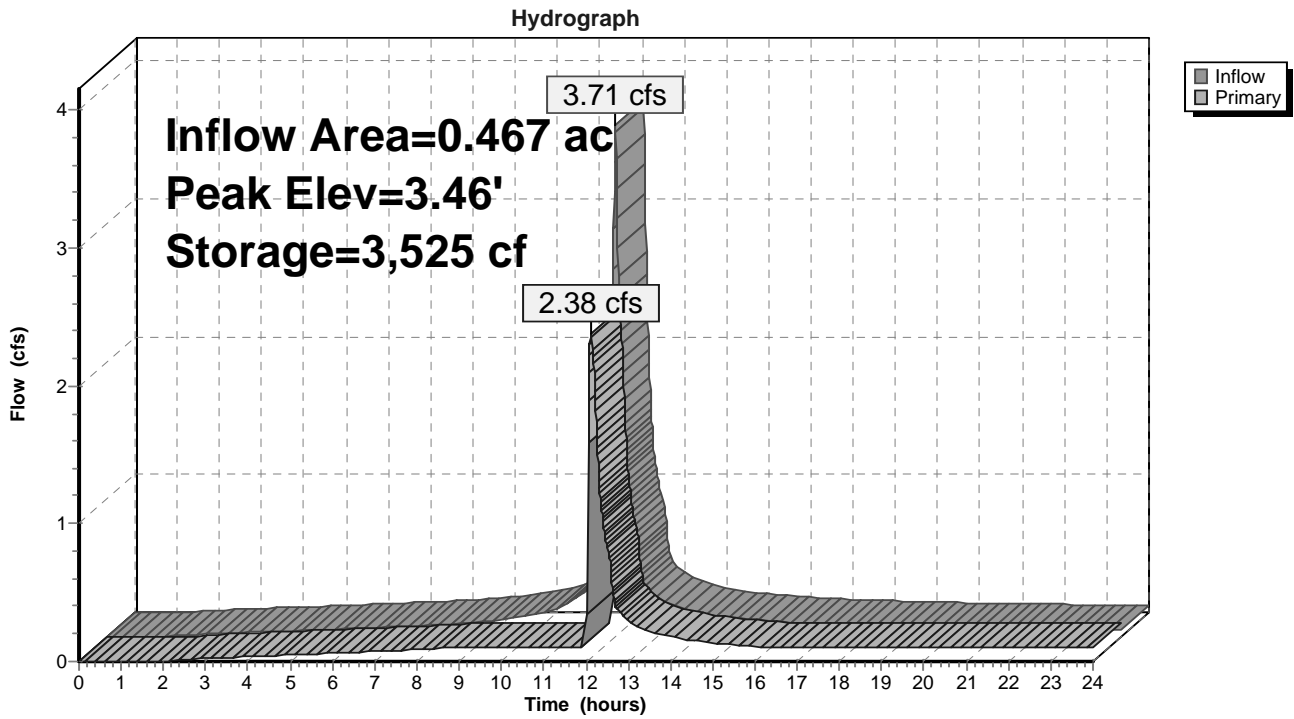
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1.00	2,121	0	0
2.50	2,121	3,182	3,182

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	<b>8.0" Vert. Orifice/Grate X 2.00</b> C= 0.600
#2	Device 1	0.00'	<b>2.000 in/hr Exfiltration (Growing Layer) over Surface area</b>
#3	Device 1	3.30'	<b>6.0" Horiz. Orifice/Grate X 6.00</b> C= 0.600
#4	Primary	3.48'	<b>350.0' long (Profile 18) Broad-Crested Rectangular Weir</b> Head (feet) 0.49 0.98 1.48 1.97 2.46 2.95 3.94 Coef. (English) 2.61 2.64 2.81 2.83 3.06 3.19 3.33

**Primary OutFlow** Max=2.38 cfs @ 12.12 hrs HW=3.46' (Free Discharge)

- 1=Orifice/Grate (Passes 2.38 cfs of 5.95 cfs potential flow)
- 2=Exfiltration (Growing Layer) (Exfiltration Controls 0.10 cfs)
- 3=Orifice/Grate (Orifice Controls 2.28 cfs @ 1.94 fps)
- 4=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

### Pond 17P: Flow Through Planters





# The View - Hydrology Calculations

NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Prepared by M.A. Day Engineering, PC

Printed 1/22/2016

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

Page 69

## Summary for Pond 19P: Dry Swale

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 4.14" for 100-yr event  
 Inflow = 5.53 cfs @ 12.26 hrs, Volume= 0.663 af  
 Outflow = 4.58 cfs @ 12.39 hrs, Volume= 0.595 af, Atten= 17%, Lag= 8.3 min  
 Primary = 4.58 cfs @ 12.39 hrs, Volume= 0.595 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
 Peak Elev= 106.97' @ 12.39 hrs Surf.Area= 5,325 sf Storage= 6,452 cf

Plug-Flow detention time= 115.9 min calculated for 0.595 af (90% of inflow)  
 Center-of-Mass det. time= 65.0 min ( 926.6 - 861.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	104.50'	6,636 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
104.50	3	0	0
105.00	540	136	136
106.00	3,536	2,038	2,174
107.00	5,389	4,463	6,636

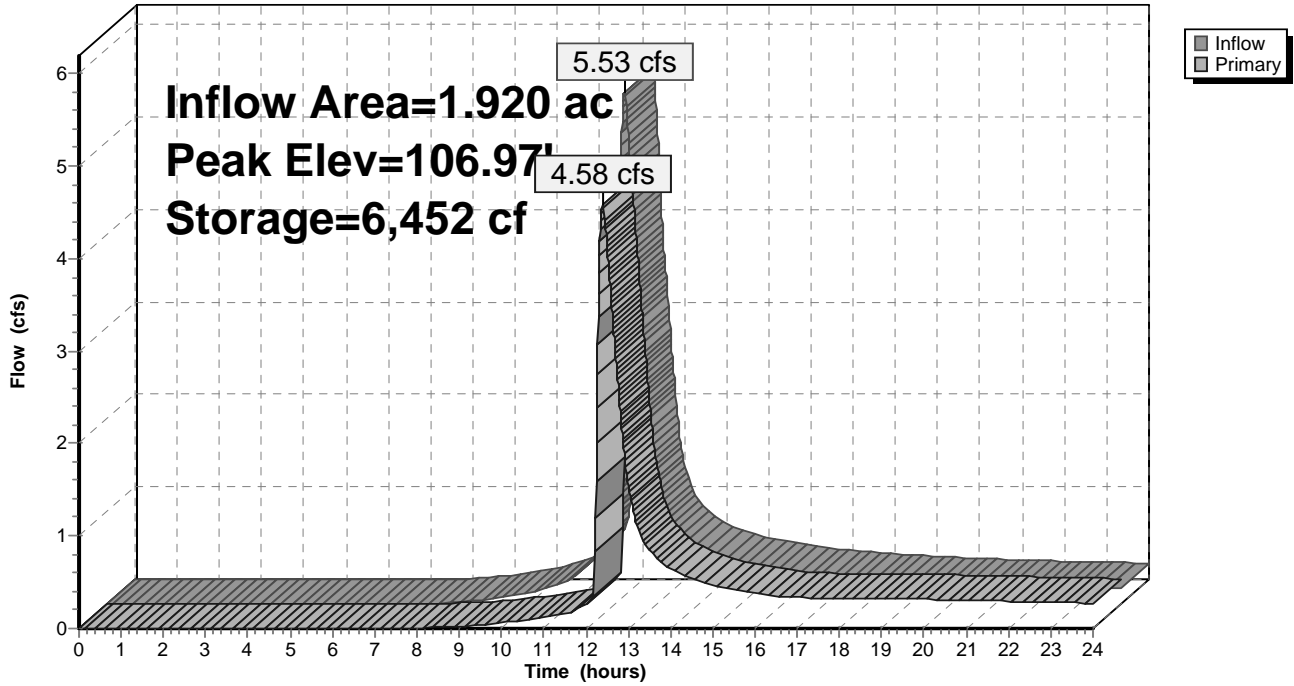
Device	Routing	Invert	Outlet Devices
#1	Primary	101.50'	<b>15.0" Round Culvert</b> L= 58.5' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 101.50' / 95.50' S= 0.1026 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Device 1	101.50'	<b>4.0" Vert. Orifice/Grate</b> C= 0.600
#3	Device 2	104.50'	<b>3.000 in/hr Exfiltration over Surface area</b>
#4	Device 1	106.67'	<b>2.0" x 2.0" Horiz. Orifice/Grate X 9.00 columns</b> X 9 rows C= 0.600 in 24.0" x 24.0" Grate (56% open area) Limited to weir flow at low heads

**Primary OutFlow** Max=4.57 cfs @ 12.39 hrs HW=106.97' (Free Discharge)

- 1=Culvert (Passes 4.57 cfs of 10.26 cfs potential flow)
- 2=Orifice/Grate (Passes 0.37 cfs of 0.97 cfs potential flow)
- 3=Exfiltration (Exfiltration Controls 0.37 cfs)
- 4=Orifice/Grate (Weir Controls 4.20 cfs @ 1.78 fps)

### Pond 19P: Dry Swale

Hydrograph



# The View - Hydrology Calculations

Prepared by M.A. Day Engineering, PC

HydroCAD® 10.00-15 s/n 04728 © 2015 HydroCAD Software Solutions LLC

NY-DUTCHESS 24-hr S1 100-yr Rainfall=8.34"

Printed 1/22/2016

Page 71

## Summary for Pond 22P: Catch Basin

Inflow Area = 1.920 ac, 9.17% Impervious, Inflow Depth > 3.72" for 100-yr event  
Inflow = 4.58 cfs @ 12.39 hrs, Volume= 0.595 af  
Outflow = 4.58 cfs @ 12.39 hrs, Volume= 0.595 af, Atten= 0%, Lag= 0.0 min  
Primary = 4.58 cfs @ 12.39 hrs, Volume= 0.595 af

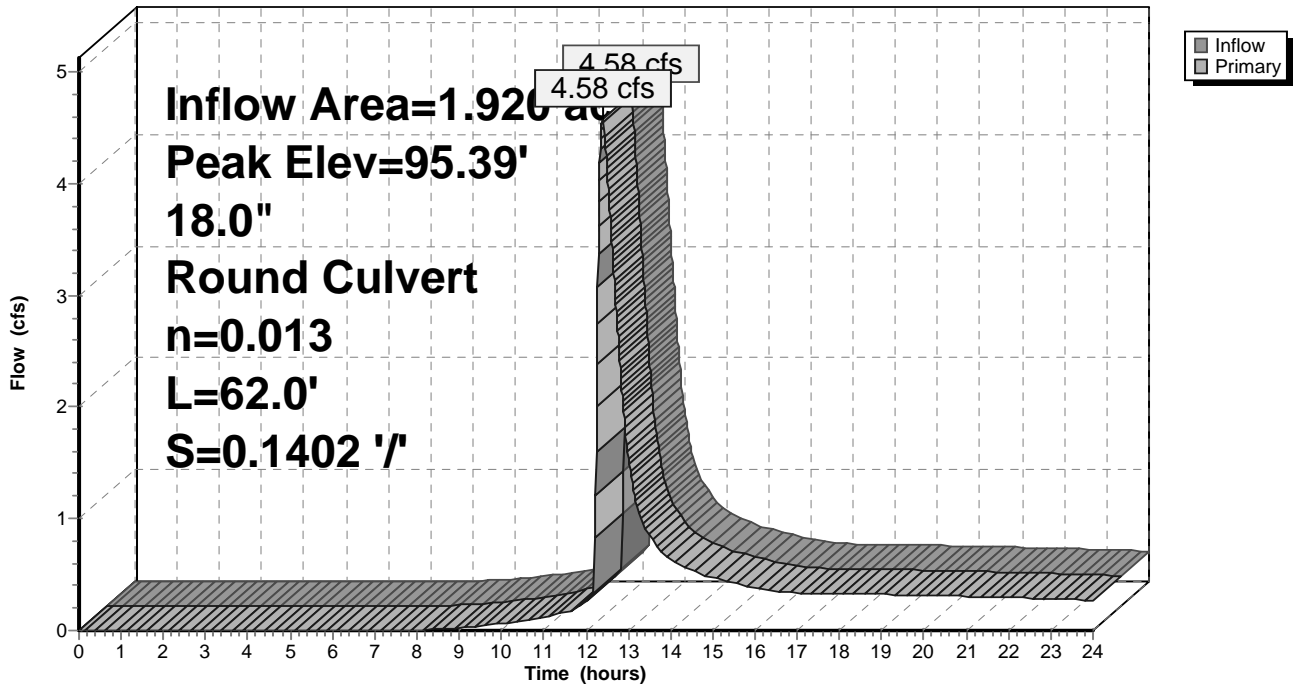
Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs  
Peak Elev= 95.39' @ 12.39 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	94.17'	<b>18.0" Round Culvert</b> L= 62.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 94.17' / 85.48' S= 0.1402 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=4.57 cfs @ 12.39 hrs HW=95.39' (Free Discharge)  
←**1=Culvert** (Inlet Controls 4.57 cfs @ 2.97 fps)

## Pond 22P: Catch Basin

Hydrograph



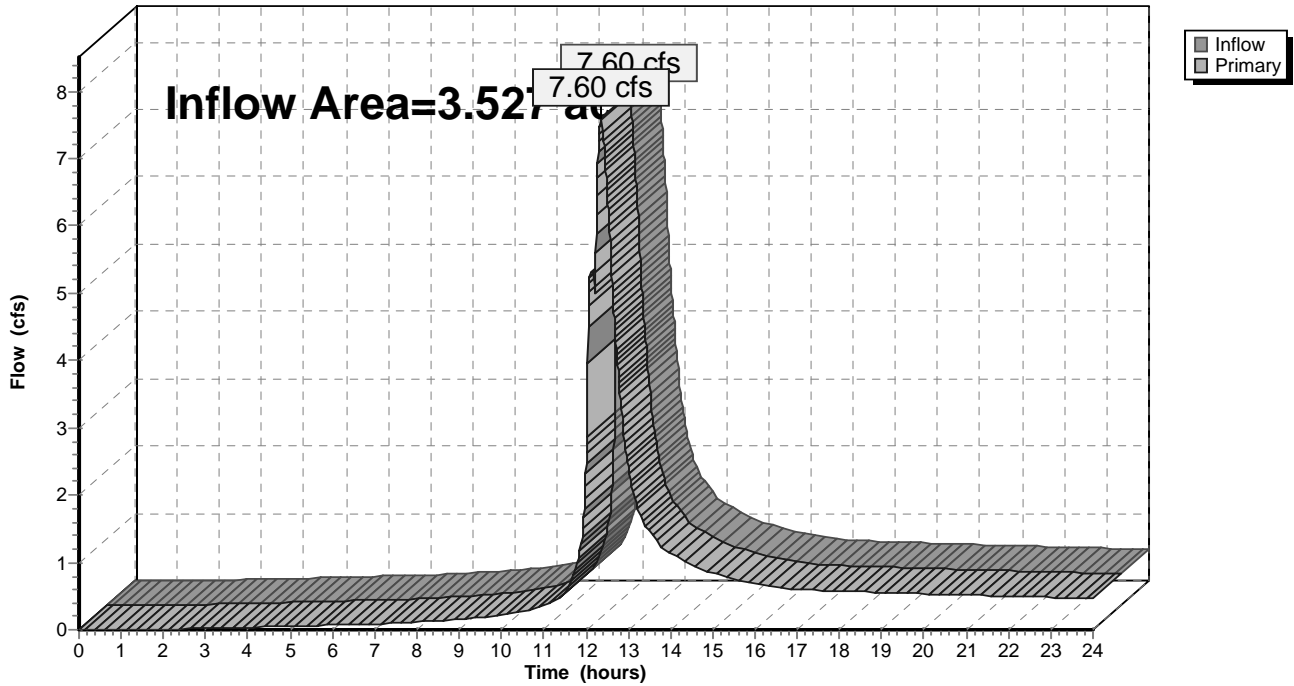
### Summary for Link 16L: DP#1

Inflow Area = 3.527 ac, 18.94% Impervious, Inflow Depth > 4.02" for 100-yr event  
Inflow = 7.60 cfs @ 12.35 hrs, Volume= 1.181 af  
Primary = 7.60 cfs @ 12.35 hrs, Volume= 1.181 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

### Link 16L: DP#1

Hydrograph





## Appendix C

# SPDES General Permit for Stormwater Discharges from Construction Activity

**Permit No. GP-0-15-002**





Department of  
Environmental  
Conservation

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
SPDES GENERAL PERMIT  
FOR STORMWATER DISCHARGES

From

**CONSTRUCTION ACTIVITY**

Permit No. GP-0-15-002

Issued Pursuant to Article 17, Titles 7, 8 and Article 70  
of the Environmental Conservation Law

Effective Date: January 29, 2015

Expiration Date: January 28, 2020

John J. Ferguson  
Chief Permit Administrator

  
Authorized Signature

1 / 12 / 15

Date

Address: NYS DEC  
Division of Environmental Permits  
625 Broadway, 4th Floor  
Albany, N.Y. 12233-1750





## PREFACE

Pursuant to Section 402 of the Clean Water Act (“CWA”), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System (“NPDES”)* permit or by a state permit program. New York’s *State Pollutant Discharge Elimination System (“SPDES”)* is a NPDES-approved program with permits issued in accordance with the *Environmental Conservation Law (“ECL”)*.

This general permit (“permit”) is issued pursuant to Article 17, Titles 7, 8 and Article 70 of the ECL. An *owner or operator* may obtain coverage under this permit by submitting a Notice of Intent (“NOI”) to the Department. Copies of this permit and the NOI for New York are available by calling (518) 402-8109 or at any New York State Department of Environmental Conservation (“the Department”) regional office (see Appendix G). They are also available on the Department’s website at:

<http://www.dec.ny.gov/>

An *owner or operator* of a *construction activity* that is eligible for coverage under this permit must obtain coverage prior to the *commencement of construction activity*. Activities that fit the definition of “*construction activity*”, as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a point source and therefore, pursuant to Article 17-0505 of the ECL, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. They cannot wait until there is an actual *discharge* from the construction site to obtain permit coverage.

**\*Note: The italicized words/phrases within this permit are defined in Appendix A.**



**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
 SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES  
 FROM CONSTRUCTION ACTIVITIES**

Part I. PERMIT COVERAGE AND LIMITATIONS .....	1
A. Permit Application .....	1
B. Effluent Limitations Applicable to Discharges from Construction Activities .....	1
C. Post-construction Stormwater Management Practice Requirements .....	4
D. Maintaining Water Quality .....	8
E. Eligibility Under This General Permit.....	9
F. Activities Which Are Ineligible for Coverage Under This General Permit .....	9
Part II. OBTAINING PERMIT COVERAGE .....	12
A. Notice of Intent (NOI) Submittal .....	12
B. Permit Authorization.....	13
C. General Requirements For Owners or Operators With Permit Coverage .....	15
D. Permit Coverage for Discharges Authorized Under GP-0-10-001.....	17
E. Change of <i>Owner or Operator</i> .....	17
Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP).....	18
A. General SWPPP Requirements .....	18
B. Required SWPPP Contents .....	20
C. Required SWPPP Components by Project Type.....	23
Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS .....	24
A. General Construction Site Inspection and Maintenance Requirements .....	24
B. Contractor Maintenance Inspection Requirements .....	24
C. Qualified Inspector Inspection Requirements.....	24
Part V. TERMINATION OF PERMIT COVERAGE .....	28
A. Termination of Permit Coverage .....	28
Part VI. REPORTING AND RETENTION OF RECORDS .....	30
A. Record Retention .....	30
B. Addresses .....	30
Part VII. STANDARD PERMIT CONDITIONS.....	31
A. Duty to Comply.....	31
B. Continuation of the Expired General Permit.....	31
C. Enforcement.....	31
D. Need to Halt or Reduce Activity Not a Defense.....	31
E. Duty to Mitigate .....	32
F. Duty to Provide Information.....	32
G. Other Information .....	32
H. Signatory Requirements.....	32
I. Property Rights.....	34
J. Severability.....	34
K. Requirement to Obtain Coverage Under an Alternative Permit.....	34
L. Proper Operation and Maintenance .....	35
M. Inspection and Entry .....	35
N. Permit Actions.....	36
O. Definitions .....	36
P. Re-Opener Clause .....	36



Q. Penalties for Falsification of Forms and Reports.....	36
R. Other Permits.....	36
APPENDIX A.....	37
APPENDIX B.....	44
APPENDIX C.....	46
APPENDIX D.....	52
APPENDIX E.....	53
APPENDIX F.....	55



(Part I)

I.

## Part I. PERMIT COVERAGE AND LIMITATIONS

### A. Permit Application

This permit 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 watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

### B. Effluent Limitations Applicable to Discharges from Construction Activities

*Discharges* authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) – (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in the Stormwater Pollution Prevention Plan (“SWPPP”) the reason(s) for the deviation or alternative design and provide information

(Part I.B.1)

which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:

- (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharges*;
- (ii) Control stormwater *discharges* to *minimize* channel and streambank erosion and scour in the immediate vicinity of the *discharge* points;
- (iii) *Minimize* the amount of soil exposed during *construction activity*;
- (iv) *Minimize* the disturbance of *steep slopes*;
- (v) *Minimize* sediment *discharges* from the site;
- (vi) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharges*, unless *infeasible*;
- (vii) *Minimize* soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
- (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover.

b. **Soil Stabilization.** In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

c. **Dewatering.** *Discharges* from dewatering activities, including *discharges*



(Part I.B.1.c)

from dewatering of trenches and excavations, must be managed by appropriate control measures.

d. **Pollution Prevention Measures.** Design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be designed, installed, implemented and maintained to:

- (i) *Minimize* the *discharge* of *pollutants* from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used;
- (ii) *Minimize* the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a *discharge* of *pollutants*, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use) ; and
- (iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.

e. **Prohibited Discharges.** The following *discharges* are prohibited:

- (i) Wastewater from washout of concrete;
- (ii) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
- (iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;
- (iv) Soaps or solvents used in vehicle and equipment washing; and
- (v) Toxic or hazardous substances from a spill or other release.

f. **Surface Outlets.** When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion

(Part I.B.1.f)

at or below the outlet does not occur.

### **C. Post-construction Stormwater Management Practice Requirements**

1. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the *performance criteria* in the New York State Stormwater Management Design Manual (“Design Manual”), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices (“SMPs”) are not designed in conformance with the *performance criteria* in the Design Manual, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.
2. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

#### **a. Sizing Criteria for New Development**

- (i) Runoff Reduction Volume (“RRv”): Reduce the total Water Quality Volume (“WQv”) by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.
- (ii) Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to *site limitations* shall direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible*.

**In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual.** The remaining portion of the total WQv

(Part I.C.2.a.ii)

that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume (“Cpv”): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
  - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
  - (2) The site *discharges* directly to tidal waters, or fifth order or larger streams.
- (iv) Overbank Flood Control Criteria (“Qp”): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that overbank control is not required.
- (v) Extreme Flood Control Criteria (“Qf”): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that overbank control is not required.

**b. Sizing Criteria for New Development in Enhanced Phosphorus Removal Watershed**

- (i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be calculated in accordance with the criteria in Section 10.3 of the Design Manual.
- (ii) Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to *site limitations* shall direct runoff from all newly constructed *impervious areas* to a RR technique or

(Part I.C.2.b.ii)

standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible*.

**In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 10.3 of the Design Manual.** The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
  - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
  - (2) The site *discharges* directly to tidal waters, or fifth order or larger streams.
- (iv) Overbank Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that overbank control is not required.
- (v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that overbank control is not required.

**c. Sizing Criteria for Redevelopment Activity**

(Part I.C.2.c.i)

- (i) Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* shall be addressed by one of the following options. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other *redevelopment activities* shall calculate the WQv in accordance with Section 4.2 of the Design Manual.
- (1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or
  - (2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or
  - (3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or
  - (4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

If there is an existing post-construction stormwater management practice located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 – 4 above.

- (ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.
- (iii) Overbank Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(Part I.C.2.c.iv)

- (iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

**d. Sizing Criteria for Combination of Redevelopment Activity and New Development**

Construction projects that include both *New Development* and *Redevelopment Activity* shall provide post-construction stormwater management controls that meet the *sizing criteria* calculated as an aggregate of the *Sizing Criteria* in Part I.C.2.a. or b. of this permit for the *New Development* portion of the project and Part I.C.2.c of this permit for *Redevelopment Activity* portion of the project.

**D. Maintaining Water Quality**

The Department expects that compliance with the conditions of this permit will control *discharges* necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any discharge to either cause or contribute to a violation of *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;
2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and
3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the stormwater *discharges* authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standards*; the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this general permit and document in accordance with Part IV.C.4. of this general permit. To address the *water quality standard* violation the *owner or operator* may need to provide additional information, include and implement appropriate controls in the SWPPP to correct the problem, or obtain an individual SPDES permit.

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharges* authorized by this permit are causing or contributing to a violation of *water quality standards*, or

(Part I.D)

if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharges* will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

#### **E. Eligibility Under This General Permit**

1. This permit may authorize all *discharges* of stormwater from *construction activity to surface waters of the State* and *groundwaters* except for ineligible *discharges* identified under subparagraph F. of this Part.
2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharges* from *construction activities*.
3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater *discharges* may be authorized by this permit: *discharges* from firefighting activities; fire hydrant flushings; waters to which cleansers or other components have not been added that are used to wash vehicles or control dust in accordance with the SWPPP, routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated *groundwater* or spring water; uncontaminated *discharges* from construction site de-watering operations; and foundation or footing drains where flows are not contaminated with process materials such as solvents. For those entities required to obtain coverage under this permit, and who *discharge* as noted in this paragraph, and with the exception of flows from firefighting activities, these *discharges* must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with *water quality standards* in Part I.D of this permit.
4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

#### **F. Activities Which Are Ineligible for Coverage Under This General Permit**

All of the following are **not** authorized by this permit:

(Part I.F)

1. *Discharges after construction activities* have been completed and the site has undergone *final stabilization*;
2. *Discharges* that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;
3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;
4. *Construction activities* or *discharges from construction activities* that may adversely affect an endangered or threatened species unless the *owner or operator* has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.C.2 of this permit.
5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;
6. *Construction activities* for residential, commercial and institutional projects:
  - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
  - b. Which disturb one or more acres of land with no existing *impervious cover*; and
  - c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture (“USDA”) Soil Survey for the County where the disturbance will occur.
7. *Construction activities* for linear transportation projects and linear utility projects:
  - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
  - b. Which disturb two or more acres of land with no existing *impervious cover*; and
  - c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the USDA Soil Survey for the County where the disturbance will occur.



(Part I.F.8)

8. *Construction activities* that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.C.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:
- a. Documentation that the *construction activity* is not within an archeologically sensitive area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the construction site within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the construction site within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.
    - 1-5 acres of disturbance - 20 feet
    - 5-20 acres of disturbance - 50 feet
    - 20+ acres of disturbance - 100 feet, or
  - b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
    - (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
    - (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
    - (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
    - (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or
  - c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:
    - (i) No Affect
    - (ii) No Adverse Affect

(Part I.F.8.c.iii)

(iii) Executed Memorandum of Agreement, or

d. Documentation that:

(i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.

9. *Discharges from construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

## II. Part II. OBTAINING PERMIT COVERAGE

### A. Notice of Intent (NOI) Submittal

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed NOI form to the Department in order to be authorized to *discharge* under this permit. An *owner or operator* shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (<http://www.dec.ny.gov/>). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address.

**NOTICE OF INTENT  
NYS DEC, Bureau of Water Permits  
625 Broadway, 4<sup>th</sup> Floor  
Albany, New York 12233-3505**

2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have its SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department. The *owner or operator* shall have the "MS4 SWPPP Acceptance" form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department. An *owner or operator* shall use either the electronic (eNOI) or paper version of the NOI.

The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the address in Part II.A.1.

(Part II.A.2)

The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *MS4* prior to submitting the NOI to the Department does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.E. (*Change of Owner or Operator*) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4*.

3. The *owner or operator* shall have the SWPPP preparer sign the “SWPPP Preparer Certification” statement on the NOI prior to submitting the form to the Department.
4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

## **B. Permit Authorization**

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.
2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied all of the following criteria:
  - a. project review pursuant to the State Environmental Quality Review Act (“SEQRA”) have been satisfied, when SEQRA is applicable. See the Department’s website (<http://www.dec.ny.gov/>) for more information,
  - b. where required, all necessary Department permits subject to the *Uniform Procedures Act (“UPA”)* (see 6 NYCRR Part 621) have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators of construction activities* that are required to obtain *UPA* permits must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,
  - c. the final SWPPP has been prepared, and
  - d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.
3. An *owner or operator* that has satisfied the requirements of Part II.B.2 above

(Part II.B.3)

will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

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

- (i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.; or
- (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has not been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;
- (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.

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

- (i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed “MS4 SWPPP Acceptance” form, or
- (ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed “MS4 SWPPP Acceptance” form.

4. The Department may suspend or deny an *owner’s or operator’s* coverage

(Part II.B.4)

under this permit if the Department determines that the SWPPP does not meet the permit requirements. In accordance with statute, regulation, and the terms and conditions of this permit, the Department may deny coverage under this permit and require submittal of an application for an individual SPDES permit based on a review of the NOI or other information pursuant to Part II.

5. Coverage under this permit authorizes stormwater *discharges* from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater *discharges* from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The *owner or operator* shall not *commence construction activity* on the future or additional areas until their authorization to *discharge* under this permit goes into effect in accordance with Part II.B. of this permit.

### **C. General Requirements For Owners or Operators With Permit Coverage**

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination (“NOT”) has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.
2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-15-002), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, and all documentation necessary to demonstrate eligibility with this permit at the construction site until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.
3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*). 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

(Part II.C.3.a)

have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. of this permit 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 temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005.
  - 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.
  - e. The *owner or operator* shall include the requirements above in their SWPPP.
4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.
  5. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*, the *owner or operator* shall notify the *regulated, traditional land use control MS4* in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the *regulated, traditional land use control MS4*, the *owner or operator* shall have the SWPPP amendments or modifications reviewed and accepted by the *regulated, traditional land use control MS4* prior to commencing construction of the post-construction stormwater management practice

(Part II.D)

#### **D. Permit Coverage for Discharges Authorized Under GP-0-10-001**

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-10-001), an *owner or operator* of a *construction activity* with coverage under GP-0-10-001, as of the effective date of GP-0-15-002, shall be authorized to *discharge* in accordance with GP-0-15-002, unless otherwise notified by the Department.

An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-15-002.

#### **E. Change of *Owner or Operator***

2. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.A.1. of this permit. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.

Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or operator* was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

(Part III)

III. **Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)**

**A. General SWPPP Requirements**

1. A SWPPP shall be prepared and implemented by the *owner or operator* of each *construction activity* covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*. A copy of the completed, final NOI shall be included in the SWPPP.
2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.
3. All SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.
4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP:
  - a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;
  - b. whenever there is a change in design, construction, or operation at the construction site that has or could have an effect on the *discharge* of *pollutants*; and
  - c. to address issues or deficiencies identified during an inspection by the *qualified inspector*, the Department or other regulatory authority.
5. The Department may notify the *owner or operator* at any time that the



(Part III.A.5)

SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.C.4. of this permit.

6. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor*. The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.

The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

"I hereby certify under penalty of law 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 am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the

(Part III.A.6)

*trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the construction site. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

## **B. Required SWPPP Contents**

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must demonstrate *equivalence* to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:
  - a. Background information about the scope of the project, including the location, type and size of project;
  - b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours ; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater *discharge(s)*;
  - c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);
  - d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other

(Part III.B.1.d)

activity at the site that results in soil disturbance;

- e. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;
- f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of *final stabilization*;
- g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;
- h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;
- i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005;
- j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the stormwater *discharges*;
- k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the construction site; and
- l. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005. Include the reason for the deviation or alternative design

(Part III.B.1.I)

and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. Post-construction stormwater management practice component – The *owner or operator* of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable *sizing criteria* in Part I.C.2.a., c. or d. of this permit and the *performance criteria* in the technical standard, New York State Stormwater Management Design Manual dated January 2015

Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

The post-construction stormwater management practice component of the SWPPP shall include the following:

- a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;
- b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;
- c. A Stormwater Modeling and Analysis Report that includes:
  - (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;
  - (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;
  - (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;
  - (iv) Summary table, with supporting calculations, which demonstrates

(Part III.B.2.c.iv)

that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;

- (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and
  - (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;
- d. Soil testing results and locations (test pits, borings);
  - e. Infiltration test results, when required; and
  - f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.
3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria*, Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f. above.

### **C. Required SWPPP Components by Project Type**

Unless otherwise notified by the Department, *owners or operators of construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit. *Owners or operators of the construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3 of this permit.

(Part IV)

#### IV. Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

##### A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.
2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York, or protect the public health and safety and/or the environment.

##### B. Contractor Maintenance Inspection Requirements

1. The *owner or operator* of each *construction activity* identified in Tables 1 and 2 of Appendix B shall have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.
2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections. The *trained contractor* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.
3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance 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.

##### C. Qualified Inspector Inspection Requirements

(Part IV.C)

The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. and IV.B. of this permit **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- Registered Landscape Architect, or
- someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].

1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:
  - a. the construction of a single family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
  - b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
  - c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and
  - d. *construction activities* located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.
2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:
  - a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.
  - b. For construction sites where soil disturbance activities are on-going and

(Part IV.C.2.b)

the *owner or operator* has received authorization in accordance with Part II.C.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

- c. For construction sites 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 DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to reducing the frequency of inspections.
- d. For construction sites 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 DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved *final stabilization*, and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed 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 address in Part II.A.1 of this permit.
- e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall



(Part IV.C.2.e)

be separated by a minimum of two (2) full calendar days.

3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site, and all points of *discharge* from the construction site.
4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:
  - a. Date and time of inspection;
  - b. Name and title of person(s) performing inspection;
  - c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
  - d. 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;
  - e. 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;
  - f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;
  - g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
  - h. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;

(Part IV.C.4.i)

- i. 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;
  - j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);
  - k. Identification and status of all corrective actions that were required by previous inspection; and
  - l. 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 onsite 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.
5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit 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.
  6. All inspection reports shall be signed by the *qualified inspector*. Pursuant to Part II.C.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

## V. Part V. TERMINATION OF PERMIT COVERAGE

### A. Termination of Permit Coverage

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.A.1 of this permit. The NOT form shall be one which is associated with this permit, signed in accordance with Part VII.H of this permit.

(Part V.A.2)

2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:
  - a. Total project completion - All *construction activity* identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;
  - b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; 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;
  - c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.E. of this permit.
  - d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.
3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the “*Final Stabilization*” and “*Post-Construction Stormwater Management Practice certification statements*” on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.
4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *regulated, traditional land use control MS4* sign the “*MS4 Acceptance*” statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The *regulated, traditional land use control MS4* official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The *regulated, traditional land use control MS4* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector’s* final site inspection certification(s) required in Part V.A.3. of this permit.

(Part V.A.5)

5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:
  - a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,
  - b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),
  - c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism 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,
  - d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

## VI. Part VI. REPORTING AND RETENTION OF RECORDS

### A. Record Retention

The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the Department receives a complete NOT submitted in accordance with Part V. of this general permit.

### B. Addresses

With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.A.1 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

(Part VII)

**VII. Part VII. STANDARD PERMIT CONDITIONS**

**A. Duty to Comply**

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE). *Construction activity* shall not resume until written permission to do so has been received from the RWE.

**B. Continuation of the Expired General Permit**

This permit expires five (5) years from the effective date. If a new general permit is not issued prior to the expiration of this general permit, an *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

**C. Enforcement**

Failure of the *owner or operator*, its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to \$37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

**D. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

(Part VII.E)

### **E. Duty to Mitigate**

The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

### **F. Duty to Provide Information**

The *owner or operator* shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

### **G. Other Information**

When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any of the documents required by this permit, or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or *impervious area*), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department using the contact information in Part II.A. of this permit. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

### **H. Signatory Requirements**

1. All NOIs and NOTs shall be signed as follows:
  - a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
    - (i) a president, secretary, treasurer, or vice-president of the

(Part VII.H.1.a.i)

corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

- (ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or

c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

- (i) the chief executive officer of the agency, or

- (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named

(Part VII.H.2.b)

individual or any individual occupying a named position) and,

- c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.
3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.
4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4*, or by a duly authorized representative of that person.

It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

#### **I. Property Rights**

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

#### **J. Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

#### **K. Requirement to Obtain Coverage Under an Alternative Permit**

1. The Department may require any *owner or operator* authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any *discharger* authorized by a general permit to apply for an individual SPDES permit, it shall notify the *discharger* in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the *owner or operator* to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from *owner or operator* receipt of the notification letter, whereby the authorization to



(Part VII.K.1)

*discharge* under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. When an individual SPDES permit is issued to a discharger authorized to *discharge* under a general SPDES permit for the same *discharge(s)*, the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

#### **L. Proper Operation and Maintenance**

The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

#### **M. Inspection and Entry**

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a construction site which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the *owner's or operator's* premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.
4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

(Part VII.N)

**N. Permit Actions**

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

**O. Definitions**

Definitions of key terms are included in Appendix A of this permit.

**P. Re-Opener Clause**

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with *construction activity* covered by this permit, the *owner or operator* of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.
2. Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

**Q. Penalties for Falsification of Forms and Reports**

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

**R. Other Permits**

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

## VIII. APPENDIX A

### Definitions

**Alter Hydrology from Pre to Post-Development Conditions** - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

**Combined Sewer** - means a sewer that is designed to collect and convey both “sewage” and “stormwater”.

**Commence (Commencement of) Construction Activities** - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for “*Construction Activity(ies)*” also.

**Construction Activity(ies)** - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

**Direct Discharge (to a specific surface waterbody)** - means that runoff flows from a construction site by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a construction site to a separate storm sewer system and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

**Discharge(s)** - means any addition of any pollutant to waters of the State through an outlet or point source.

**Environmental Conservation Law (ECL)** - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

**Equivalent (Equivalence)** – means that the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

**Final Stabilization** - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied

on all disturbed areas that are not covered by permanent structures, concrete or pavement.

**General SPDES permit** - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 and Section 70-0117 of the ECL authorizing a category of discharges.

**Groundwater(s)** - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

**Historic Property** – means any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State or National Registers of Historic Places.

**Impervious Area (Cover)** - means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

**Infeasible** – means not technologically possible, or not economically practicable and achievable in light of best industry practices.

**Larger Common Plan of Development or Sale** - means a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term “plan” in “larger common plan of development or sale” is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed.

**Minimize** – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

**Municipal Separate Storm Sewer (MS4)** - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters,

ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State;
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a *combined sewer*; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

**National Pollutant Discharge Elimination System (NPDES)** - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

**New Development** – means any land disturbance that does meet the definition of Redevelopment Activity included in this appendix.

**NOI Acknowledgment Letter** - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from *construction activity*.

**Owner or Operator** - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; and/or an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications.

**Performance Criteria** – means the design criteria listed under the “Required Elements” sections in Chapters 5, 6 and 10 of the technical standard, New York State Stormwater Management Design Manual, dated January 2015. It does not include the Sizing Criteria (i.e. WQv, RRv, Cpv, Qp and Qf ) in Part I.C.2. of the permit.

**Pollutant** - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq .

**Qualified Inspector** - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

**Qualified Professional** - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York..

**Redevelopment Activity(ies)** – means the disturbance and reconstruction of existing impervious area, including impervious areas that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

**Regulated, Traditional Land Use Control MS4** - means a city, town or village with land use control authority that is required to gain coverage under New York State DEC's SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s).

**Routine Maintenance Activity** - means *construction activity* that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Stream bank restoration projects (does not include the placement of spoil material),
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that makes the transition between the road shoulder and the ditch or embankment,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or embankment,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

**Site limitations** – means site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical site limitations include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of site limitations shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

**Sizing Criteria** – means the criteria included in Part I.C.2 of the permit that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), Overbank Flood (Qp), and Extreme Flood (Qf).

**State Pollutant Discharge Elimination System (SPDES)** - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

**Steep Slope** – means land area with a Soil Slope Phase that is identified as an E or F, or

the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture (“USDA”) Soil Survey for the County where the disturbance will occur.

**Surface Waters of the State** - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

**Temporarily Ceased** – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

**Temporary Stabilization** - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

**Total Maximum Daily Loads (TMDLs)** - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet *water quality standards*, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for point source discharges, load allocations (LAs) for nonpoint sources, and a margin of safety (MOS).

**Trained Contractor** - means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The *trained contractor* is responsible for the day to day implementation of the SWPPP.

**Uniform Procedures Act (UPA) Permit** - means a permit required under 6 NYCRR Part



621 of the Environmental Conservation Law (ECL), Article 70.

**Water Quality Standard** - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

IX. APPENDIX B

**Required SWPPP Components by Project Type**

**Table 1  
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP  
THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS**

<p><b>The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:</b></p> <ul style="list-style-type: none"><li>• Single family home <u>not</u> located in one of the watersheds listed in Appendix C or <u>not directly discharging</u> to one of the 303(d) segments listed in Appendix E</li><li>• Single family residential subdivisions with 25% or less impervious cover at total site build-out and <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E</li><li>• Construction of a barn or other agricultural building, silo, stock yard or pen.</li></ul>
<p><b>The following construction activities that involve soil disturbances of one (1) or more acres of land:</b></p> <ul style="list-style-type: none"><li>• Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains</li><li>• Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects</li><li>• Bike paths and trails</li><li>• Sidewalk construction projects that are not part of a road/ highway construction or reconstruction project</li><li>• Slope stabilization projects</li><li>• Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics</li><li>• Spoil areas that will be covered with vegetation</li><li>• Land clearing and grading for the purposes of creating vegetated open space (i.e. recreational parks, lawns, meadows, fields), excluding projects that <i>alter hydrology from pre to post development</i> conditions</li><li>• Athletic fields (natural grass) that do not include the construction or reconstruction of <i>impervious area</i> <u>and</u> do not <i>alter hydrology from pre to post development</i> conditions</li><li>• Demolition project where vegetation will be established and no redevelopment is planned</li><li>• Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with <i>impervious cover</i></li><li>• Structural practices as identified in Table II in the “Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State”, excluding projects that involve soil disturbances of less than five acres and construction activities that include the construction or reconstruction of impervious area</li></ul>
<p><b>The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:</b></p> <ul style="list-style-type: none"><li>• All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.</li></ul>

**Table 2**  
**CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES**  
**POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES**

**The following construction activities that involve soil disturbances of one (1) or more acres of land:**

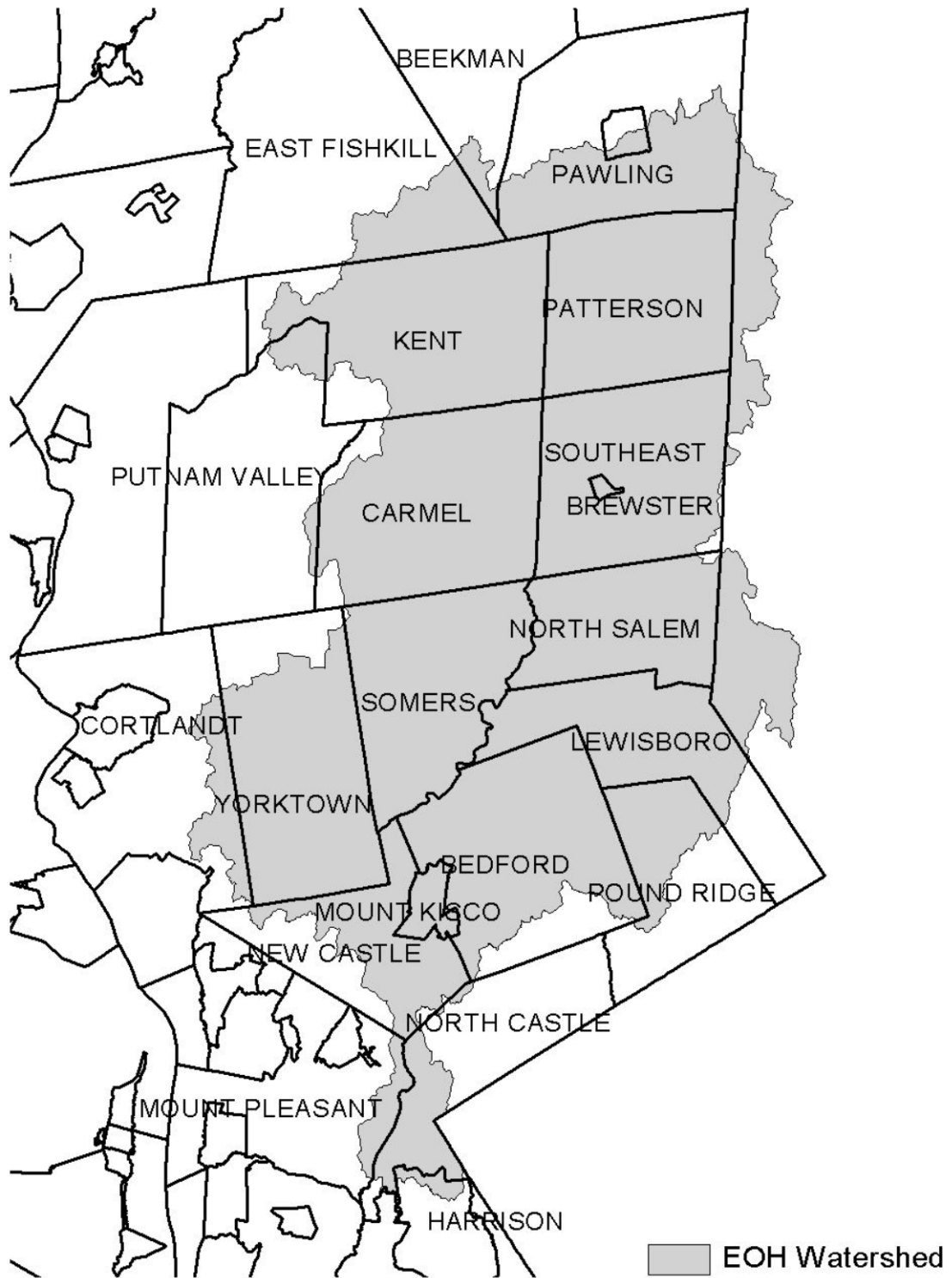
- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other agricultural building(e.g. silo) and structural practices as identified in Table II in the “Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State” that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional, includes hospitals, prisons, schools and colleges
- Industrial facilities, includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW’s and water treatment plants
- Office complexes
- Sports complexes
- Racetracks, includes racetracks with earthen (dirt) surface
- Road construction or reconstruction
- Parking lot construction or reconstruction
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover*, and constructed as part of an over-head electric transmission line project , wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- All other construction activities that include the construction or reconstruction of *impervious area* or *alter the hydrology from pre to post development* conditions, and are not listed in Table 1

**APPENDIX C****Watersheds Where Enhanced Phosphorus Removal Standards Are Required**

**Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual (“Design Manual”).**

- Entire New York City Watershed located east of the Hudson River - Figure 1
- Onondaga Lake Watershed - Figure 2
- Greenwood Lake Watershed -Figure 3
- Oscawana Lake Watershed – Figure 4
- Kinderhook Lake Watershed – Figure 5

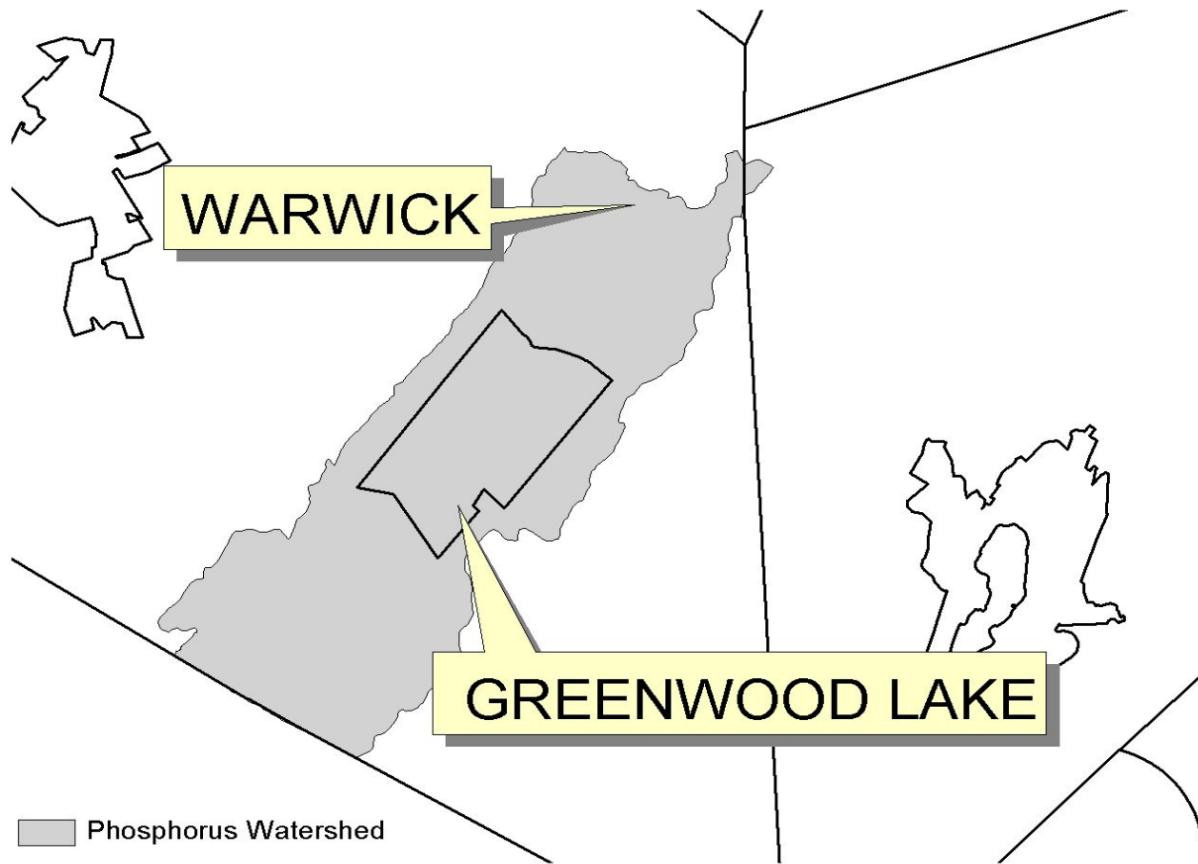
**Figure 1 - New York City Watershed East of the Hudson**



**Figure 2 - Onondaga Lake Watershed**



**Figure 3 - Greenwood Lake Watershed**



**Figure 4 - Oscawana Lake Watershed**

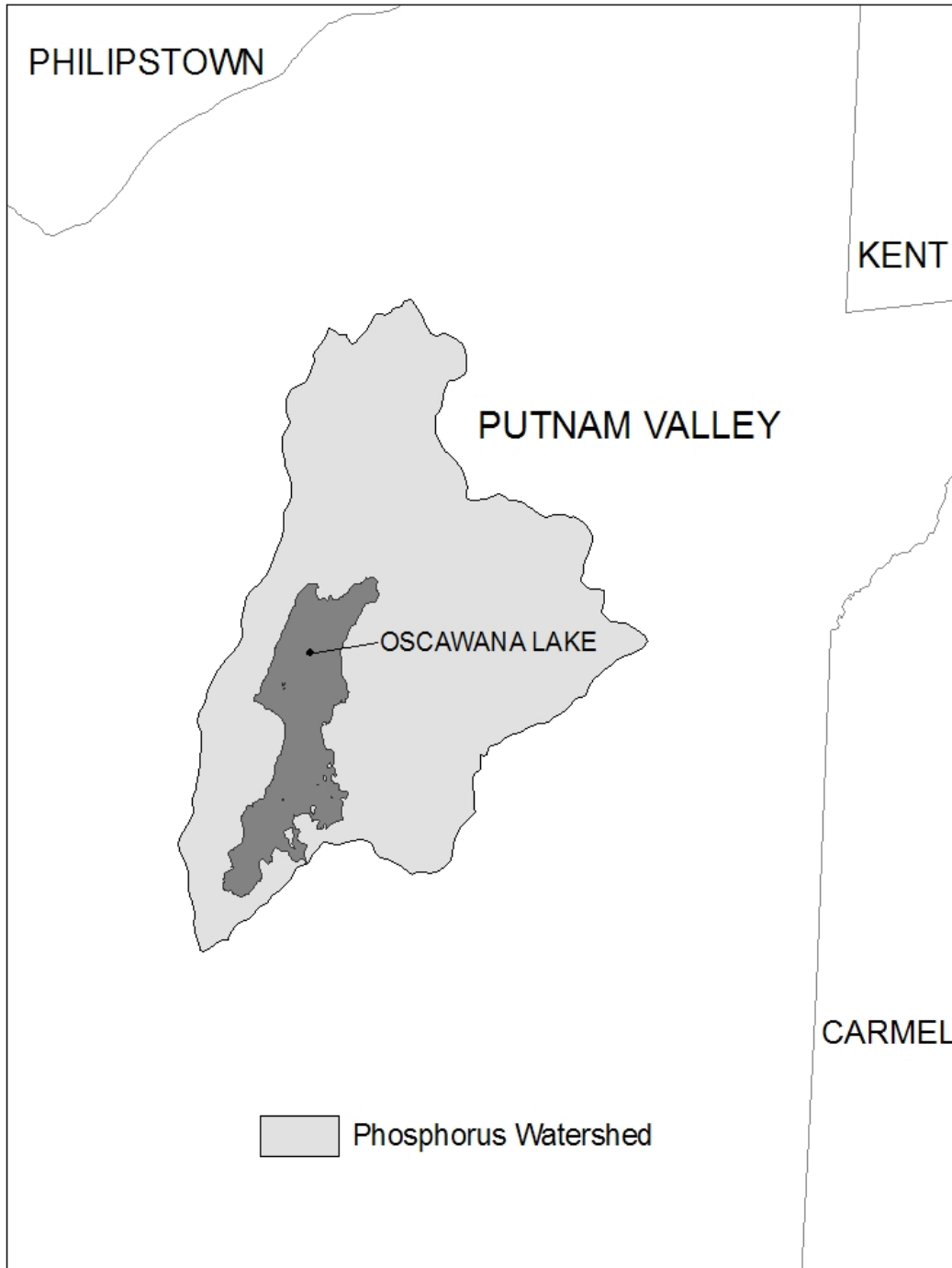
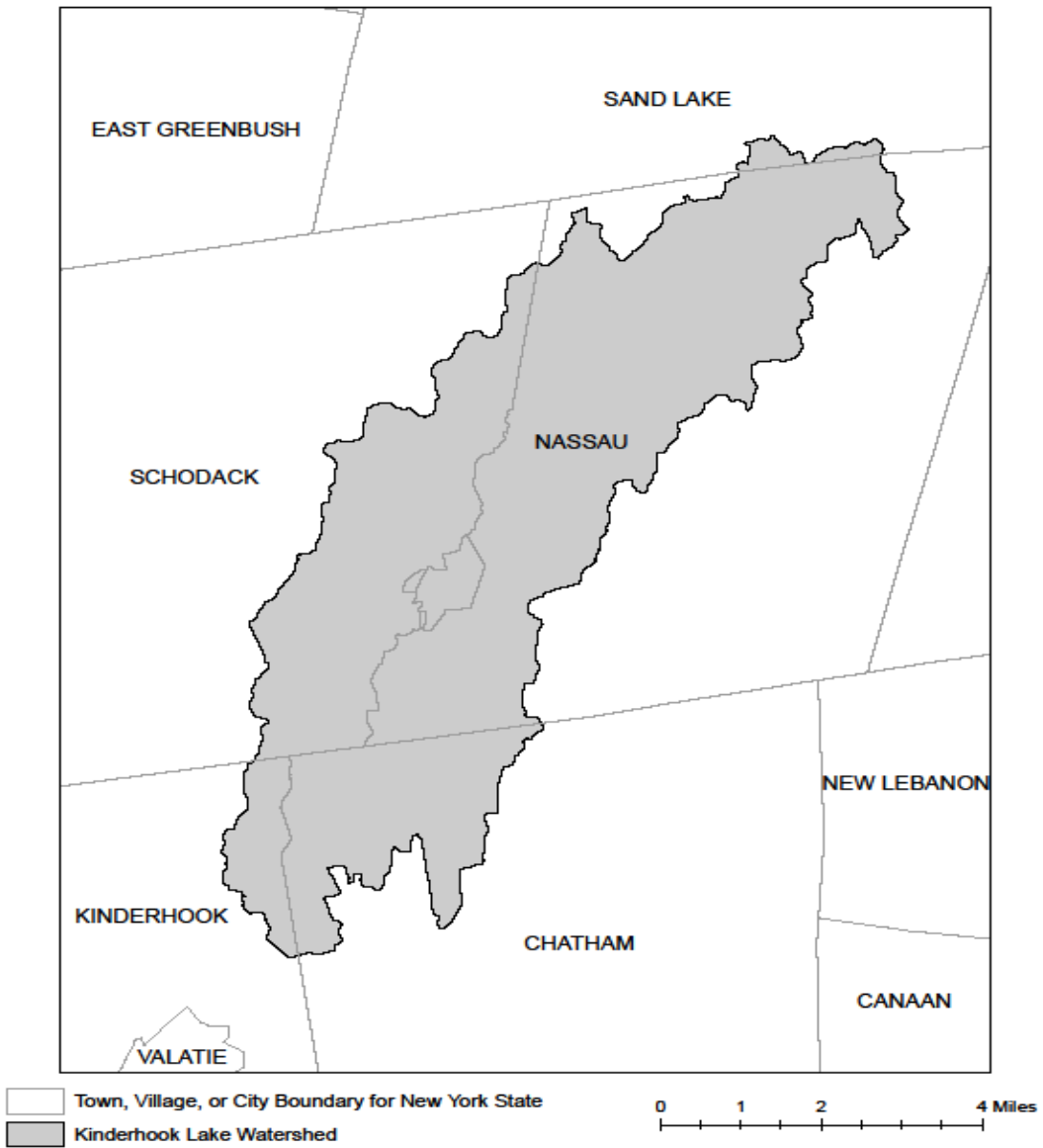




Figure 5: Kinderhook Lake Watershed



XI. **APPENDIX D**

**Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.**

Entire New York City Watershed that is located east of the Hudson River - See Figure 1 in Appendix C

XII. APPENDIX E

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual (“Design Manual”), dated January 2015.

COUNTY	WATERBODY	COUNTY	WATERBODY
Albany	Ann Lee (Shakers) Pond, Stump Pond	Greene	Sleepy Hollow Lake
Albany	Basic Creek Reservoir	Herkimer	Steele Creek tribs
Allegheny	Amity Lake, Saunders Pond	Kings	Hendrix Creek
Bronx	Van Cortlandt Lake	Lewis	Mill Creek/South Branch and tribs
Broome	Whitney Point Lake/Reservoir	Livingston	Conesus Lake
Broome	Fly Pond, Deer Lake	Livingston	Jaycox Creek and tribs
Broome	Minor Tribs to Lower Susquehanna (north)	Livingston	Mill Creek and minor tribs
Cattaraugus	Allegheny River/Reservoir	Livingston	Bradner Creek and tribs
Cattaraugus	Case Lake	Livingston	Christie Creek and tribs
Cattaraugus	Linlyco/Club Pond	Monroe	Lake Ontario Shoreline, Western
Cayuga	Duck Lake	Monroe	Mill Creek/Blue Pond Outlet and tribs
Chautauqua	Chautauqua Lake, North	Monroe	Rochester Embayment - East
Chautauqua	Chautauqua Lake, South	Monroe	Rochester Embayment - West
Chautauqua	Bear Lake	Monroe	Unnamed Trib to Honeoye Creek
Chautauqua	Chadakoin River and tribs	Monroe	Genesee River, Lower, Main Stem
Chautauqua	Lower Cassadaga Lake	Monroe	Genesee River, Middle, Main Stem
Chautauqua	Middle Cassadaga Lake	Monroe	Black Creek, Lower, and minor tribs
Chautauqua	Findley Lake	Monroe	Buck Pond
Clinton	Great Chazy River, Lower, Main Stem	Monroe	Long Pond
Columbia	Kinderhook Lake	Monroe	Cranberry Pond
Columbia	Robinson Pond	Monroe	Mill Creek and tribs
Dutchess	Hillside Lake	Monroe	Shipbuilders Creek and tribs
Dutchess	Wappinger Lakes	Monroe	Minor tribs to Irondequoit Bay
Dutchess	Fall Kill and tribs	Monroe	Thomas Creek/White Brook and tribs
Erie	Green Lake	Nassau	Glen Cove Creek, Lower, and tribs
Erie	Scajaquada Creek, Lower, and tribs	Nassau	LI Tribs (fresh) to East Bay
Erie	Scajaquada Creek, Middle, and tribs	Nassau	East Meadow Brook, Upper, and tribs
Erie	Scajaquada Creek, Upper, and tribs	Nassau	Hempstead Bay
Erie	Rush Creek and tribs	Nassau	Hempstead Lake
Erie	Ellicott Creek, Lower, and tribs	Nassau	Grant Park Pond
Erie	Beeman Creek and tribs	Nassau	Beaver Lake
Erie	Murder Creek, Lower, and tribs	Nassau	Camaans Pond
Erie	South Branch Smoke Cr, Lower, and tribs	Nassau	Halls Pond
Erie	Little Sister Creek, Lower, and tribs	Nassau	LI Tidal Tribs to Hempstead Bay
Essex	Lake George (primary county: Warren)	Nassau	Massapequa Creek and tribs
Genesee	Black Creek, Upper, and minor tribs	Nassau	Reynolds Channel, east
Genesee	Tonawanda Creek, Middle, Main Stem	Nassau	Reynolds Channel, west
Genesee	Oak Orchard Creek, Upper, and tribs	Nassau	Silver Lake, Lofts Pond
Genesee	Bowen Brook and tribs	Nassau	Woodmere Channel
Genesee	Bigelow Creek and tribs	Niagara	Hyde Park Lake
Genesee	Black Creek, Middle, and minor tribs	Niagara	Lake Ontario Shoreline, Western
Genesee	LeRoy Reservoir	Niagara	Bergholtz Creek and tribs
Greene	Schoharie Reservoir	Oneida	Ballou, Nail Creeks
		Onondaga	Ley Creek and tribs
		Onondaga	Onondaga Creek, Lower and tribs

## APPENDIX E

### List of 303(d) segments impaired by pollutants related to construction activity, cont'd.

COUNTY	WATERBODY	COUNTY	WATERBODY
Onondaga	Onondaga Creek, Middle and tribs	Suffolk	Great South Bay, West
Onondaga	Onondaga Creek, Upp, and minor tribs	Suffolk	Mill and Seven Ponds
Onondaga	Harbor Brook, Lower, and tribs	Suffolk	Moriches Bay, East
Onondaga	Ninemile Creek, Lower, and tribs	Suffolk	Moriches Bay, West
Onondaga	Minor tribs to Onondaga Lake	Suffolk	Quantuck Bay
Onondaga	Onondaga Creek, Lower, and tribs	Suffolk	Shinnecock Bay (and Inlet)
Ontario	Honeoye Lake	Sullivan	Bodine, Montgomery Lakes
Ontario	Hemlock Lake Outlet and minor tribs	Sullivan	Davies Lake
Ontario	Great Brook and minor tribs	Sullivan	Pleasure Lake
Orange	Monhagen Brook and tribs	Sullivan	Swan Lake
Orange	Orange Lake	Tompkins	Cayuga Lake, Southern End
Orleans	Lake Ontario Shoreline, Western	Tompkins	Owasco Inlet, Upper, and tribs
Oswego	Pleasant Lake	Ulster	Ashokan Reservoir
Oswego	Lake Neatahwanta	Ulster	Esopus Creek, Upper, and minor tribs
Putnam	Oscawana Lake	Ulster	Esopus Creek, Lower, Main Stem
Putnam	Palmer Lake	Ulster	Esopus Creek, Middle, and minor tribs
Putnam	Lake Carmel	Warren	Lake George
Queens	Jamaica Bay, Eastern, and tribs (Queens)	Warren	Tribs to L.George, Village of L George
Queens	Bergen Basin	Warren	Huddle/Finkle Brooks and tribs
Queens	Shellbank Basin	Warren	Indian Brook and tribs
Rensselaer	Nassau Lake	Warren	Hague Brook and tribs
Rensselaer	Snyders Lake	Washington	Tribs to L.George, East Shr Lk George
Richmond	Grasmere, Arbutus and Wolfes Lakes	Washington	Cossayuna Lake
Rockland	Congers Lake, Swartout Lake	Washington	Wood Cr/Champlain Canal, minor tribs
Rockland	Rockland Lake	Wayne	Port Bay
Saratoga	Ballston Lake	Wayne	Marbletown Creek and tribs
Saratoga	Round Lake	Westchester	Lake Katonah
Saratoga	Dwaas Kill and tribs	Westchester	Lake Mohegan
Saratoga	Tribs to Lake Lonely	Westchester	Lake Shenorock
Saratoga	Lake Lonely	Westchester	Reservoir No.1 (Lake Isle)
Schenectady	Collins Lake	Westchester	Saw Mill River, Middle, and tribs
Schenectady	Duane Lake	Westchester	Silver Lake
Schenectady	Mariaville Lake	Westchester	Teatown Lake
Schoharie	Engleville Pond	Westchester	Truesdale Lake
Schoharie	Summit Lake	Westchester	Wallace Pond
Schuyler	Cayuta Lake	Westchester	Peach Lake
St. Lawrence	Fish Creek and minor tribs	Westchester	Mamaroneck River, Lower
St. Lawrence	Black Lake Outlet/Black Lake	Westchester	Mamaroneck River, Upp, and tribs
Steuben	Lake Salubria	Westchester	Sheldrake River and tribs
Steuben	Smith Pond	Westchester	Blind Brook, Lower
Suffolk	Millers Pond	Westchester	Blind Brook, Upper, and tribs
Suffolk	Mattituck (Marratooka) Pond	Westchester	Lake Lincolndale
Suffolk	Tidal tribs to West Moriches Bay	Westchester	Lake Meahaugh
Suffolk	Canaan Lake	Wyoming	Java Lake
Suffolk	Lake Ronkonkoma	Wyoming	Silver Lake
Suffolk	Beaverdam Creek and tribs		
Suffolk	Big/Little Fresh Ponds		
Suffolk	Fresh Pond		
Suffolk	Great South Bay, East		
Suffolk	Great South Bay, Middle		

Note: The list above identifies those waters from the final New York State "2014 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy", dated January 2015, that are impaired by silt, sediment or nutrients.

XIII. APPENDIX F

**LIST OF NYS DEC REGIONAL OFFICES**

<b><u>Region</u></b>	<b><u>COVERING THE FOLLOWING COUNTIES:</u></b>	<b><u>DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS</u></b>	<b><u>DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM</u></b>
<b>1</b>	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (631) 444-0405
<b>2</b>	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933
<b>3</b>	DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	100 HILLSIDE AVENUE, SUITE 1W WHITE PLAINS, NY 10603 TEL. (914) 428 - 2505
<b>4</b>	ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE	1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045
<b>5</b>	CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON	1115 STATE ROUTE 86, Po Box 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234	232 GOLF COURSE ROAD WARRENSBURG, NY 12885-1172 TEL. (518) 623-1200
<b>6</b>	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
<b>7</b>	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
<b>8</b>	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROAD AVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
<b>9</b>	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVE. BUFFALO, NY 14203-2999 TEL. (716) 851-7070





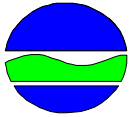
## Appendix D

### Notice of Intent (NOI)





# NOTICE OF INTENT



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

**NYR**   
(For DEC use only)

**Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-15-002**  
All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

**- IMPORTANT -**  
**RETURN THIS FORM TO THE ADDRESS ABOVE**  
OWNER/OPERATOR MUST SIGN FORM

### Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Owner/Operator Contact Person First Name

Owner/Operator Mailing Address

City

State  Zip  -

Phone (Owner/Operator)  -  -  Fax (Owner/Operator)  -  -

Email (Owner/Operator)

FED TAX ID  -  (not required for individuals)

Project Site Information

Project/Site Name

[Grid for Project/Site Name]

Street Address (NOT P.O. BOX)

[Grid for Street Address]

Side of Street

North  South  East  West

City/Town/Village (THAT ISSUES BUILDING PERMIT)

[Grid for City/Town/Village]

State

[Grid for State]

Zip

[Grid for Zip]

-

[Grid for Zip Extension]

County

[Grid for County]

DEC Region

[Grid for DEC Region]

Name of Nearest Cross Street

[Grid for Name of Nearest Cross Street]

Distance to Nearest Cross Street (Feet)

[Grid for Distance to Nearest Cross Street]

Project In Relation to Cross Street

North  South  East  West

Tax Map Numbers

Section-Block-Parcel

[Grid for Tax Map Numbers Section-Block-Parcel]

Tax Map Numbers

[Grid for Tax Map Numbers]

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you **must** go to the NYSDEC Stormwater Interactive Map on the DEC website at:

[www.dec.ny.gov/imsmaps/stormwater/viewer.htm](http://www.dec.ny.gov/imsmaps/stormwater/viewer.htm)

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site, go to the tool boxes on the top and choose "i"(identify). Then click on the center of your site and a new window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting)

[Grid for X Coordinates]

Y Coordinates (Northing)

[Grid for Y Coordinates]

2. What is the nature of this construction project?

- New Construction
- Redevelopment with increase in impervious area
- Redevelopment with no increase in impervious area





15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?  Yes  No  Unknown

16. What is the name of the municipality/entity that owns the separate storm sewer system?

Two rows of empty grid boxes for text entry.

17. Does any runoff from the site enter a sewer classified as a Combined Sewer?  Yes  No  Unknown

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?  Yes  No

19. Is this property owned by a state authority, state agency, federal government or local government?  Yes  No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)  Yes  No

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?  Yes  No

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)?  Yes  No  
**If No, skip questions 23 and 27-39.**

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual?  Yes  No





**Post-construction Stormwater Management Practice (SMP) Requirements**

**Important: Completion of Questions 27-39 is not required if response to Question 22 is No.**

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

- Preservation of Undisturbed Areas
- Preservation of Buffers
- Reduction of Clearing and Grading
- Locating Development in Less Sensitive Areas
- Roadway Reduction
- Sidewalk Reduction
- Driveway Reduction
- Cul-de-sac Reduction
- Building Footprint Reduction
- Parking Reduction

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).

- All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

**Total WQv Required**

.     acre-feet

29. Identify the RR techniques (Area Reduction), RR techniques (Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required (#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

**Note:** Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.



Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

<u>RR Techniques (Area Reduction)</u>	<u>Total Contributing Area (acres)</u>		and/or	<u>Total Contributing Impervious Area(acres)</u>	
<input type="radio"/> Conservation of Natural Areas (RR-1) ...	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Sheetflow to Riparian Buffers/Filters Strips (RR-2) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Tree Planting/Tree Pit (RR-3) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Disconnection of Rooftop Runoff (RR-4) ..	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
 <u>RR Techniques (Volume Reduction)</u>					
<input type="radio"/> Vegetated Swale (RR-5) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Rain Garden (RR-6) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Stormwater Planter (RR-7) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Rain Barrel/Cistern (RR-8) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Porous Pavement (RR-9) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Green Roof (RR-10) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
 <u>Standard SMPs with RRv Capacity</u>					
<input type="radio"/> Infiltration Trench (I-1) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Infiltration Basin (I-2) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Dry Well (I-3) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Underground Infiltration System (I-4) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Bioretention (F-5) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Dry Swale (O-1) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
 <u>Standard SMPs</u>					
<input type="radio"/> Micropool Extended Detention (P-1) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Wet Pond (P-2) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Wet Extended Detention (P-3) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Multiple Pond System (P-4) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Pocket Pond (P-5) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Surface Sand Filter (F-1) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Underground Sand Filter (F-2) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Perimeter Sand Filter (F-3) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Organic Filter (F-4) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Shallow Wetland (W-1) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Extended Detention Wetland (W-2) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Pond/Wetland System (W-3) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Pocket Wetland (W-4) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>
<input type="radio"/> Wet Swale (O-2) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>



33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

**Note:** Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question 29.

**WQv Provided**

				.						acre-feet
--	--	--	--	---	--	--	--	--	--	-----------

**Note:** For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - RRv provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). 

				.				
--	--	--	--	---	--	--	--	--

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? 
 **Yes**     **No**

**If Yes, go to question 36.**

**If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.**

36. Provide the total Channel Protection Storage Volume (CPv) required and provided or select waiver (36a), if applicable.

<b>CPv Required</b>	<b>CPv Provided</b>																						
<table border="1" style="border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="font-size: 24px; vertical-align: middle;">.</td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="padding-left: 10px;">acre-feet</td> </tr> </table>					.						acre-feet	<table border="1" style="border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="font-size: 24px; vertical-align: middle;">.</td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="padding-left: 10px;">acre-feet</td> </tr> </table>					.						acre-feet
				.						acre-feet													
				.						acre-feet													

36a. The need to provide channel protection has been waived because:

- Site discharges directly to tidal waters or a fifth order or larger stream.
- Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (37a), if applicable.

**Total Overbank Flood Control Criteria (Qp)**

<b>Pre-Development</b>	<b>Post-development</b>																				
<table border="1" style="border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="font-size: 24px; vertical-align: middle;">.</td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="padding-left: 10px;">CFS</td> </tr> </table>					.					CFS	<table border="1" style="border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="font-size: 24px; vertical-align: middle;">.</td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="padding-left: 10px;">CFS</td> </tr> </table>					.					CFS
				.					CFS												
				.					CFS												

**Total Extreme Flood Control Criteria (Qf)**

<b>Pre-Development</b>	<b>Post-development</b>																				
<table border="1" style="border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="font-size: 24px; vertical-align: middle;">.</td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="padding-left: 10px;">CFS</td> </tr> </table>					.					CFS	<table border="1" style="border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="font-size: 24px; vertical-align: middle;">.</td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="padding-left: 10px;">CFS</td> </tr> </table>					.					CFS
				.					CFS												
				.					CFS												









## Appendix E

# MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form







New York State 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:

2. Contact Person:

3. Street Address:

4. City/State/Zip:

**II. Project Site Information**

5. Project/Site Name:

6. Street Address:

7. City/State/Zip:

**III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information**

8. SWPPP Reviewed by:

9. Title/Position:

10. Date Final SWPPP Reviewed and Accepted:

**IV. Regulated MS4 Information**

11. Name of MS4:

12. MS4 SPDES Permit Identification Number: NYR20A \_\_\_\_\_

13. Contact Person:

14. Street Address:

15. City/State/Zip:

16. Telephone Number:

**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:

Title/Position:

Signature:

Date:

**VI. Additional Information**



# Appendix F

## Notice of Termination (NOT)

**(To Be Completed Upon Completion of Project)**





**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:

2. Street Address:

3. City/State/Zip:

4. Contact Person:

4a. Telephone:

5. Contact Person E-Mail:

**II. Project Site Information**

5. Project/Site Name:

6. Street Address:

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, the deed of record has been modified to include a deed covenant that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.
- For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, college, university), or government agency or authority, 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 2010)





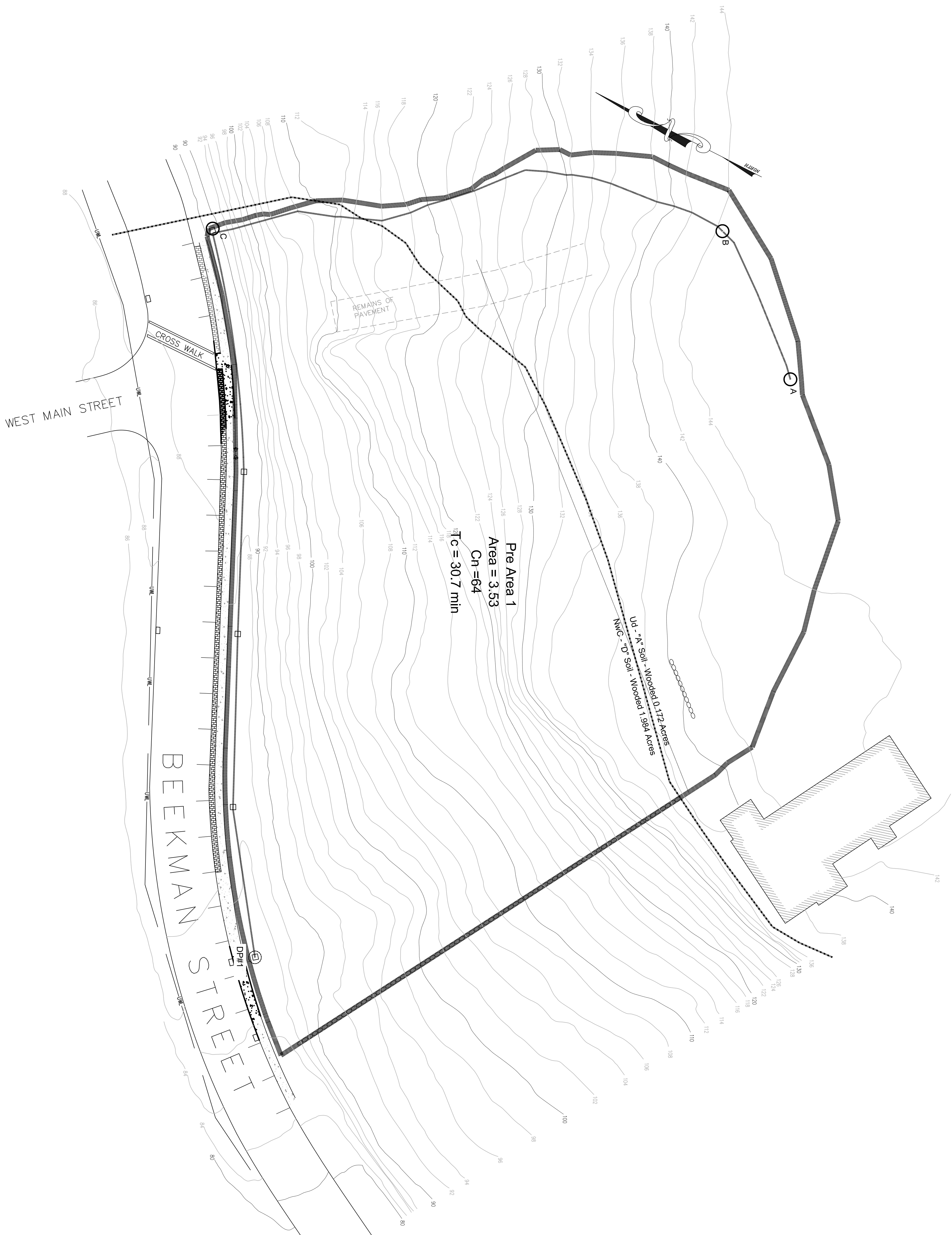


## Appendix G

### Pre & Post Hydrology



- LEGEND**
- EXISTING PROPERTY LINE
  - EXISTING ADJACENT PROPERTY LINE (APPROX.)
  - 200' EXISTING 10 FT. CONTOUR LINE
  - 198' EXISTING 2 FT. CONTOUR LINE
  - EXISTING SIGN
  - EXISTING CATCH BASIN
  - EXISTING STORM SEWER PIPE
  - EXISTING SANITARY SEWER MANHOLE
  - EXISTING SANITARY SEWER LINE
  - EXISTING UTILITY POLE
  - EXISTING WATER LINE
  - EXISTING HYDRANT
  - EXISTING BUILDING
  - EXISTING CONCRETE SIDEWALK
  - EXISTING STONE WALL



THE PROPERTY BOUNDARY AND TOPOGRAPHICAL INFORMATION SHOWN HEREON WAS TAKEN FROM A SURVEY PREPARED BY ROBERT V. OSWALD L.S.

FLOOD PLAN INFORMATION SHOWN HEREON WAS OBTAINED FROM FEMA MAY 2012 FLOOD MAP. BASE FLOOD ELEVATION IS 217.00'

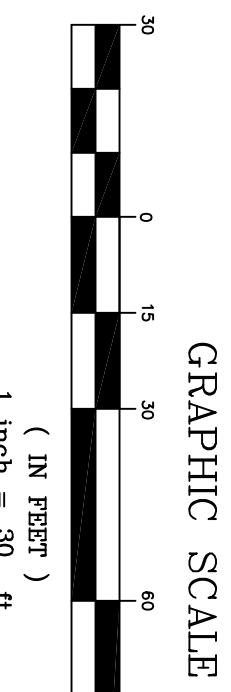
EVERY ATTEMPT HAS BEEN MADE TO LOCATE ALL EXISTING UTILITIES ALONG ROSILA LANE. FIELD MODIFICATIONS MAY BE REQUIRED DUE TO UNKNOWN CONDITIONS ENCOUNTERED DURING INSTALLATION OF THE NEW UTILITIES. A PRE-CONSTRUCTION INVESTIGATION SHALL BE PERFORMED TO DETERMINE THE EXACT LOCATION AND LOCATION OF THE EXISTING WATER MAIN IN ROSILA LANE.

Prepared by	Mark A. Day, PE
Checked	January 22, 2016
Reviewed	December 28, 2015
Approved	November 23, 2015
Permitted	August 25, 2015
License No.	July 28, 2015 20151659 062846

**M.A. DAY Engineering, PC**  
*Consulting Engineers*  
 3 Van Wyck  
 Lane Suite 2  
 Wappingers Falls, New York  
 (845) 223-3202

**The View**  
 City of Beacon  
 Dutchess County, New York

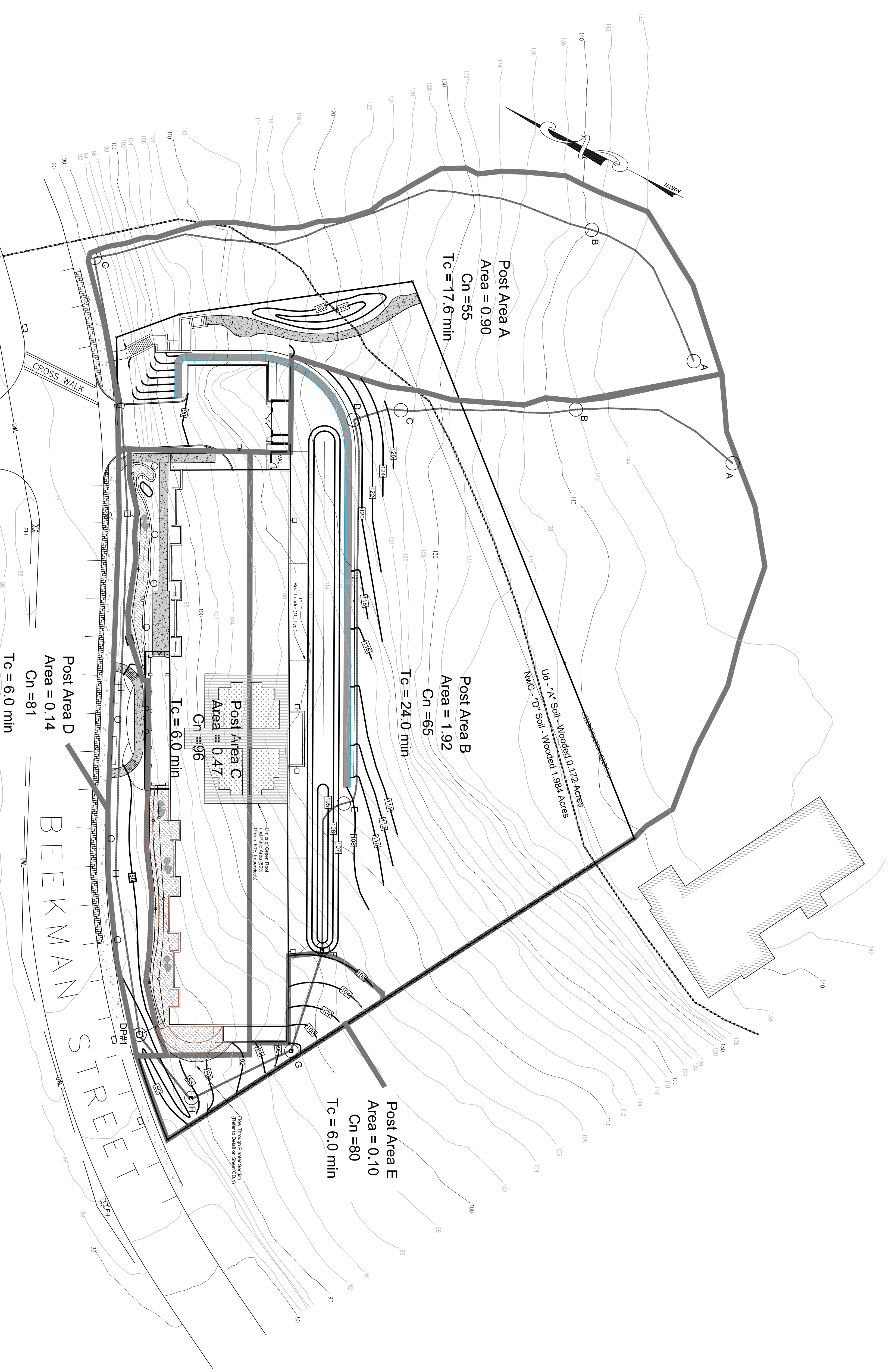
**Pre-Development**  
 Project No. **HYD.1**  
 Date: 06-23-15  
 Scale: 1" = 30'  
 Drawn by: DJD  
 Checked by: M.A.D.





**LEGEND**

	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE (APPROX.)
	EXISTING 10 FT CONTOUR LINE
	EXISTING 2 FT CONTOUR LINE
	EXISTING SIGN
	EXISTING CATCH BASIN
	EXISTING STORM SEWER PIPE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING SANITARY SEWER LINE
	EXISTING UTILITY POLE
	EXISTING WATER LINE
	EXISTING HYDRANT
	EXISTING BUILDING
	EXISTING CONCRETE SIDEWALK
	EXISTING STONE WALL

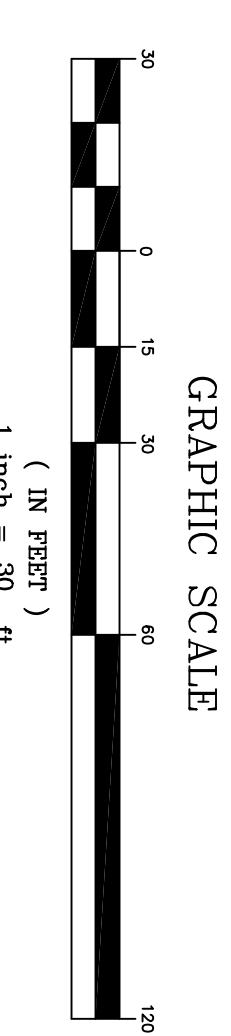


**POST DEVELOPMENT DRAINAGE AREA A**

Reach	Flow Type	Distance (ft)	Cover Type	Slope (Ave.)
A to B	Sheet	100	Woodlands	5.0%
B to C	Shallow Conc.	297	Woodlands	15.0%
C to DP#1	Pipe Flow	450	24"Ø	1.4%
<b>Total Area:</b>		<b>0.901 Acres</b>		
<b>Weighted Cn:</b>		<b>55</b>		
<b>Tc:</b>		<b>17.6 Minutes</b>		

**POST DEVELOPMENT DRAINAGE AREA B**

Reach	Flow Type	Distance (ft)	Cover Type	Slope (Ave.)
A to B	Sheet	100	Woodlands	2.7%
B to C	Shallow Conc.	101	Woodlands	12.9%
C to D	Shallow Conc.	28	Unpaved	14.0%
D to E	Par. Channel	228	Grass	5.0%
E to F	Trap. Channel	86	Grass	1.0%
F to G	Pipe Flow	59	15"Ø	10.0%
G to H	Pipe Flow	62	18"Ø	14.0%
H to DP#1	Pipe Flow	45	18"Ø	7.0%
<b>Total Area:</b>		<b>1.92 Acres</b>		
<b>Weighted Cn:</b>		<b>65</b>		
<b>Tc:</b>		<b>21.3 Minutes</b>		



<p><b>Mark A. Day, PE</b></p>	
<p>January 22, 2016 December 28, 2015 November 23, 2015 August 25, 2015 July 28, 2015</p>	<p>License No. 069366</p>
<p><b>M.A. DAY Engineering, PC</b> Consulting Engineers 3 Van Wyck Lane Suite 2 Wappingers Falls, New York (845) 223-3202</p>	
<p><b>The View</b> City of Beacon Dutchess County, New York</p>	
<p><b>Post-Development</b></p>	
<p>SCALE: 1" = 30' DATE: 06-23-15</p>	<p>DESIGNED BY: DJD CHECKED BY: MADD PROJECT: HYD.2</p>

THE PROPERTY BOUNDARY AND TOPOGRAPHICAL INFORMATION SHOWN HEREON WAS TAKEN FROM A SURVEY PREPARED BY ROBERT V. OSWALD L.S. FLOOD PLAN INFORMATION SHOWN HEREON WAS OBTAINED FROM FEMA MAY 2012 FLOOD MAP. BASE FLOOD ELEVATION IS 217.00'

EVERY ATTEMPT HAS BEEN MADE TO LOCATE ALL EXISTING UTILITIES ALONG ROSILA LANE. FIELD MODIFICATIONS MAY BE REQUIRED DUE TO UNKNOWN CONDITIONS ENCOUNTERED DURING INSTALLATION OF THE NEW UTILITIES. A PRE-CONSTRUCTION INVESTIGATION SHALL BE PERFORMED TO DETERMINE THE EXISTING UTILITIES AND LOCATION OF THE EXISTING WATER MAIN IN ROSILA LANE.





## Appendix H

# Erosion & Sediment Control Plan & Details

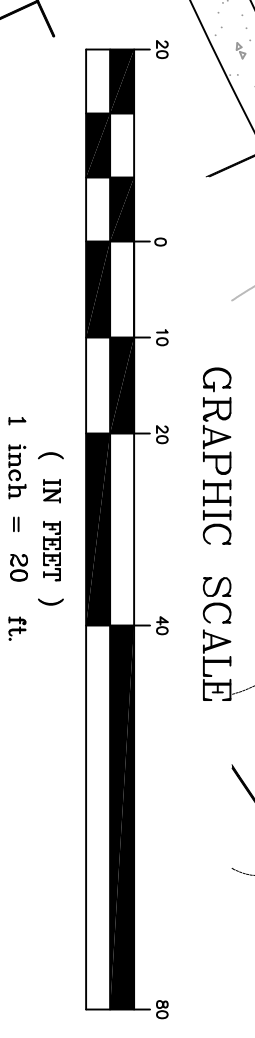






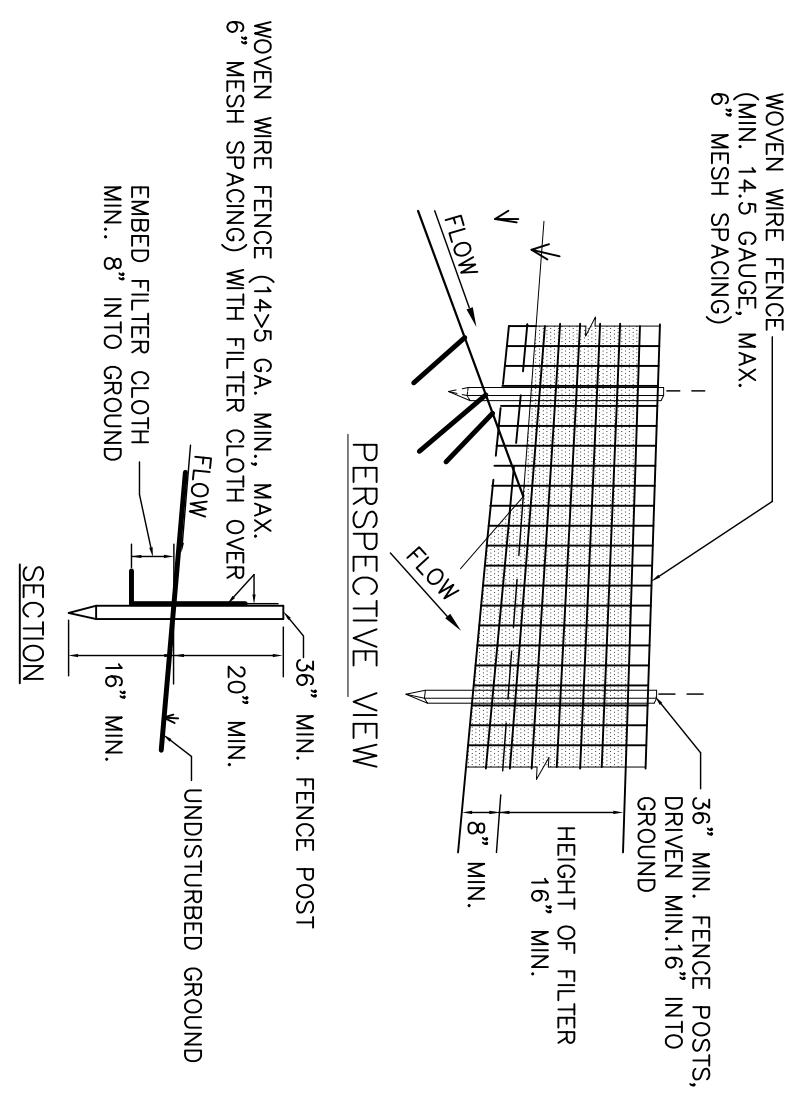
**LEGEND**

	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE (APPROX.)
	EXISTING 10-FT. CONTOUR LINE
	EXISTING 2-FT. CONTOUR LINE
	EXISTING SIGN
	EXISTING CATCH BASIN
	EXISTING STORM SEWER PIPE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING SANITARY SEWER LINE
	EXISTING UTILITY POLE
	EXISTING WATER LINE
	EXISTING HYDRANT
	EXISTING BUILDING
	EXISTING CONCRETE SIDEWALK
	EXISTING STONE WALL



**Maintenance/Inspection Schedule (Long Term)**

Maintenance Item	Frequency	Field Representative Shall Inspect for the Following	Maintenance/Repair Representative Shall Repair Respective Deficiency As Follows:
Catch Basins	Monthly	- Excess Silt & Sediment in Sumps	- Remove (Vacuum)
Pipe Network	Monthly	- Excess Silt & Sediment	- Remove (Vacuum)
Dry Swale	Annual & Monthly	- Vegetation - Adequate Vegetation - Undersirable Vegetative Growth - Undersirable Woody Vegetation - Standing Water/Wet Spots	- Remove - Restore to Original Specification as Per Landscaping Plan - Remove - Remove - Add/Remove Fill as Necessary to Restore Pond Base Elevation
Planter Plantings	Annually	- Sediment and/or Trash Accumulation - Survival of Desired Wetland Plants - 50% Cover of Plants After 2nd Growing Season - Distribution of Plants as Per Landscaping Plan	- Remove - Re-Plant Wetland Species as Necessary - Restore as Necessary - Re-Distribute as Necessary
Green Roof	Monthly for first 24 months & Biannually	- Any Evidence of Undersirable Invasive Species - Maintenance of Adequate Water Depth Plan Species - Choking of Plants Due to Excessive Sediment Depths - Any Evidence of Undersirable/Invasive Vegetative Growth	- Remove - Clean outlet to Restore Appropriate Water Levels - Remove Pond Sediments as Necessary - Remove
Miscellaneous	Monthly	- Leaks or Structural Deficiencies - Complaints from Residents - Aesthetics (Graffiti, Lack of Grass cover, Etc) - Signs of Hydrocarbon Build-Up - Any Possible Public Hazards	- Contact as Directed by a Trained and Qualified Contractor - Note Complaint and Discuss with Owner and Engineers - Remove Any Graffiti and Stains, Seed and Mulch as Needed - Remove - Notify City and Discuss with Owner and Town as Necessary



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- 1) WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES
  - 2) FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION
  - 3) WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED
  - 4) MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE

- MATERIALS**
- 1) POSTS: STEEL EITHER 1 OR U TYPE OR 2" HARDWOOD
  - 2) FILTER CLOTH: WIRAFI 100X, STABILUNKA 1140N OR APPROVED EQUAL
  - 3) FENCE: WOVEN WIRE, 14.5 GA., 6" MAX MESH OPENING
  - 4) PREFABRICATED UNIT: GEOPAB, ENVIRENCE, OR APPROVED EQUAL

<p><b>Mark A. Day, PE</b></p>	
<p><b>M.A. DAY Engineering, PC</b></p>	
<p><i>Consulting Engineers</i></p>	
<p>3 Van Wyck Lane Suite 2 Wappingers Falls, New York (845)-223-3202</p>	
<p><b>The View</b></p>	
<p>City of Beacon Dutchess County, New York</p>	
<p><b>Erosion &amp; Sediment Control Plan</b></p>	
<p>SCALE: 1" = 20'</p>	<p>DATE: 06-23-15</p>
<p>PROJECT: DUD</p>	<p>DESIGNED BY: MAD</p>
<p><b>ESC.1</b></p>	
<p>10 of 16</p>	





# Appendix I

## Construction Inspection Log Book



# **M. A. Day Engineering, PC**

---

3 Van Wyck Lane  
Suite 2  
Wappingers Falls, New York 12590  
Phone: 845-223-3202

## **Construction Site Inspection Log Book for Temporary Erosion & Sediment Controls in use on The View Site Plan**

### **Location:**

Beekman Street  
City of Beacon  
Dutchess County



## APPENDIX H

### STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES CONSTRUCTION SITE LOG BOOK

#### Table of Contents

---

- I. Pre-Construction Meeting Documents
  - a. Preamble to Site Assessment and Inspections
  - b. Operator's Certification
  - c. Qualified Professional's Credentials & Certification
  - d. Pre-Construction Site Assessment Checklist
  
- II. Construction Duration Inspections
  - a. Directions
  - b. Modification to the SWPPP
  
- III. Monthly Summary Reports
  
- IV. Monitoring, Reporting, and Three-Month Status Reports
  - a. Operator's Compliance Response Form

Properly completing forms such as those contained in Appendix H meet the inspection requirement of NYS-DEC SPDES GP for Construction Activities. Completed forms shall be kept on site at all times and made available to authorities upon request.

## 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 professional<sup>1</sup> conduct an assessment of the site prior to the commencement of construction<sup>2</sup> 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.

When construction starts, site inspections shall be conducted by the qualified professional at least every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater (Construction Duration Inspections). 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. The Operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis (Monthly Summary Report).

The operator shall also prepare a written summary of compliance with this general permit at a minimum frequency of every three months (Operator's Compliance Response Form), while coverage exists. The summary should address the status of achieving each component of the SWPPP.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization<sup>3</sup> 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 "Qualified Professional means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, licensed engineer or someone working under the direction and supervision of a licensed engineer (person must have experience in the principles and practices of erosion and sediment control).

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. Operators Certification**

"I certify under penalty of law that this document and all attachments 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 the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. Further, I hereby certify that the SWPPP meets all Federal, State, and local erosion and sediment control requirements. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law.

**Name (please print):** \_\_\_\_\_

**Title** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**c. Qualified Professional's Credentials & 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 following Pre-construction Site Assessment Checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction."

**Name (please print):** \_\_\_\_\_

**Title** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**d. 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 Entrance

**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. Perimeter Sediment Controls

**Yes No NA**

- Silt fence material and installation comply with the standard drawing and specifications.
- Silt fences are installed at appropriate spacing intervals
- Sediment/detention basin was installed as first land disturbing activity.
- Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

**Yes No NA**

- The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
- The plan is contained in the SWPPP on page \_\_\_\_\_
- Appropriate materials to control spills are onsite. Where? \_\_\_\_\_

## II. CONSTRUCTION DURATION INSPECTIONS

### a. Directions:

**Inspection Forms will be filled out during the entire construction phase of the project.**

Required Elements:

- (1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;
- (2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;
- (3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;
- (4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);
- (5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and
- (6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

**SITE PLAN/SKETCH**

---

**Inspector (print name)**

---

**Date of Inspection**

---

**Qualified Professional (print name)**

---

**Qualified Professional 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?
- Is there residue from oil and floating substances, visible oil film, or globules or grease?
- 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 and debris 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.

**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.

2. Level 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

**CONSTRUCTION DURATION INSPECTIONS**  
**Runoff Control Practices (continued)**

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. Stabilized Construction Entrance

**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?

2. Silt Fence

**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)**

**3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated 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.
- Sediment accumulation \_\_\_% of design capacity.

**4. 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 accumulation is \_\_\_% of design capacity.

**5. 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 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.  
 Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.







# THE VIEW

## BEEKMAN STREET

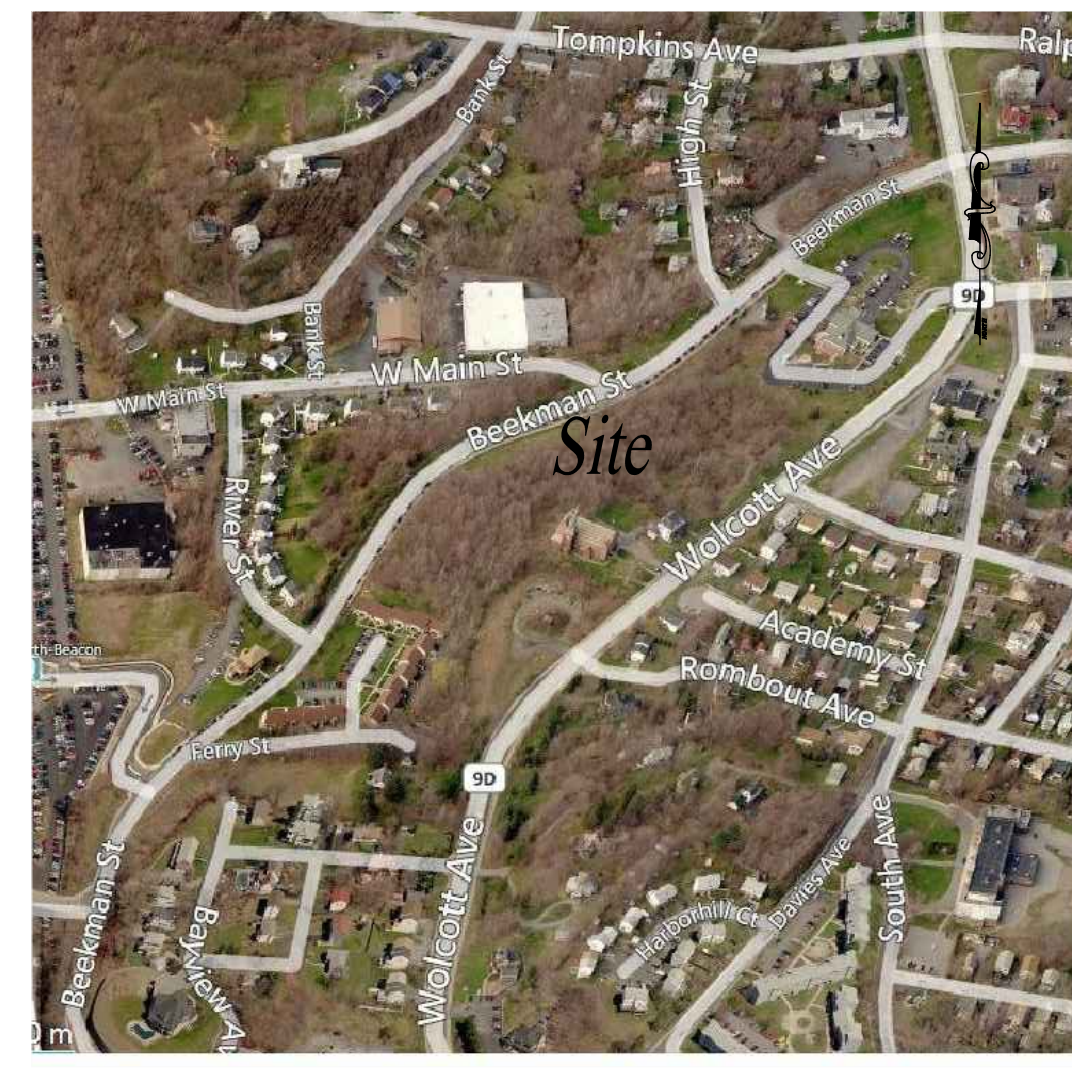
### CITY OF BEACON NY

### SITE PLAN

PREPARED FOR  
 DMS Consolidators, Ltd.  
 108 Village Square  
 Box 403  
 Somers, NY 10589



LOCATION MAP SCALE: N.T.S.



AREA MAP SCALE: N.T.S.

#### ADJOINING PROPERTY OWNERS

1 City of Beacon  
 1 Municipal Plaza  
 Beacon, NY 12524  
 For Property: 130200-5954-26-660924

2 Reformed Church of Beacon  
 RD1 Magnolia Drive  
 Wappingers Falls, NY 12590  
 For Property: 130200-5954-26-661901

#### ZONING INFORMATION

Zone Classification Linkage (L)  
 Tax Map Parcel No.s 130200-5954-26-660924  
 Topographic Datum USGS (1988 NVDG)  
 Total Acreage: 2.3 Ac.  
 Water Supply: Central  
 Sewage Disposal: Central

Linkage (L) Zoning District			Parking Calculations	
Bulk Regulations:	Required (Min./Max.)	Proposed	Use:	Minimum Off-street Parking
Lot Area (square feet)	--/--	N/A	Residential	One Space per Unit
Lot Width	--/--	N/A		
Lot Depth	75'--	444'		
Floor Area Ratio (F.A.R)	--/--	N/A	proposed:	50 Units
Front setback (feet)	0'/20'	20'	Total Required Parking:	50
Side Setback (feet)	0'/30'	17'/57'	Total Proposed Parking:	79
Rear Setback (feet)	25'--	88'		
Landscaped Area	15%	>15%		
Frontage Occupancy	--/--	N/A		
Pedestrian Clearing	5'--	5'		
Maximum Building Height (Stories)	2/4*	4		

\* minimum two stories, maximum four stories, as determined from the average street front level. Stories built below the grade of the street front shall not be counted toward building height. The second story of a two-story building shall be built in a manner that allows actual occupancy for one or more permitted uses and does not create the mere appearance of a second story. For any building over three stories, a stepback of at least 15 feet behind the facade shall be required above the third story.

#### GENERAL SITE NOTES

- THE CONTRACTOR IS TO VISIT THE SITE AND THOROUGHLY ACQUAINT HIMSELF WITH ALL EXISTING CONDITIONS. TO CHECK AND VERIFY ALL CONDITIONS, DIMENSIONS, ETC. AND REPORT TO THE ARCHITECT ANY ERRORS, OMISSIONS, OR VARIATION FROM INTENT OF THE PLANS, PRIOR TO THE START OF WORK.
- DRAWINGS ARE NOT TO BE SCALED: USE DIMENSIONS ONLY.
- CONTRACTOR TO OBTAIN AND PAY FOR ALL REQUIRED LOCAL PERMITS. NO WORK IS TO COMMENCE UNTIL ALL PERMITS ARE OBTAINED.
- THOSE ITEMS NOT NOTED, BUT IMPLIED AS NECESSARY FOR THE PERFORMANCE OF THE CONTRACT ARE CONSIDERED PART OF THE WORK.
- ALL MATERIAL AND WORKMANSHIP IS TO BE GUARANTEED BY THE CONTRACTOR TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR. THE CONTRACTOR AGREES TO CORRECT, WITHOUT CHARGE SUCH CONDITIONS AS MAY OCCUR DURING THE GUARANTEE PERIOD.
- ALL WORK IS TO BE EXECUTED BY MECHANICS SKILLED IN THEIR TRADES.
- ALL CHANGES AND/OR SUBSTITUTIONS ARE TO BE APPROVED IN WRITING BEFORE BEING INCORPORATED INTO THE WORK.
- ALL TRADES TO COOPERATE WITH EACH OTHER TO FACILITATE THE PROGRESS OF THE ENTIRE JOB.
- CONTRACTOR SHALL VERIFY WITH LOCAL UTILITY COMPANY THE POSSIBILITY OF ANY UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION.
- CONTRACTOR IS TO REMOVE ALL RUBBISH FROM THE SITE RESULTING FROM HIS WORK DURING THE PROGRESS OF CONSTRUCTION AND SHALL LEAVE THE PREMISES IN A CONDITION SATISFACTORY TO THE OWNER PRIOR TO THE FINAL PAYMENT.
- ALL MATERIALS, ASSEMBLIES, CONSTRUCTION AND EQUIPMENT SHALL CONFORM TO THE REGULATIONS OF THE BUILDING CODE OF NEW YORK STATE AND SHALL CONFORM TO GENERALLY ACCEPTED STANDARDS.
- THE MITIGATION IN THE NEW YORK STATE OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION (OPRHP) DATED DECEMBER 26, 2012 DOES NOT APPLY TO THIS PROPERTY.

#### Table of Content

Sheet No.	Sheet Title
1 of 17	Title Sheet
2 of 17	Existing Conditions Plan
3 of 17	Site Plan
4 of 17	Utility & Grading Plan
5 of 17	Landscape & Lighting Plan
6 of 17	Erosion & Sediment Control Plan
7 of 17	Construction Details - 1
8 of 17	Construction Details - 2
9 of 17	Landscape/Lighting Details
10 of 17	Landscaping Details
11 of 17	Stormwater Details
12 of 17	Profile Plan - 1
13 of 17	Profile Plan - 2
14 of 17	Profile Plan - 3
15 of 17	Plan & Profile
16 of 17	Construction Phasing Plan
17 of 17	Sight Distance Plan

Mark A. Day, PE
January 22, 2016
December 28, 2015
November 23, 2015
August 25, 2015
July 28, 2015
Project No. 2015/059 License No. 060946

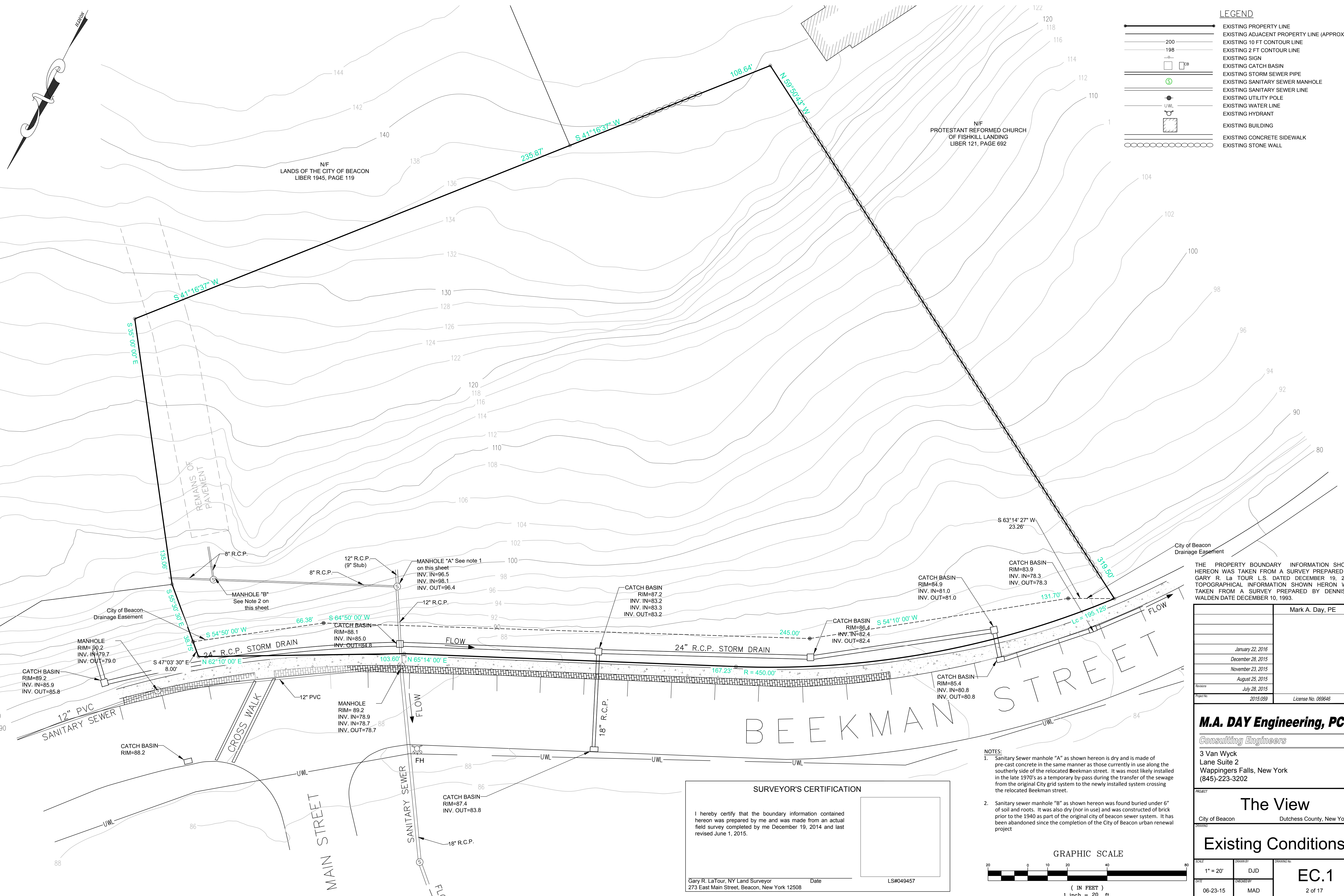
**M.A. DAY Engineering, PC**  
 Consulting Engineers  
 3 Van Wyck Lane Suite 2  
 Wappingers Falls, New York  
 (845)-223-3202

PROJECT		
The View		
City of Beacon		Dutchess County, New York
DRAWING		
Title Sheet		
SCALE	DRAWN BY	DRAWING NO.
As Noted	DJD	TS.1
DATE	CHECKED BY	1 of 17
06-23-15	MAD	

*Owner/Applicant*  
 DMS Consolidators, Ltd.  
 108 Village Square  
 Box 403  
 Somers, NY 10589

*Owner's Consent Note*  
 THE UNDERSIGNED OWNER OF THIS PROPERTY HEREOF 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  
 DMS CONSOLIDATORS, LTD MEMBER DATE

*City of Beacon Planning Board*  
 APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CIT OF BEACON, NEW YORK ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2016 SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAN, AS APPROVED SHALL VOID THIS APPROVAL.  
 CITY OF BEACON PLANNING BOARD SIGNED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2016  
 JAMES C. SHEERS, CITY OF BEACON PLANNING BOARD CHAIR



**LEGEND**

	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE (APPROX.)
	EXISTING 10 FT CONTOUR LINE
	EXISTING 2 FT CONTOUR LINE
	EXISTING SIGN
	EXISTING CATCH BASIN
	EXISTING STORM SEWER PIPE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING SANITARY SEWER LINE
	EXISTING UTILITY POLE
	EXISTING WATER LINE
	EXISTING HYDRANT
	EXISTING BUILDING
	EXISTING CONCRETE SIDEWALK
	EXISTING STONE WALL

THE PROPERTY BOUNDARY INFORMATION SHOWN HEREON WAS TAKEN FROM A SURVEY PREPARED BY GARY R. LA TOUR L.S. DATED DECEMBER 19, 2014. TOPOGRAPHICAL INFORMATION SHOWN HERON WAS TAKEN FROM A SURVEY PREPARED BY DENNIS E WALDEN DATE DECEMBER 10, 1993.

Mark A. Day, PE	
January 22, 2016	
December 28, 2015	
November 23, 2015	
August 25, 2015	
July 28, 2015	
Project No. 2015/059	License No. 069646

**M.A. DAY Engineering, PC**  
*Consulting Engineers*  
 3 Van Wyck Lane Suite 2  
 Wappingers Falls, New York  
 (845)-223-3202

<b>The View</b>		
		City of Beacon
<b>Existing Conditions</b>		
SCALE 1" = 20'	DRAWN BY DJD	DRAWING NO. <b>EC.1</b>
DATE 06-23-15	CHECKED BY MAD	2 of 17

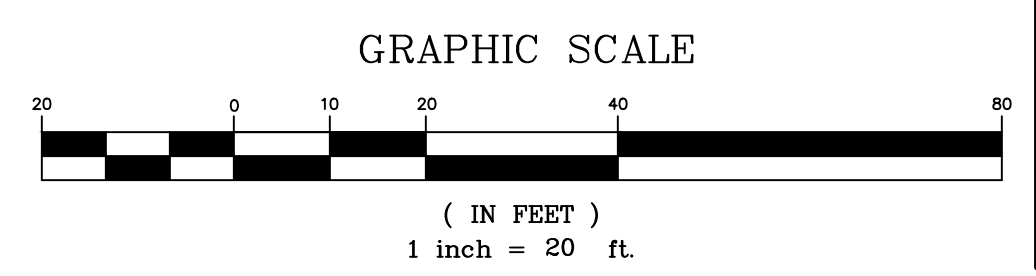
**SURVEYOR'S CERTIFICATION**

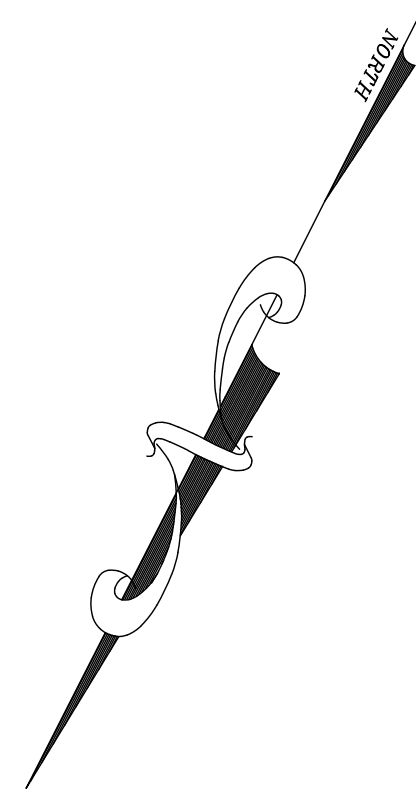
I hereby certify that the boundary information contained hereon was prepared by me and was made from an actual field survey completed by me December 19, 2014 and last revised June 1, 2015.

Gary R. LaTour, NY Land Surveyor  
 273 East Main Street, Beacon, New York 12508

Date \_\_\_\_\_ LS#049457

- NOTES:**
- Sanitary sewer manhole "A" as shown hereon is dry and is made of pre-cast concrete in the same manner as those currently in use along the southerly side of the relocated Beekman street. It was most likely installed in the late 1970's as a temporary by-pass during the transfer of the sewage from the original City grid system to the newly installed system crossing the relocated Beekman street.
  - Sanitary sewer manhole "B" as shown hereon was found buried under 6" of soil and roots. It was also dry (nor in use) and was constructed of brick prior to the 1940 as part of the original city of beacon sewer system. It has been abandoned since the completion of the City of Beacon urban renewal project



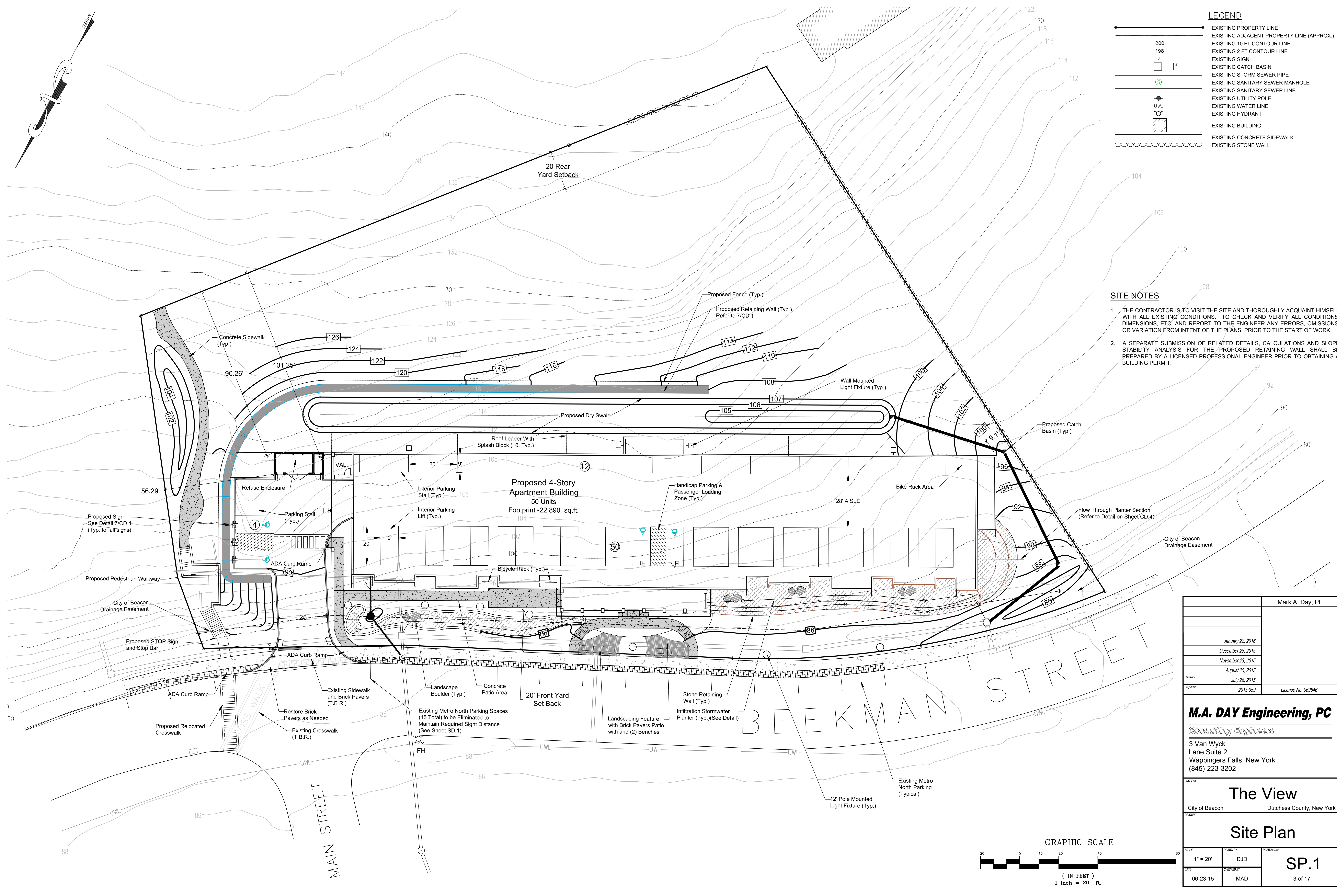


**LEGEND**

	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE (APPROX.)
	EXISTING 10 FT CONTOUR LINE
	EXISTING 2 FT CONTOUR LINE
	EXISTING SIGN
	EXISTING CATCH BASIN
	EXISTING STORM SEWER PIPE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING SANITARY SEWER LINE
	EXISTING UTILITY POLE
	EXISTING WATER LINE
	EXISTING HYDRANT
	EXISTING BUILDING
	EXISTING CONCRETE SIDEWALK
	EXISTING STONE WALL

**SITE NOTES**

1. THE CONTRACTOR IS TO VISIT THE SITE AND THOROUGHLY ACQUAINT HIMSELF WITH ALL EXISTING CONDITIONS. TO CHECK AND VERIFY ALL CONDITIONS, DIMENSIONS, ETC. AND REPORT TO THE ENGINEER ANY ERRORS, OMISSIONS, OR VARIATION FROM INTENT OF THE PLANS, PRIOR TO THE START OF WORK
2. A SEPARATE SUBMISSION OF RELATED DETAILS, CALCULATIONS AND SLOPE STABILITY ANALYSIS FOR THE PROPOSED RETAINING WALL SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER PRIOR TO OBTAINING A BUILDING PERMIT.

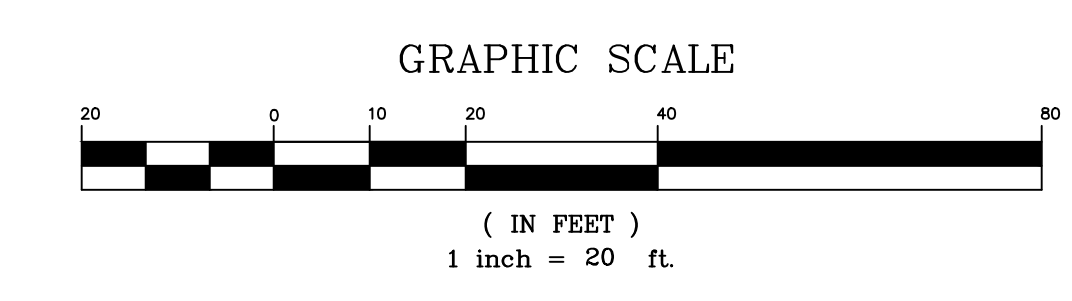


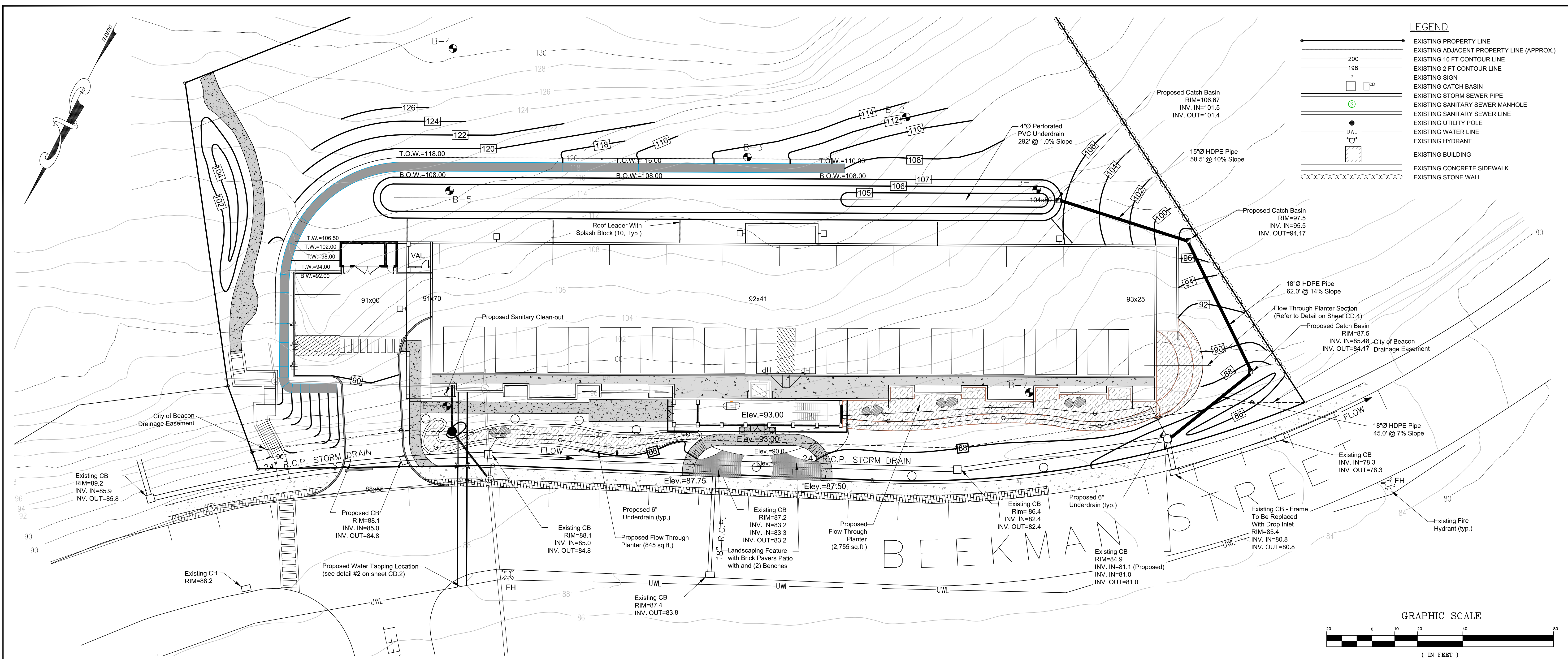
Mark A. Day, PE
January 22, 2016
December 28, 2015
November 23, 2015
August 25, 2015
July 28, 2015
2015-059
License No. 069646

**M.A. DAY Engineering, PC**  
*Consulting Engineers*  
 3 Van Wyck Lane Suite 2  
 Wappingers Falls, New York  
 (845)-223-3202

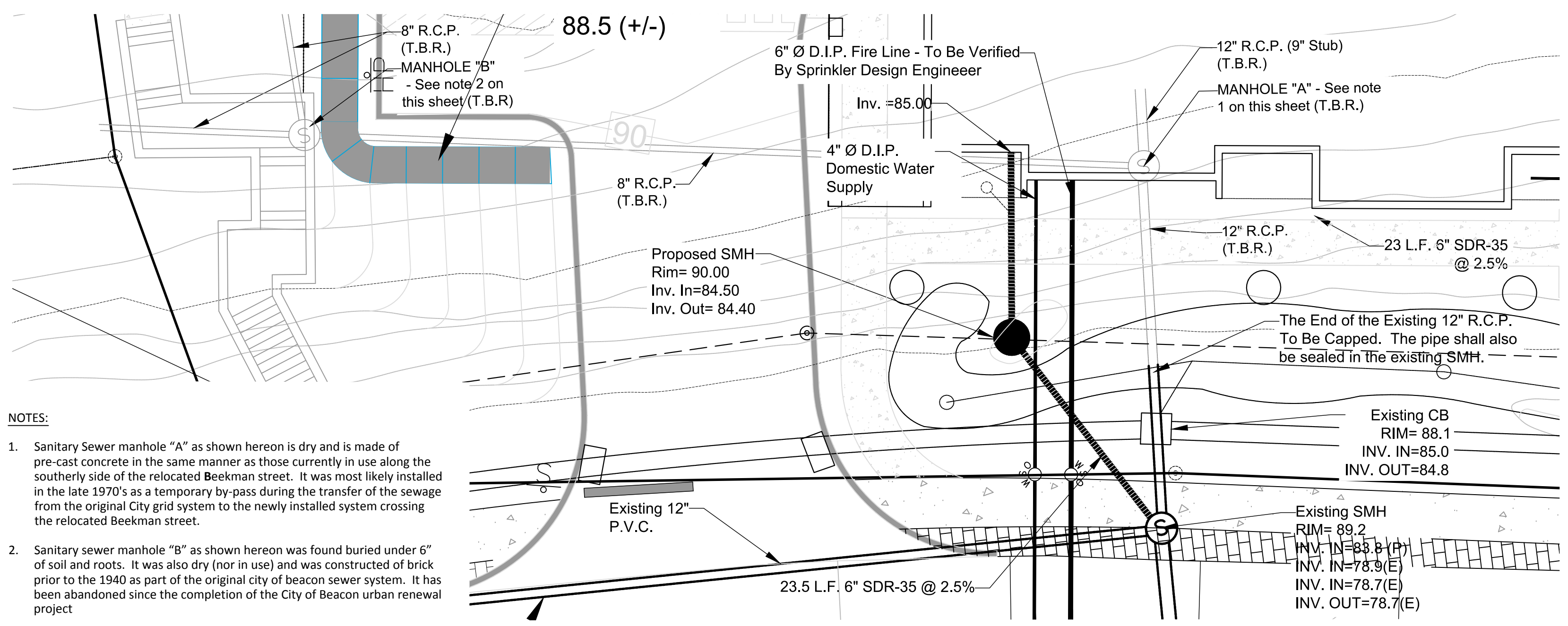
**The View**  
 City of Beacon Dutchess County, New York

<b>Site Plan</b>	
SCALE 1" = 20'	DRAWN BY DJD
DATE 06-23-15	CHECKED BY MAD
DRAWING NO. <b>SP.1</b> 3 of 17	





**1 GRADING & UTILITY PLAN**  
Scale: 1" = 20'



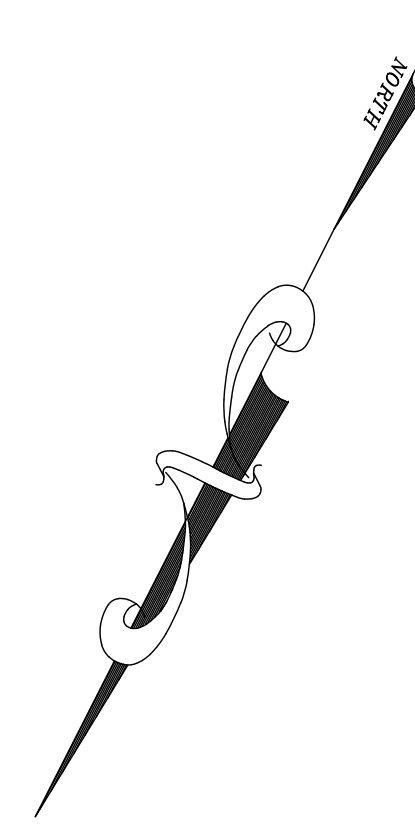
**2 Water & Sewer Layout**  
Scale: 1" = 10'

- NOTES:**
- Sanitary sewer manhole "A" as shown hereon is dry and is made of pre-cast concrete in the same manner as those currently in use along the southerly side of the relocated Beekman street. It was most likely installed in the late 1970's as a temporary by-pass during the transfer of the sewage from the original City grid system to the newly installed system crossing the relocated Beekman street.
  - Sanitary sewer manhole "B" as shown hereon was found buried under 6" of soil and roots. It was also dry (nor in use) and was constructed of brick prior to the 1940 as part of the original city of beacon sewer system. It has been abandoned since the completion of the City of Beacon urban renewal project

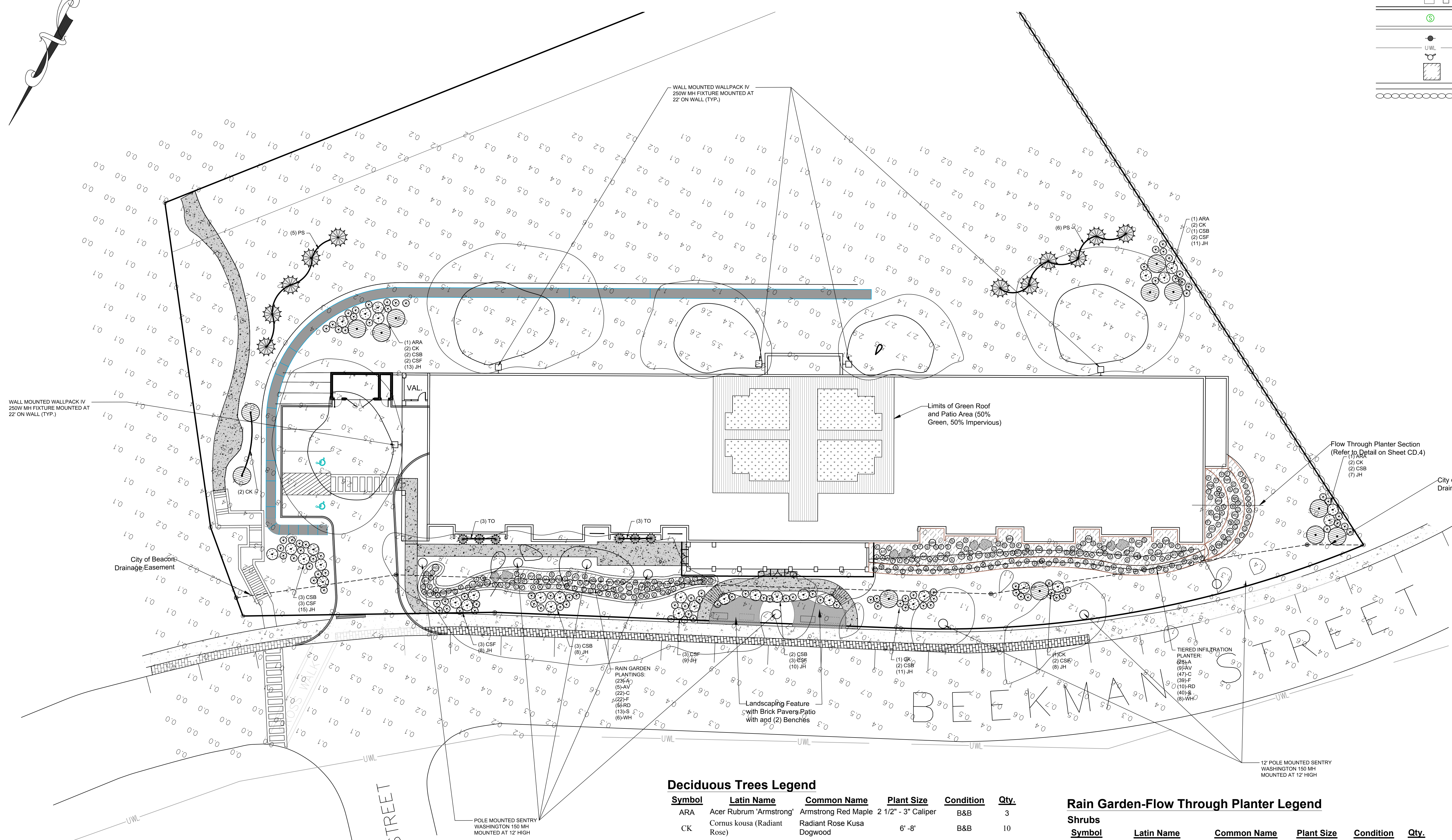
Boring	Soil Description
B-1	0'-4" brn F-M SAND & SILT, sm C sand, lit gravel, 4'-5.5' weathered BEDROCK, 5.5' AUGER REFUSAL, No water
B-2	0'-5.5' brn F-M SAND & SILT, sm C sand, lit gravel, 5.5' AUGER REFUSAL, No water
B-3	0'-1' brn F-M SAND & SILT, sm C sand, lit gravel, 1'-4" fractured BEDROCK, 4' AUGER REFUSAL, No water
B-4	0'-2' brn F-M SAND & SILT, sm C sand, lit gravel, 2'-6.5' fractured BEDROCK, 6.5' AUGER REFUSAL, No water
B-5	0'-2' brn F-M SAND & SILT, sm C sand, lit gravel, 2'-3' fractured BEDROCK, 3' AUGER REFUSAL, No water
B-6	0'-1.5' brn F-M SAND & SILT, sm C sand, lit gravel, 1.5'-3' fractured BEDROCK, 3' AUGER REFUSAL, No water
B-7	0'-8' brn CLAYEY SILT, lit gravel, 8'-10.5' fractured BEDROCK, 10.5' AUGER REFUSAL, No water

Soil Boring were performed by Soil Testing Inc. on June 17, 2015

Mark A. Day, PE	
January 22, 2016	
December 28, 2015	
November 23, 2015	
August 25, 2015	
July 28, 2015	
Project No. 2015/059	License No. 069646
<b>M.A. DAY Engineering, PC</b>	
<i>Consulting Engineers</i>	
3 Van Wyck Lane Suite 2 Wappingers Falls, New York (845)-223-3202	
<b>The View</b>	
City of Beacon	Dutchess County, New York
<b>Utility &amp; Grading Plan</b>	
SCALE: 1" = 20'	DESIGNED BY: DJD
DATE: 06-23-15	CHECKED BY: MAD
<b>UP.1</b>	
4 of 17	



LEGEND	
	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE (APPROX.)
	EXISTING 10 FT CONTOUR LINE
	EXISTING 2 FT CONTOUR LINE
	EXISTING SIGN
	EXISTING CATCH BASIN
	EXISTING STORM SEWER PIPE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING SANITARY SEWER LINE
	EXISTING UTILITY POLE
	EXISTING WATER LINE
	EXISTING HYDRANT
	EXISTING BUILDING
	EXISTING CONCRETE SIDEWALK
	EXISTING STONE WALL



**Deciduous Trees Legend**

Symbol	Latin Name	Common Name	Plant Size	Condition	Qty.
ARA	Acer Rubrum 'Armstrong'	Armstrong Red Maple	2 1/2" - 3" Caliper	B&B	3
CK	Cornus kousa (Radiant Rose)	Radiant Rose Kousa Dogwood	6' - 8'	B&B	10

**Evergreen Tree Legend**

Symbol	Latin Name	Common Name	Plant Size	Condition	Qty.
PS	Pinus strobus	Eastern White Pine	6' - 8'	B&B	11
TO	Thuja occidentalis	American Arborvitae	6' - 8'	B&B	9

**Shrub Legend**

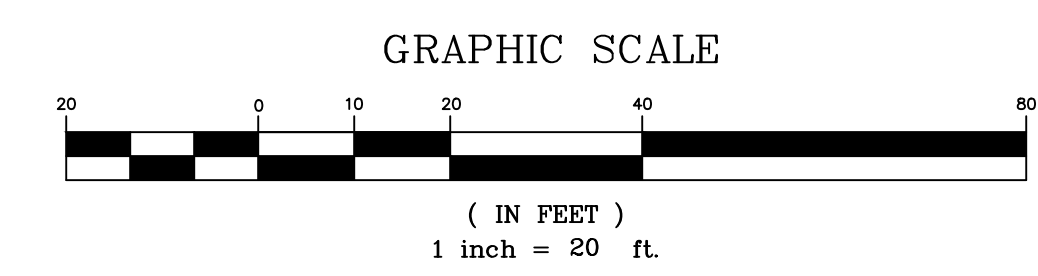
Symbol	Latin Name	Common Name	Plant Size	Condition	Qty.
CSB	Cornus sericea "Bialeyn"	Bailey's Red Twigg Dogwood	2' - 3'	Container	15
CSF	Cornus sericea "Flaviramea"	Yellow Twig Dogwood	2' - 3'	Container	18
JH	Juniperus horizontalis	'Bar Harbor' Creeping Juniper	3 Gallon	Container	100

**Rain Garden-Flow Through Planter Legend**

Symbol	Latin Name	Common Name	Plant Size	Condition	Qty.
WH	Ilex Verticillata 'Winter Red'	Winterberry Holly	5 Gallon	Container	14
AV	Viburnum Dentatum	Arrowwood Viburnum	10 Gallon	Container	14
RD	Cornus Sericea	Red Osier Dogwood	5 Gallon	Container	15

**Herbaceous Plants**

Symbol	Latin Name	Common Name	Plant Size	Condition	Qty.
S	Panicum Virgatum	Switch Grass	1 Gallon	Container	53
A	Aster Novae-Angliae	New England Aster	1 Gallon	Container	51
F	Carex Vulpinoidea	Fox Sedge	1 Gallon	Container	61
C	Osmunda Cinnamomea	Cinnamon Fern	1 Gallon	Container	69

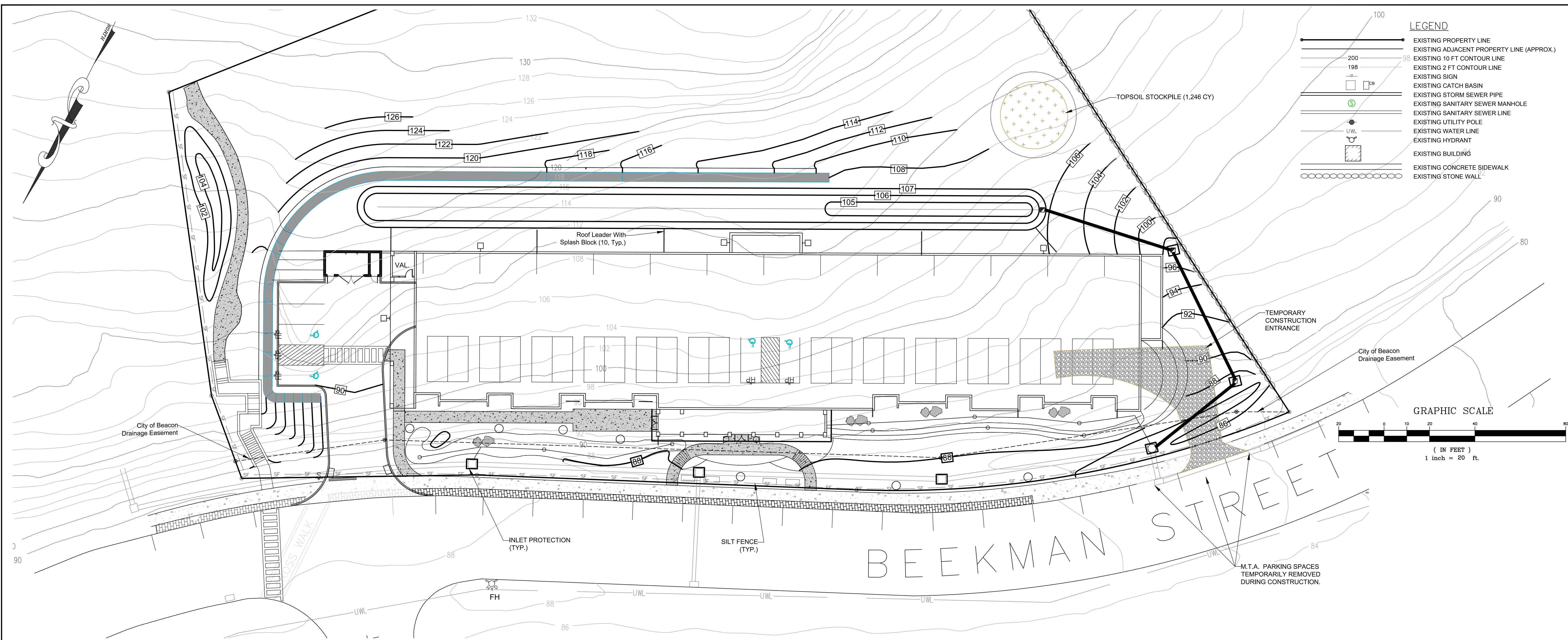


Mark A. Day, PE	
January 22, 2016	
December 28, 2015	
November 23, 2015	
August 25, 2015	
July 28, 2015	
Project No. 2015-059	License No. 069646

**M.A. DAY Engineering, PC**  
*Consulting Engineers*  
 3 Van Wyck Lane Suite 2  
 Wappingers Falls, New York  
 (845)-223-3202

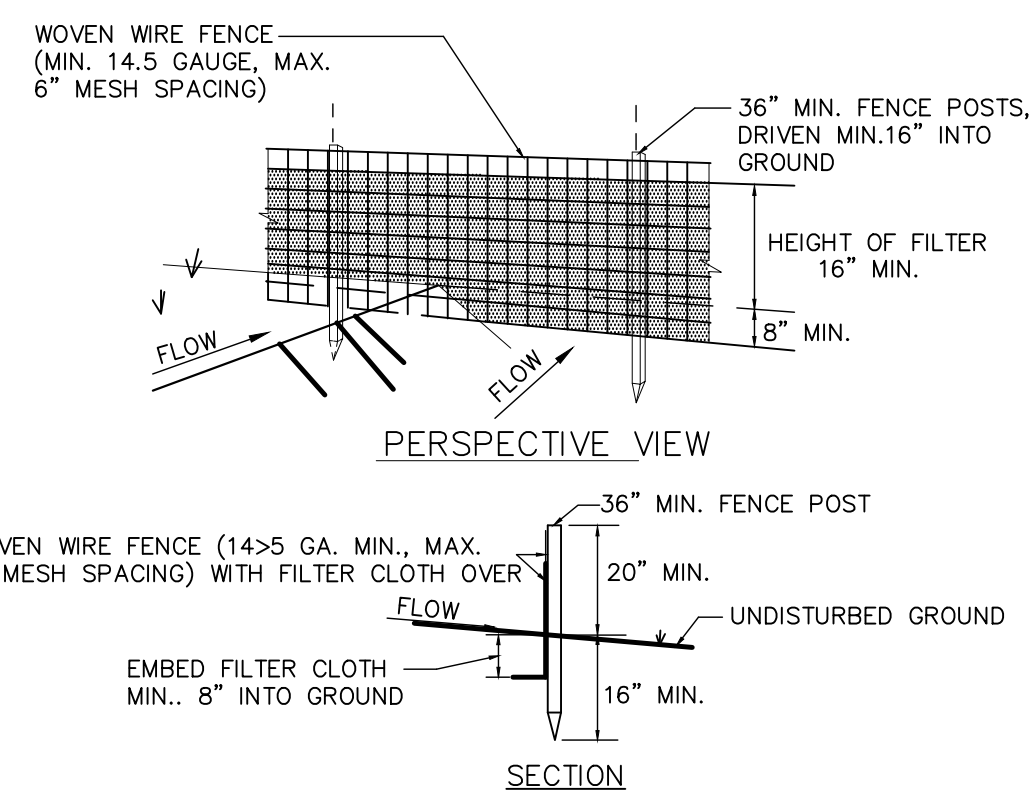
PROJECT: **The View**  
 City of Beacon Dutchess County, New York  
 DRAWING: **Landscape & Lighting Plan**

SCALE: 1" = 20'	DRAWN BY: DJD	DRAWING NO.: <b>LLP.1</b>
DATE: 06-23-15	CHECKED BY: MAD	SHEET: 5 of 17



**Maintenance/Inspection Schedule (Long Term)**

Maintenance Item	Frequency	Field Representative Shall Inspect for the Following	Maintenance/Repair Representative Shall Repair Respective Deficiency As Follows:
Catch Basins	Monthly	- Excess Silt & Sediment in Sumps	-Remove (Vacuum)
Pipe Network	Monthly	-Excess Silt & Sediment	-Remove (Vacuum)
Dry Swale	Annual & Monthly	- Vegetation - Adequate Vegetation - Undesirable Vegetative Growth - Undesirable Woody Vegetation - Standing Water/Wet Spots - Sediment and/or trash Accumulation	- Remove - Restore to Original Specification as Per Landscaping Plan - Remove - Remove - Add/ Remove Fill as Necessary to Restore Pond Base Elevation - Remove
Planter Plantings	Annually	- Survival of Desired Wetland Plants - 50% Cover of Plants After 2nd Growing Season - Distribution of Plants as Per Landscaping Plan - Any Evidence of Undesirable Invasive Species - Maintenance of Adequate Water Depth Plan Species - "Choking" of Plants Due to Excessive Sediment Depths	- Re-Plant Wetland Species as Necessary - Restore as Necessary - Re-Distribute as Necessary - Remove - Clean outlet to Restore Appropriate Water Levels - Remove Pond Sediments as Necessary
Green Roof	Monthly for first 24 months & Biannually	- Any Evidence of Undesirable/Invasive Vegetative Growth - Plant Health/Establishment Inadequate - Roof Drains Clogged or Impeded by Debris - Leaks or Structural Deficiencies	- Remove - Water, Fertilize, and Re-plant as Necessary - Remove Debris - Correct as Directed By a Trained and Qualified Contractor
Miscellaneous	Monthly	- Complaints from Residents - Aesthetics ( Graffiti, Lack of Grass cover, Etc) - Signs of Hydrocarbon Build-up - Any Possible Public Hazards	- Note Complaint and Discuss with Owner and Engineers - Remove Any Graffiti and Scarfly, Seed And Mulch as Needed - Remove - Notify City and Discuss with Owner and Town as Necessary



**CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**

- 1) WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES
- 2) FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION
- 3) WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED
- 4) MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE

**MATERIALS**

- 1) POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
- 2) FILTER CLOTH: MIRAFI 100X, STABLINKA 1140N OR APPROVED EQUAL
- 3) FENCE: WOVEN WIRE, 14.5 GA. 6" MAX MESH OPENING
- 4) PREFABRICATED UNIT: GEOFAB, EVIROFENCE, OR APPROVED EQUAL

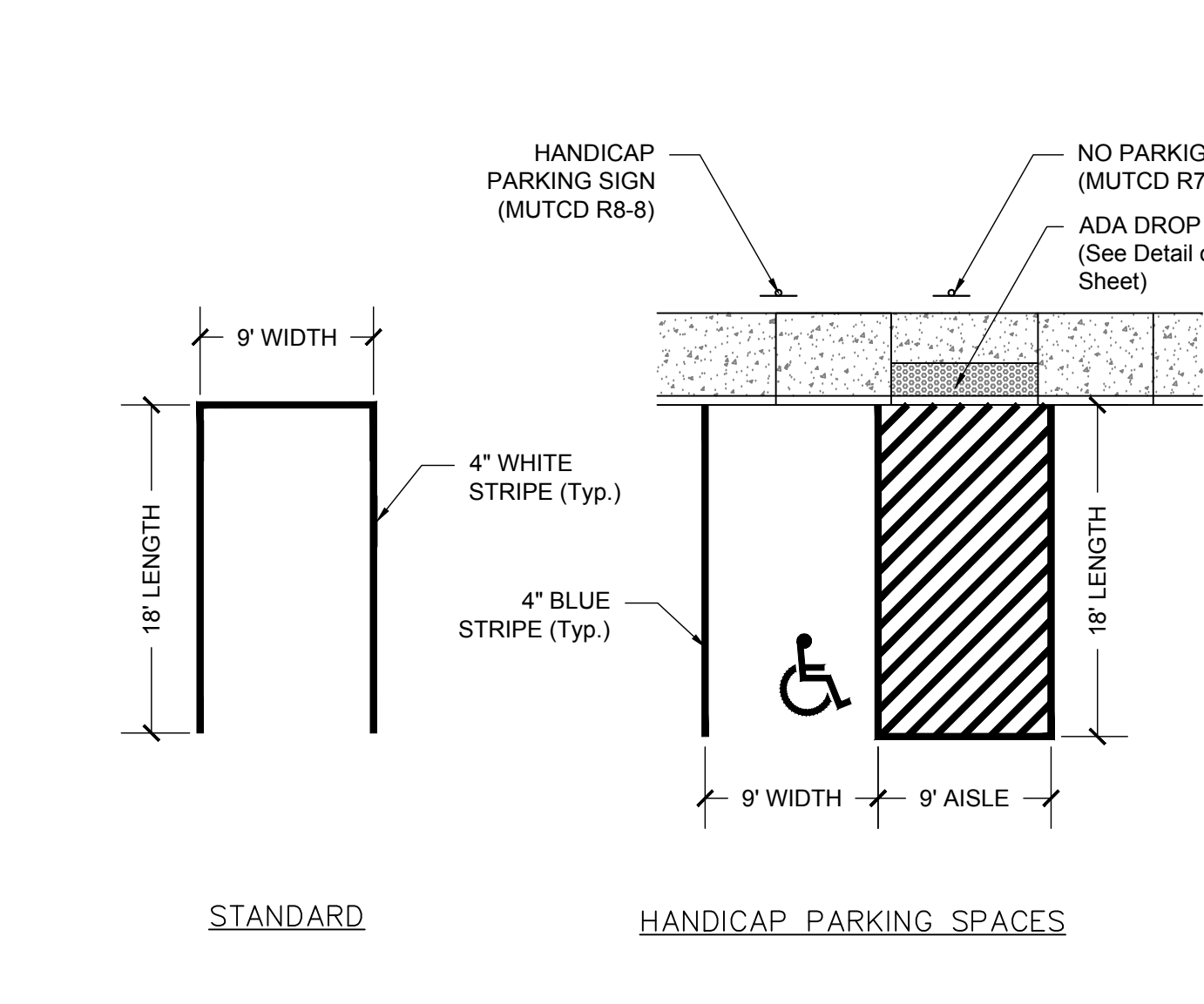
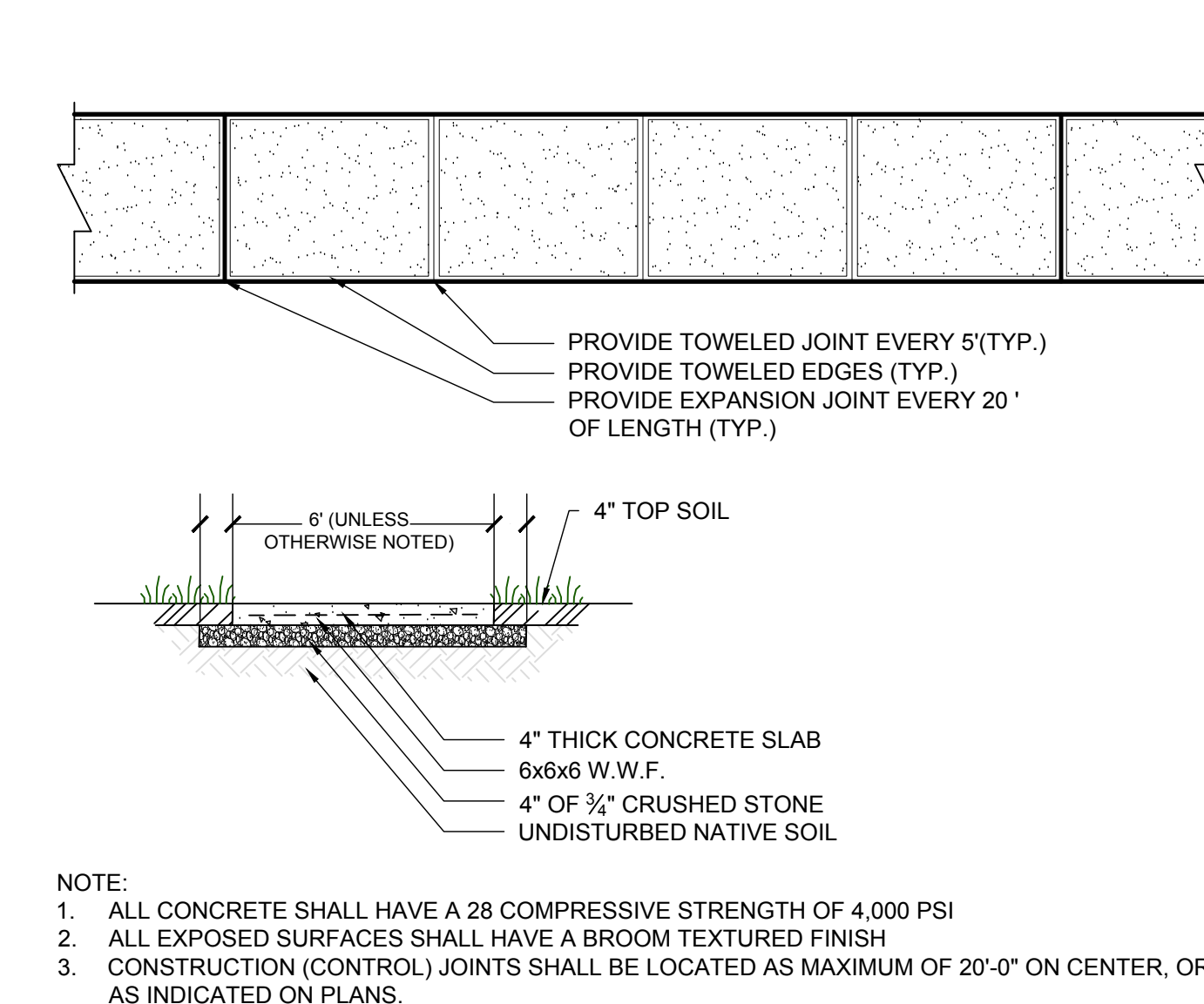
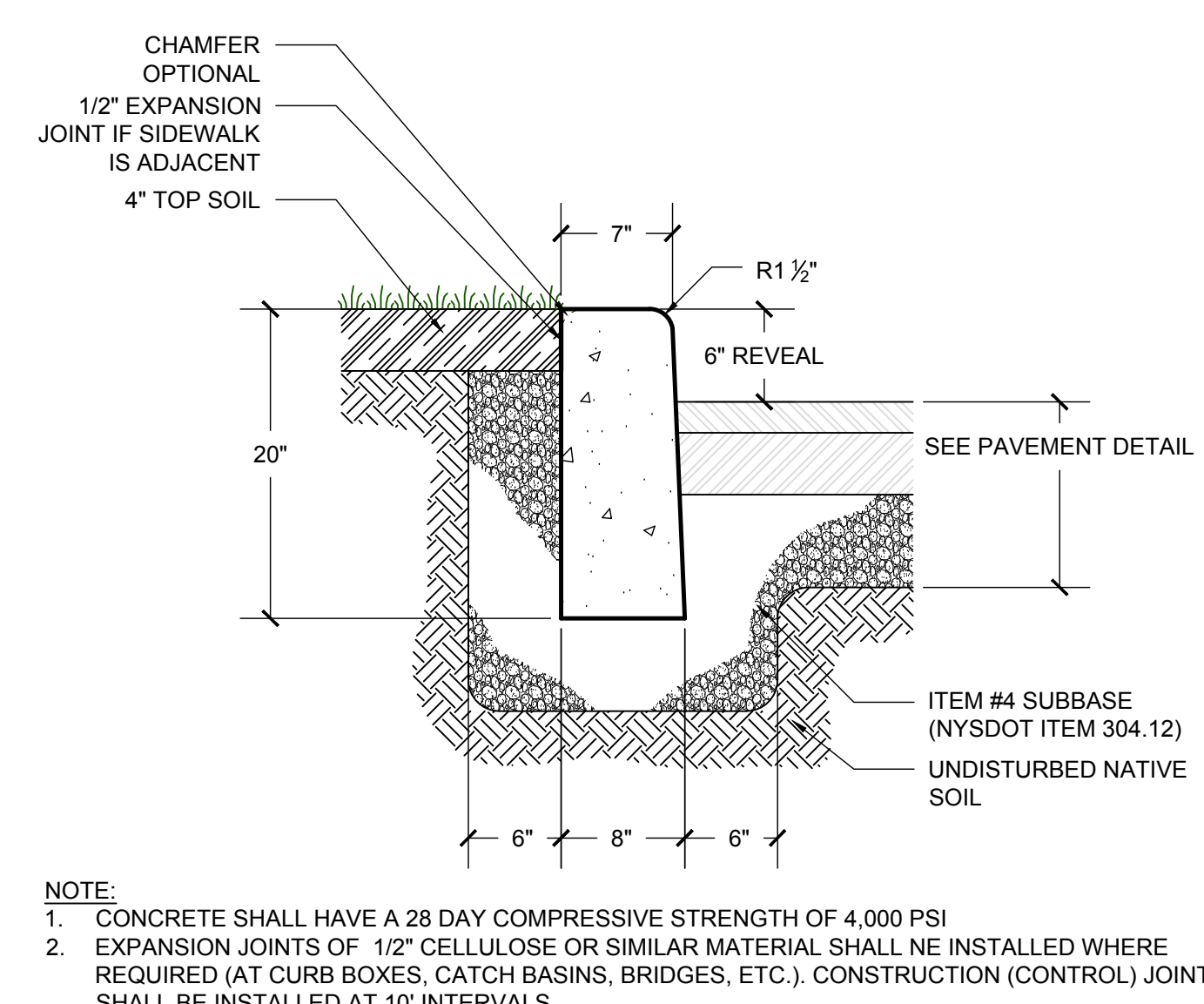
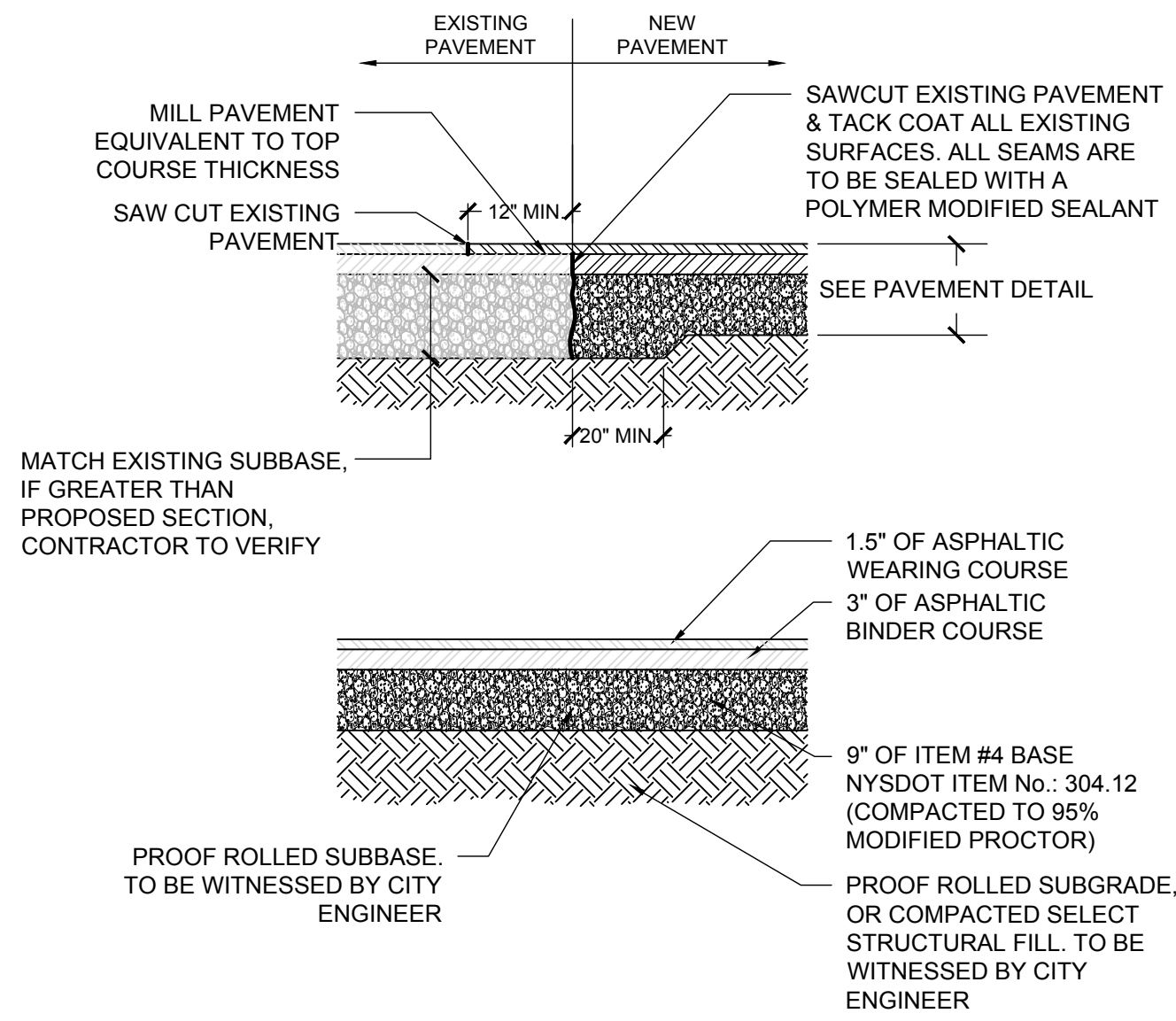
Mark A. Day, PE
January 22, 2016
December 28, 2015
November 23, 2015
August 25, 2015
July 28, 2015
Project No. 2015-059
License No. 069646

**M.A. DAY Engineering, PC**  
Consulting Engineers  
3 Van Wyck Lane Suite 2  
Wappingers Falls, New York  
(845)-223-3202

**The View**  
City of Beacon Dutchess County, New York

**Erosion & Sediment Control Plan**

SCALE 1" = 20'	DRAWN BY DJD	<b>ESC.1</b> 6 of 17
DATE 06-23-15	CHECKED BY MAD	



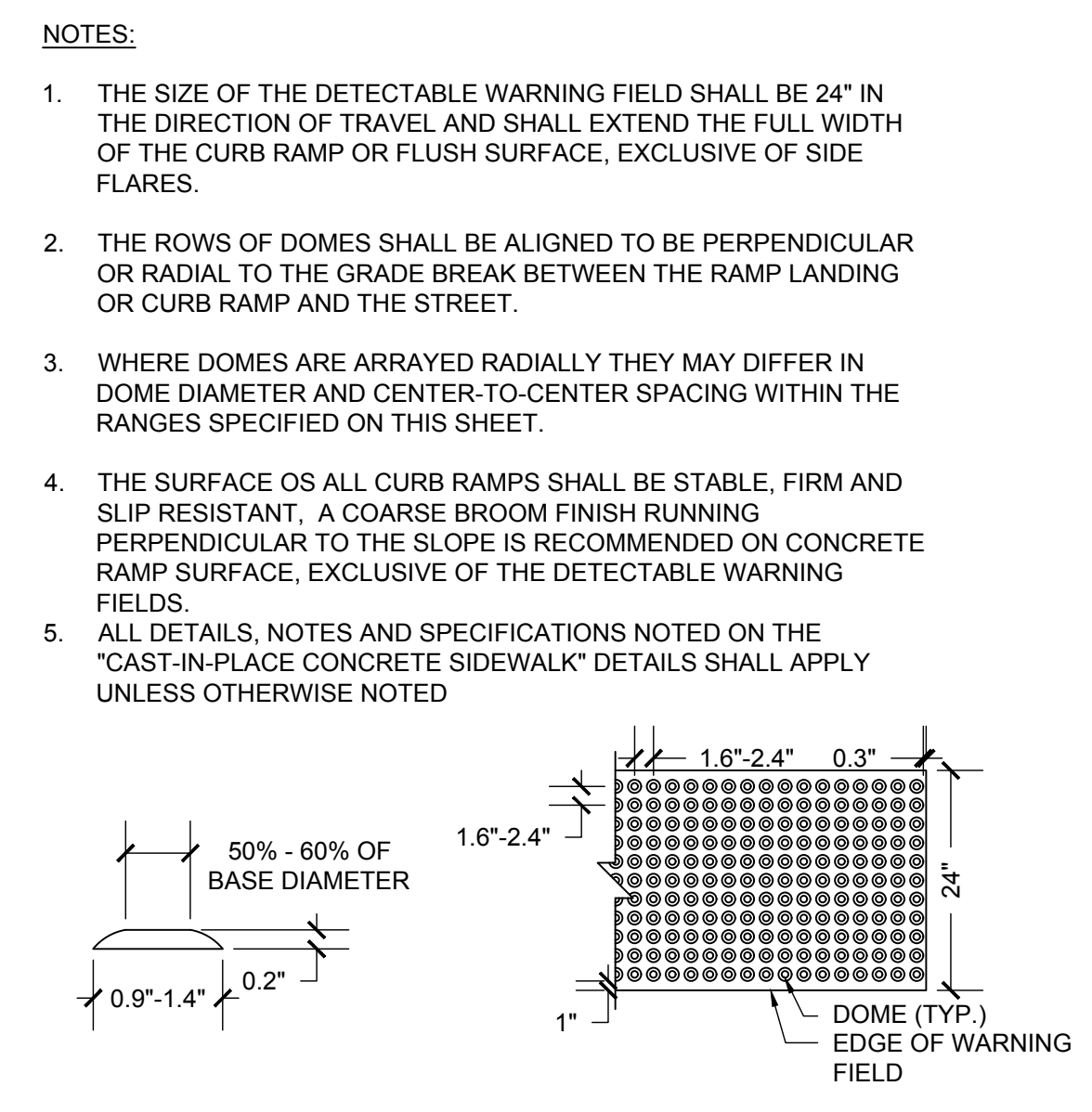
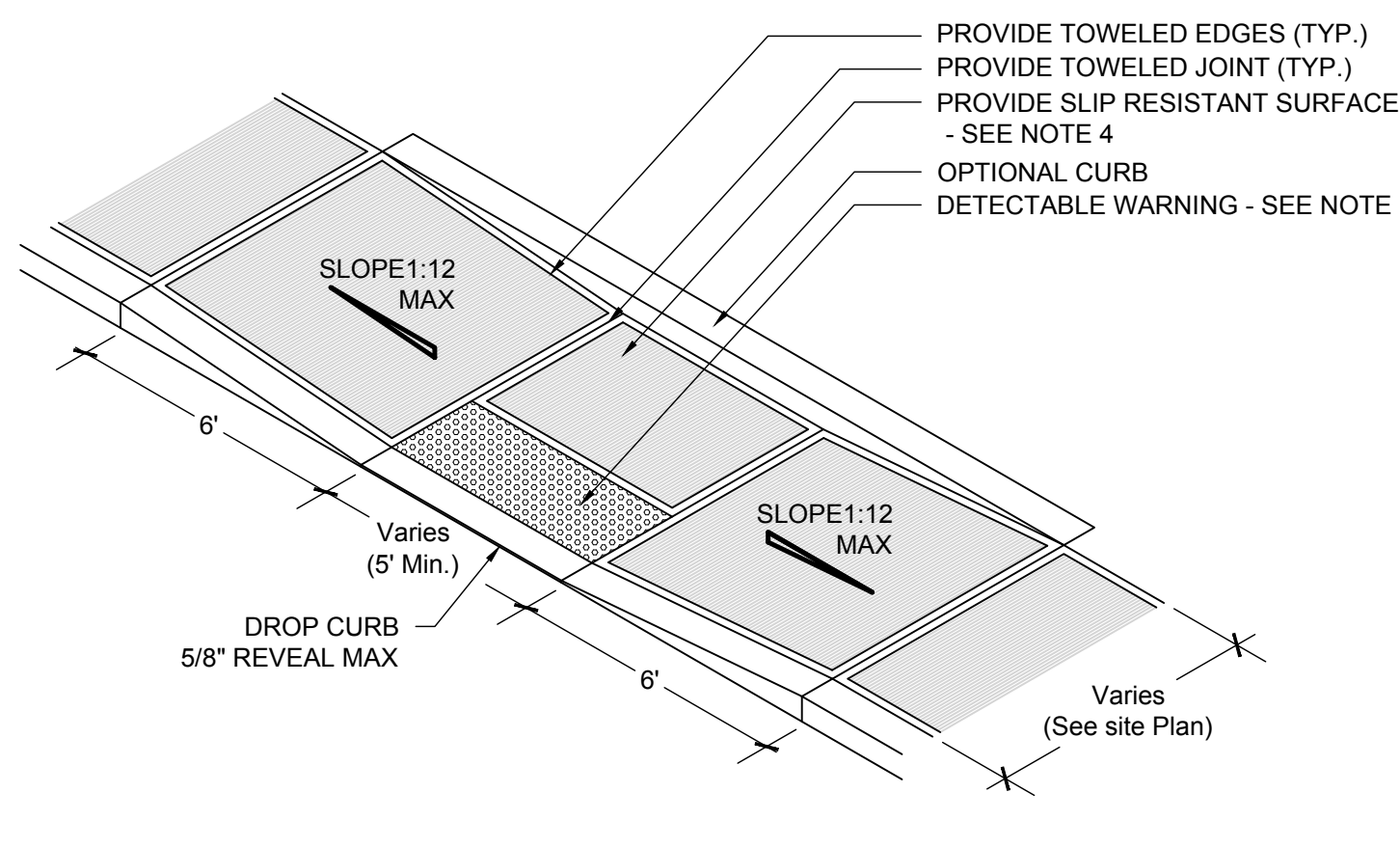
1 PAVEMENT SECTION  
NOT TO SCALE

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

3 CAST-IN-PLACE CONCRETE SIDEWALK  
NOT TO SCALE

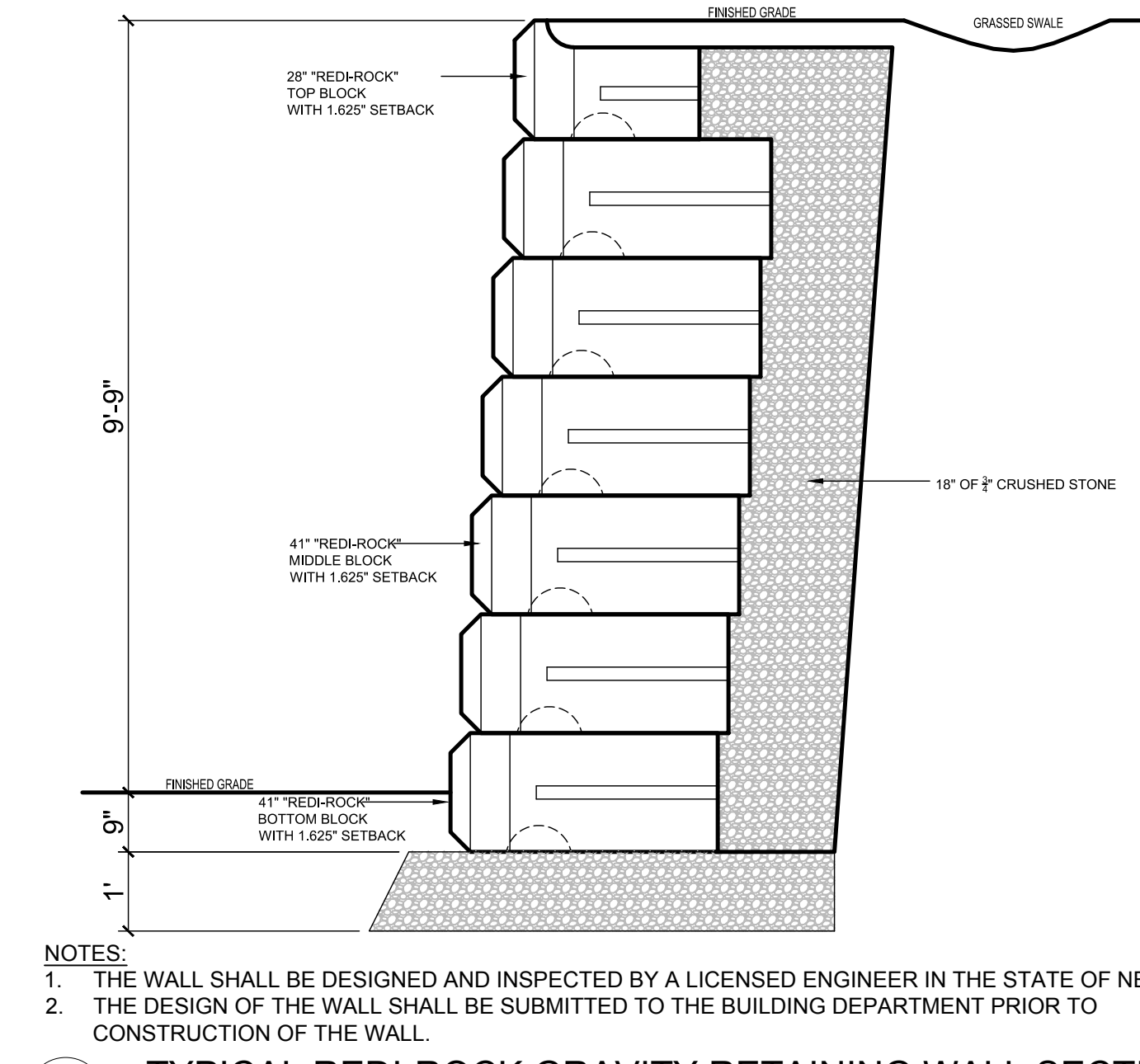
4 PARKING STALL DETAIL  
NOT TO SCALE

ALL CONCRETE SIDEWALKS AND CURBING WITHIN THE CITY R.O.W. SHALL BE SEALED TO PROTECT AGAINST DE-ICING AGENTS.

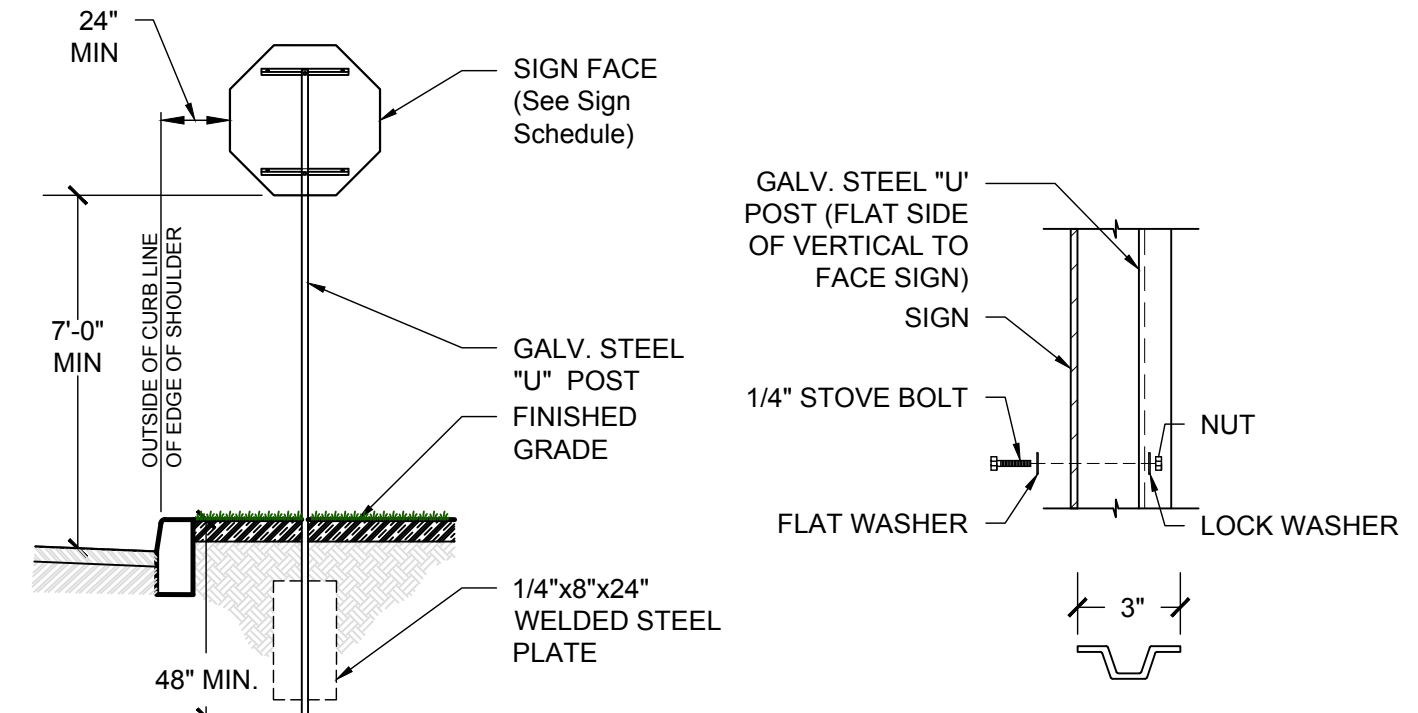


5 ADA MID-BLOCK CURB RAMP DETAIL  
NOT TO SCALE

6 TYPICAL SPLIT RAIL FENCING  
NOT TO SCALE

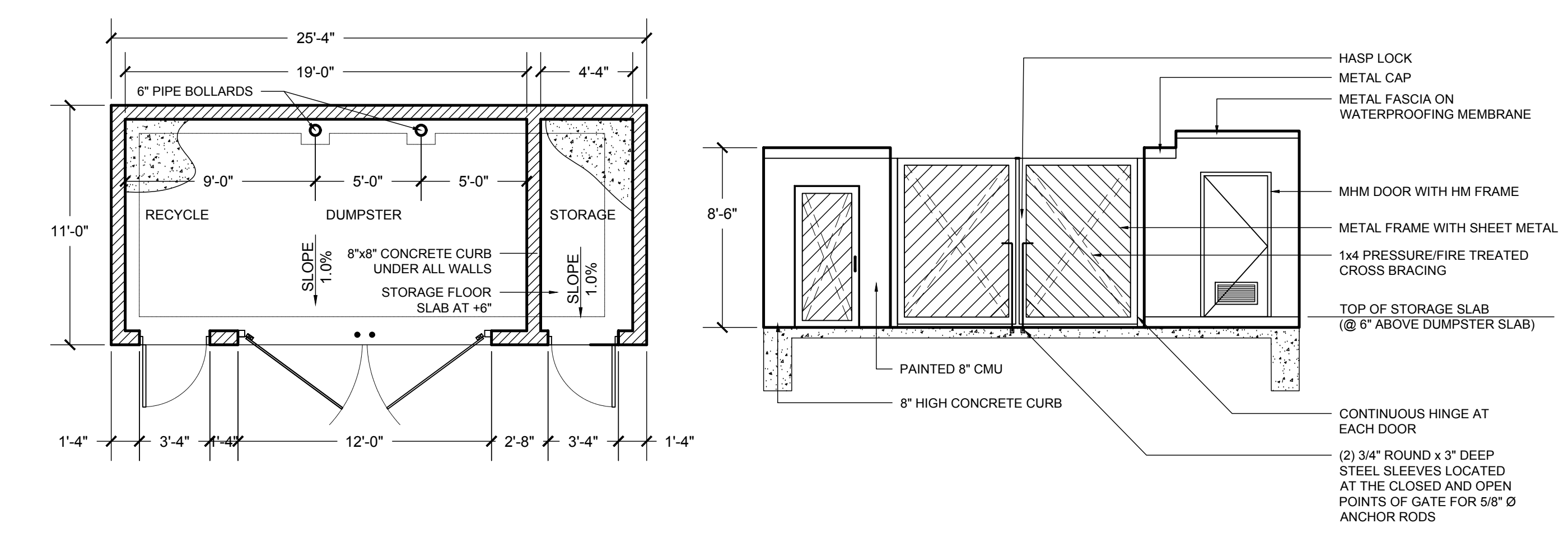


7 TYPICAL REDI-ROCK GRAVITY RETAINING WALL SECTION  
NOT TO SCALE



8 TYPICAL SIGN DETAIL  
NOT TO SCALE

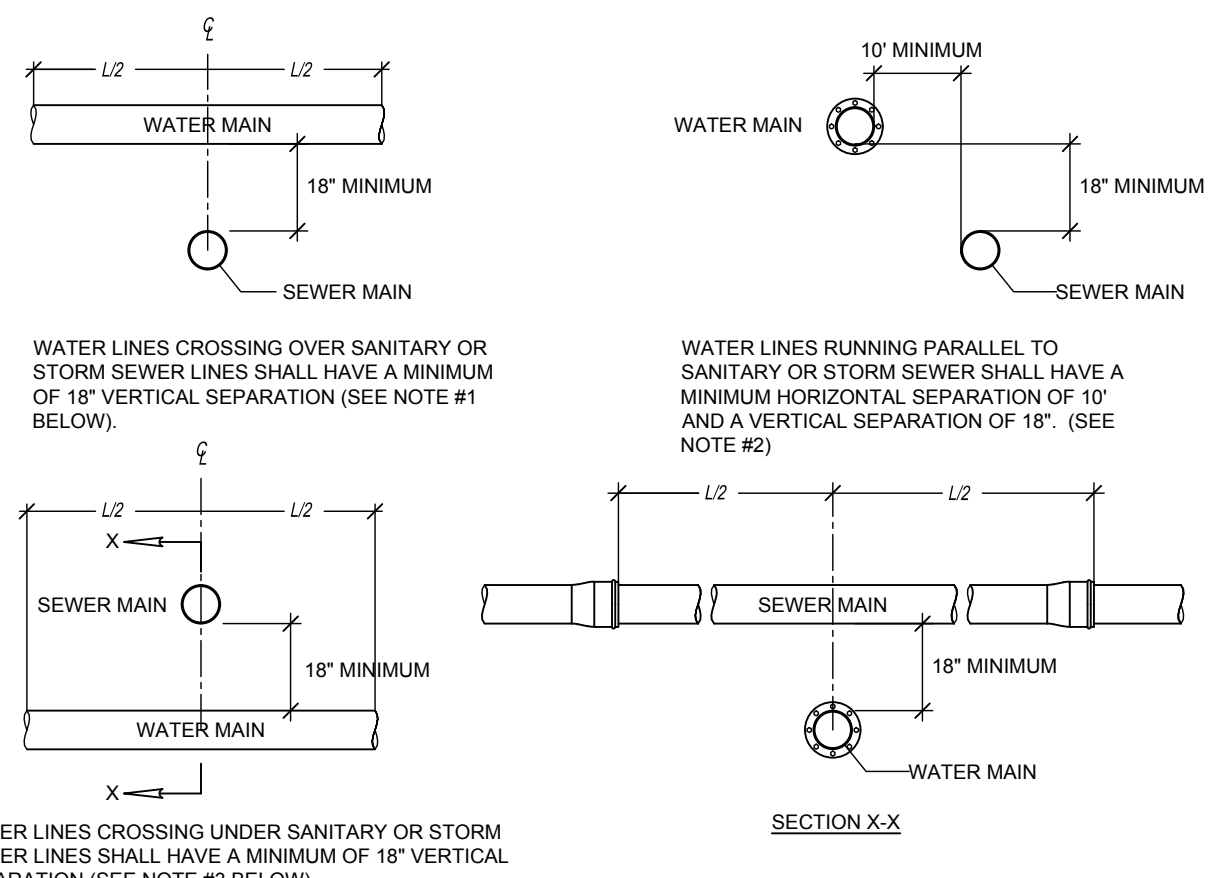
SIGN SCHEDULE				
SYMBOL	MUTCD NUMBER	PANEL	SIZE (WxH)	QUANTITY
HC	R7-8	RESERVED PARKING	12 x 18	5
HC	R7-1	No Parking ANY TIME	12 x 18	3
SP	R1-1	STOP	36x36	1



9 REFUSE ENCLOSURE  
NOT TO SCALE

Mark A. Day, PE	
January 22, 2016	
December 28, 2015	
November 23, 2015	
August 25, 2015	
July 28, 2015	
Project No. 2015/059	License No. 069646
<b>M.A. DAY Engineering, PC</b>	
Consulting Engineers	
3 Van Wyck Lane Suite 2	
Wappingers Falls, New York	
(845)-223-3202	
PROJECT	
The View	
City of Beacon	Dutchess County, New York
DRAWING	
Construction Details	
SCALE	As Noted
DATE	06-23-15
DRAWN BY	DJD
CHECKED BY	MAD
DRAWING NO.	CD.1
7 of 17	

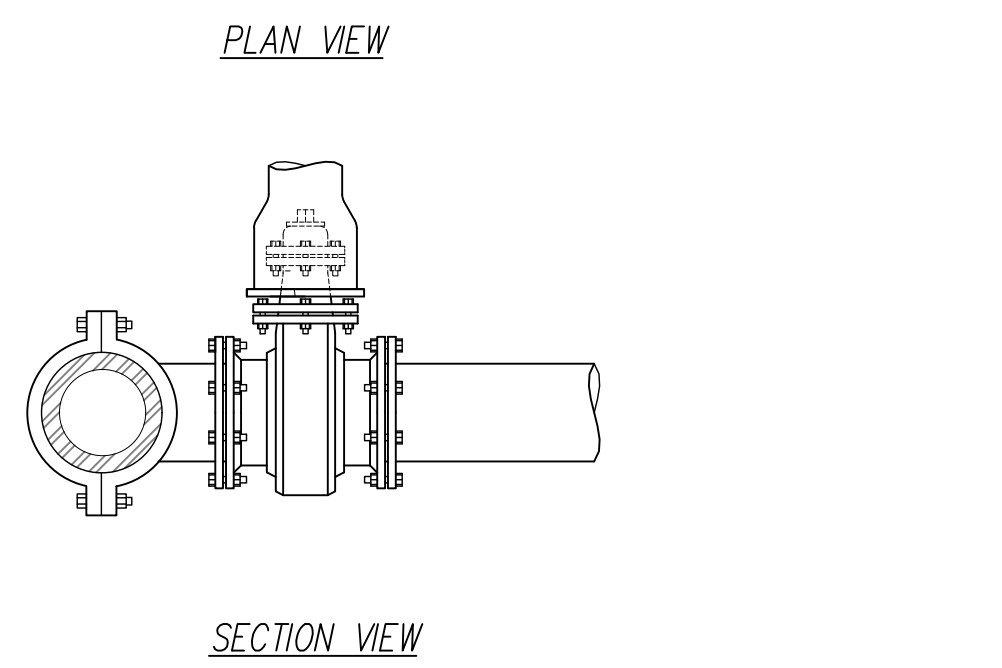
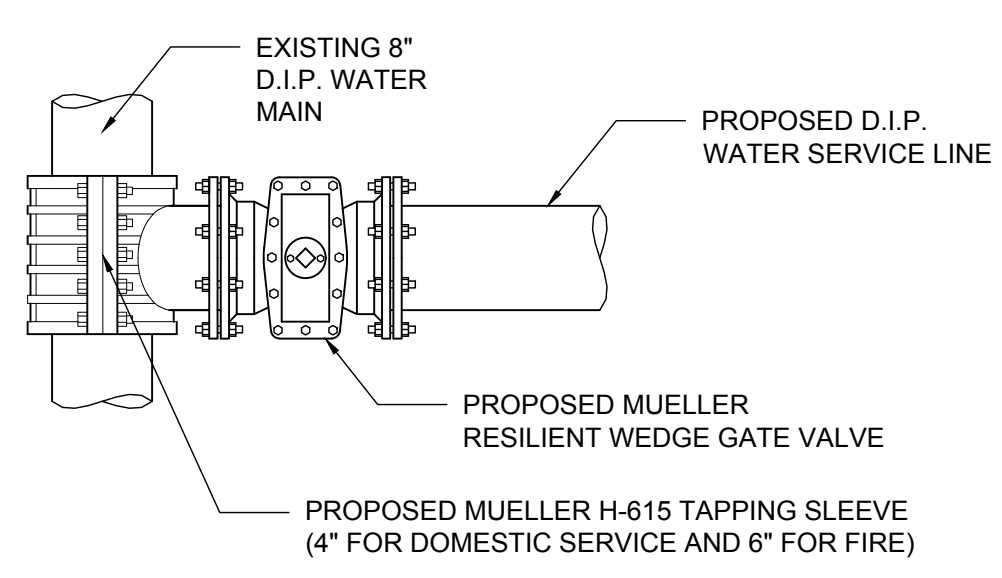




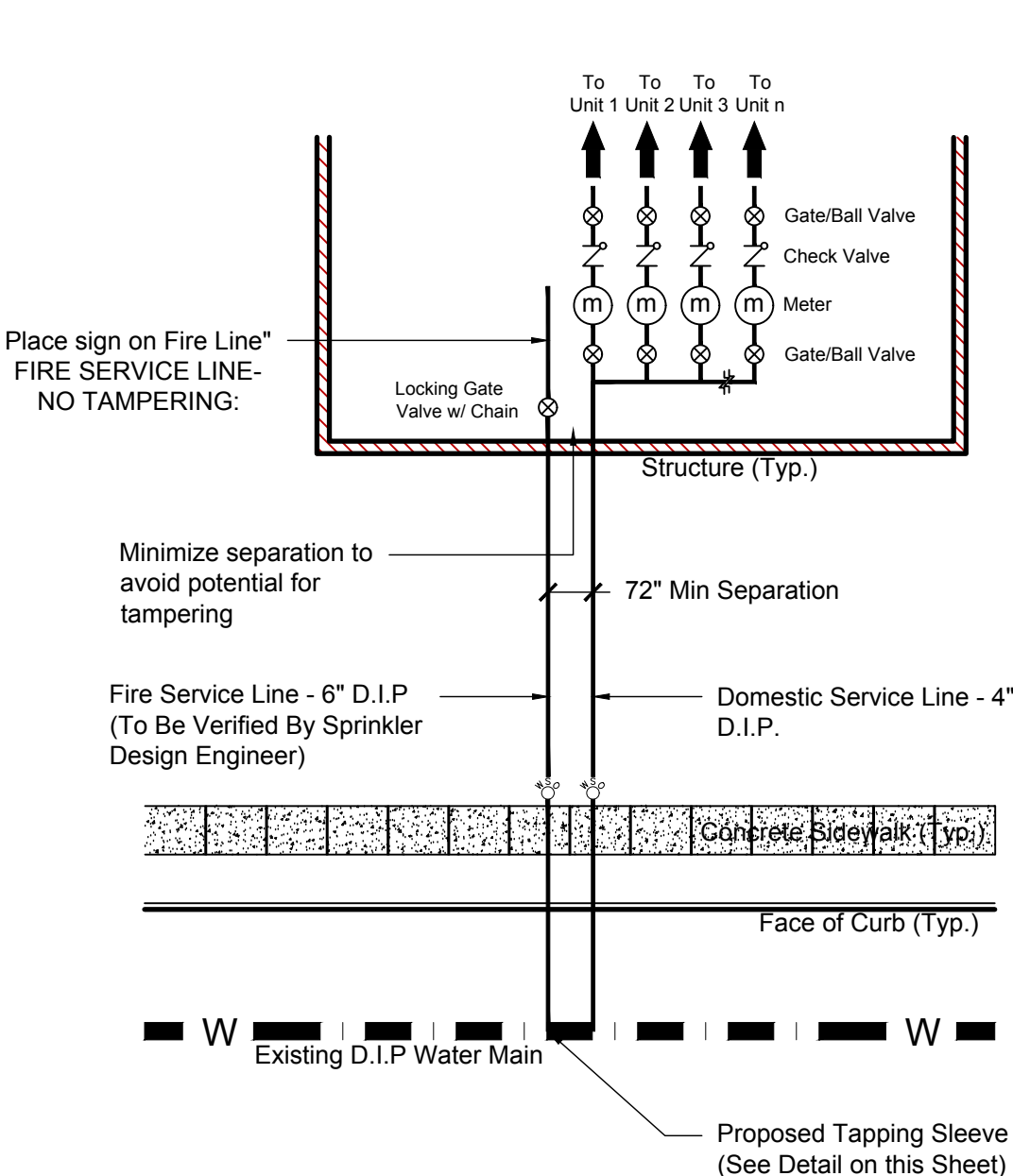
WATER LINES CROSSING OVER SANITARY OR STORM SEWER LINES SHALL HAVE A MINIMUM OF 18" VERTICAL SEPARATION (SEE NOTE #1 BELOW).

WATER LINES RUNNING PARALLEL TO SANITARY OR STORM SEWER SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 10" AND A VERTICAL SEPARATION OF 18". (SEE NOTE #2)

WATER LINES CROSSING UNDER SANITARY OR STORM SEWER LINES SHALL HAVE A MINIMUM OF 18" VERTICAL SEPARATION (SEE NOTE #3 BELOW).



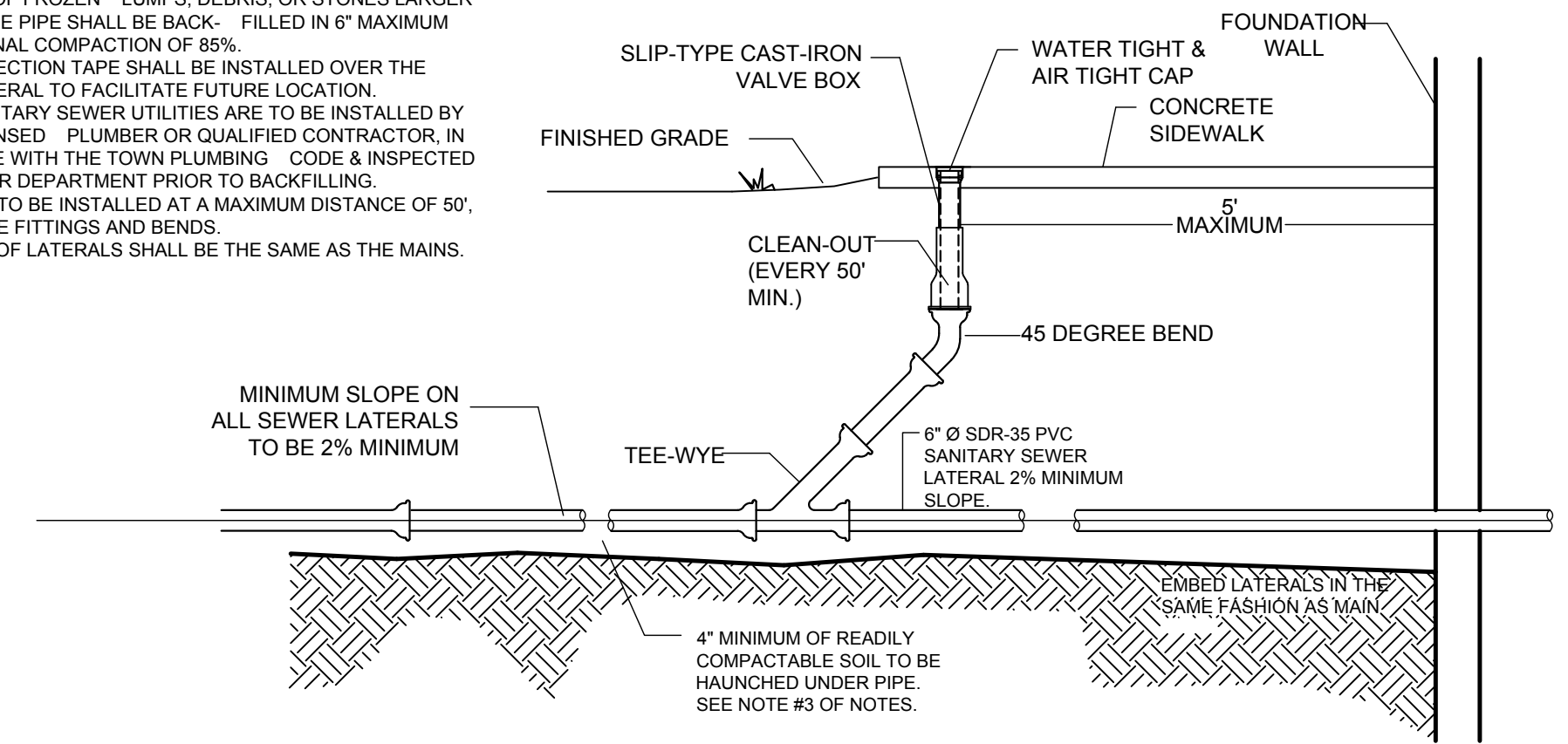
2 TAPPING SLEEVE AND VALVE INSTALLATION DETAIL  
NOT TO SCALE



3 WATER SERVICE DETAIL  
NOT TO SCALE

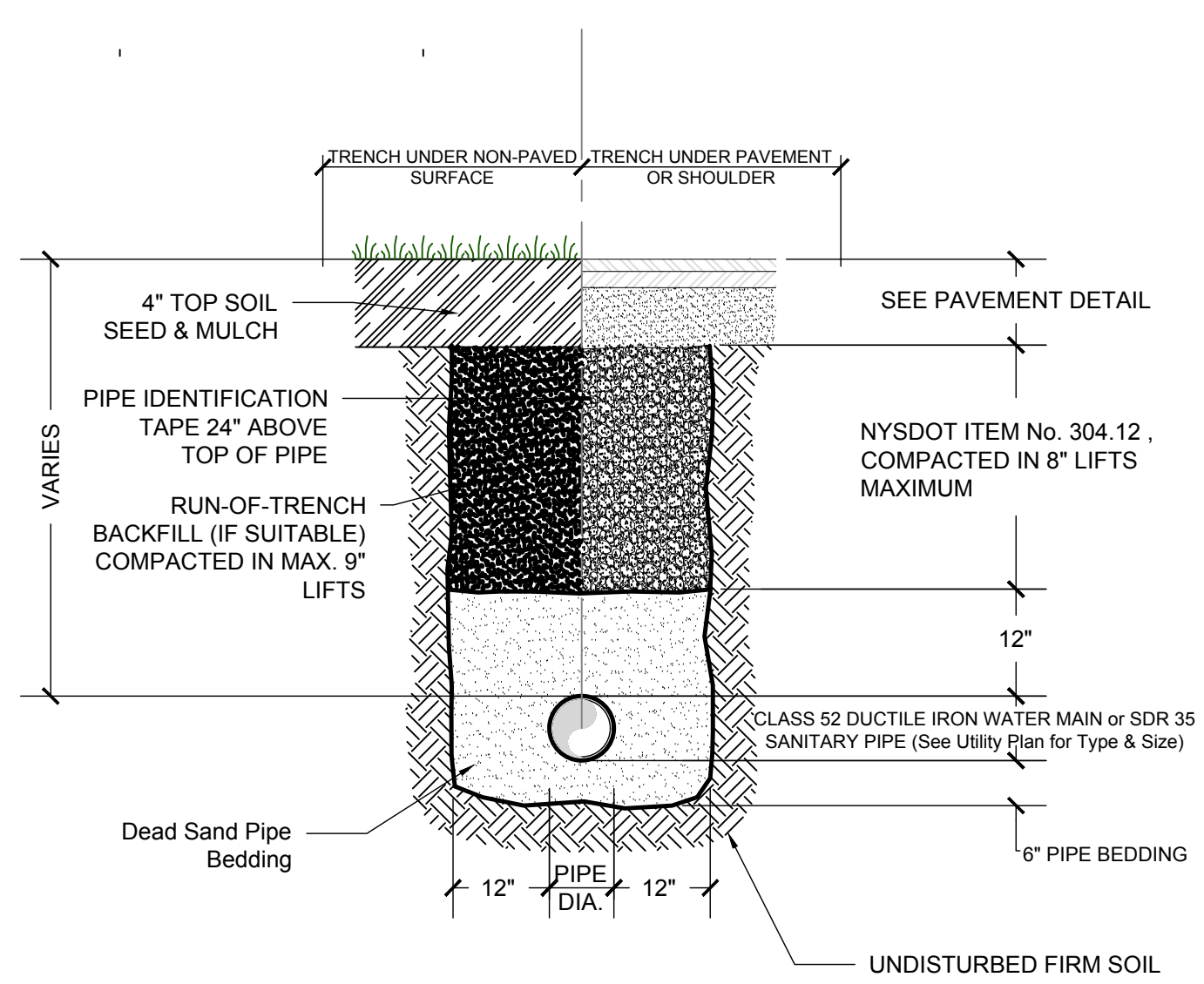
NOTE:

- A 10" MINIMUM SEPARATION DISTANCE SHALL BE MAINTAINED BETWEEN THE SEWER LATERAL AND THE WATER SERVICE LINE.
- THE FIRST 5' SEWER LATERAL IS TO BE 6" DIAMETER CAST-IRON PIPE AT 2% MIN. SLOPE. THE REMAINING SEWER LATERAL PIPING SHALL BE SDR-35 PVC AT 2% MIN. SLOPE. ALL JOINTS TO BE "BELL & SPIGOT" TYPE.
- THE MATERIAL IMMEDIATELY SURROUNDING THE PIPE TO BE READILY COMPACTABLE SOIL (SAND, LOAMY SAND OR LOAMY CLAY), FREE OF FROZEN LUMPS, DEBRIS, OR STONES LARGER THAN 3/4". THE PIPE SHALL BE BACK-FILLED IN 6" MAXIMUM LIFTS TO A FINAL COMPACTION OF 85%.
- A METAL DETECTION TAPE SHALL BE INSTALLED OVER THE SEWER LATERAL TO FACILITATE FUTURE LOCATION.
- ALL SITE SANITARY SEWER UTILITIES ARE TO BE INSTALLED BY A TOWN LICENSED PLUMBER OR QUALIFIED CONTRACTOR, IN ACCORDANCE WITH THE TOWN PLUMBING CODE & INSPECTED BY THE SEWER DEPARTMENT PRIOR TO BACKFILLING.
- CLEAN-OUTS TO BE INSTALLED AT A MAXIMUM DISTANCE OF 50' AND AT ANGLE FITTINGS AND BENDS.
- EMBEDMENT OF LATERALS SHALL BE THE SAME AS THE MAINS.

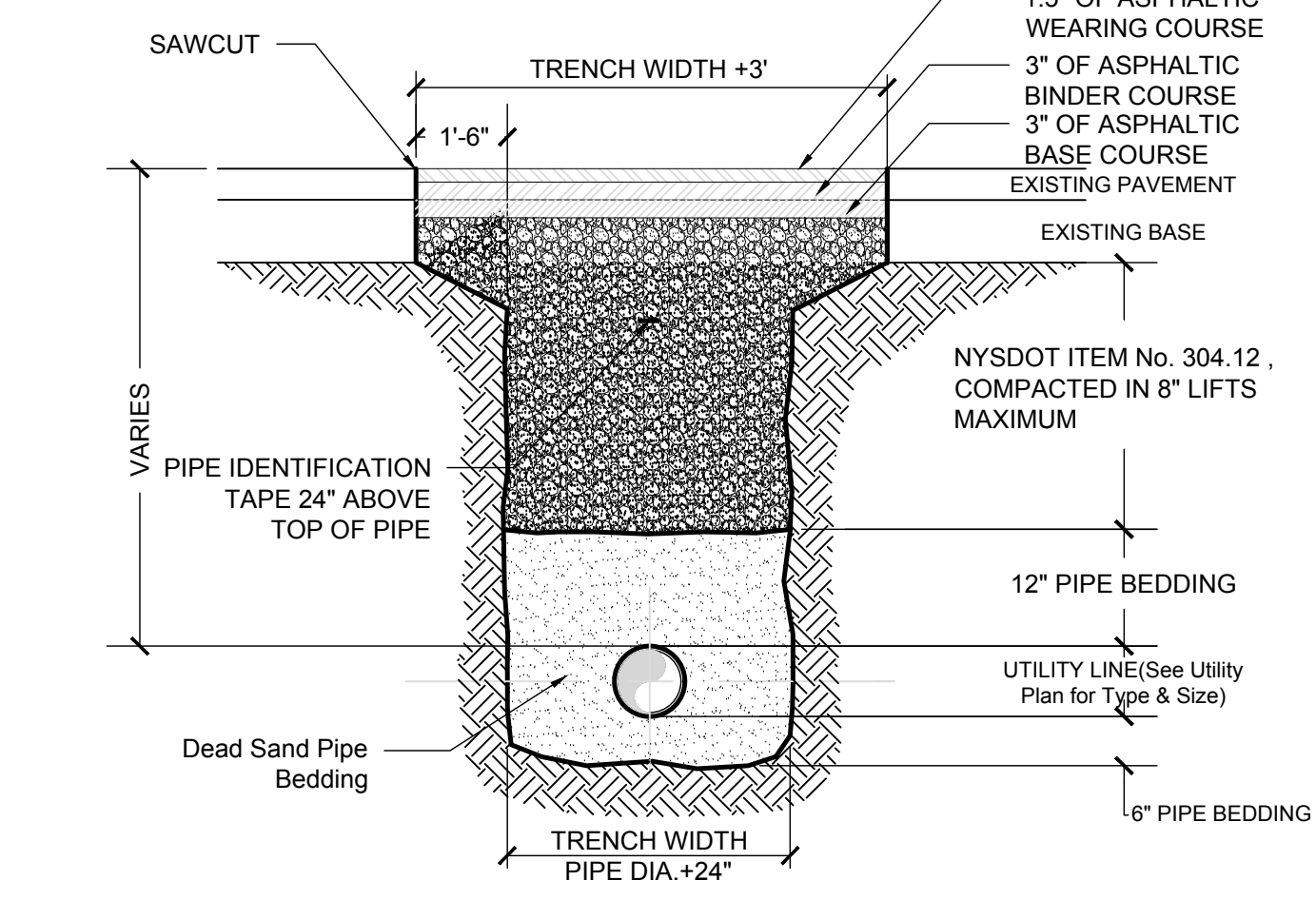


4 SANITARY SEWER LATERAL DETAIL  
NOT TO SCALE

1 WATER & SEWER SEPARATION  
NOT TO SCALE



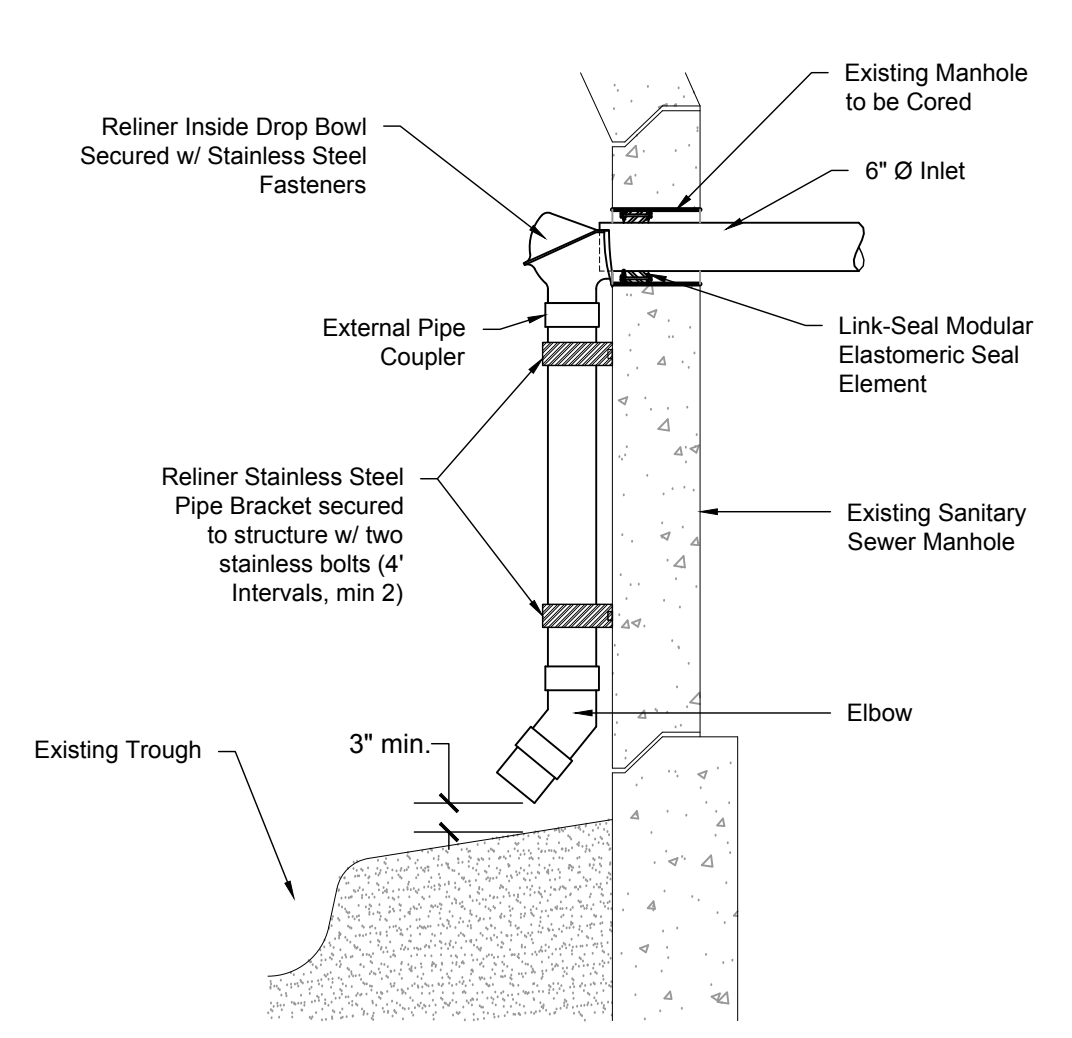
5 UTILITY TRENCH DETAIL  
NOT TO SCALE



NOTES:

- DITCH WIDTH SHALL EXTEND A MINIMUM OF ONE AND ONE-HALF FT. FROM THE EDGES OF THE TRENCH.
- REPLACED BASE MATERIAL OVER TRENCH SHALL BE ITEM 4 COMPACTED IN 8" LIFTS.
- PIPE BEDDING SHALL BE A MINIMUM OF 6" ABOVE AND BELOW PIPE
- ALL JOINTS SHALL BE MECHANICALLY SAWED.
- ALL JOINTS SHALL BE SQUARED TO THE EXISTING EDGE OF CURB AND/OR PAVEMENT, AND TACK COATED PER DETAIL.
- ALL JOINTS SHALL BE SEALED WITH A POLYMER MODIFIED CRACK SEALANT.

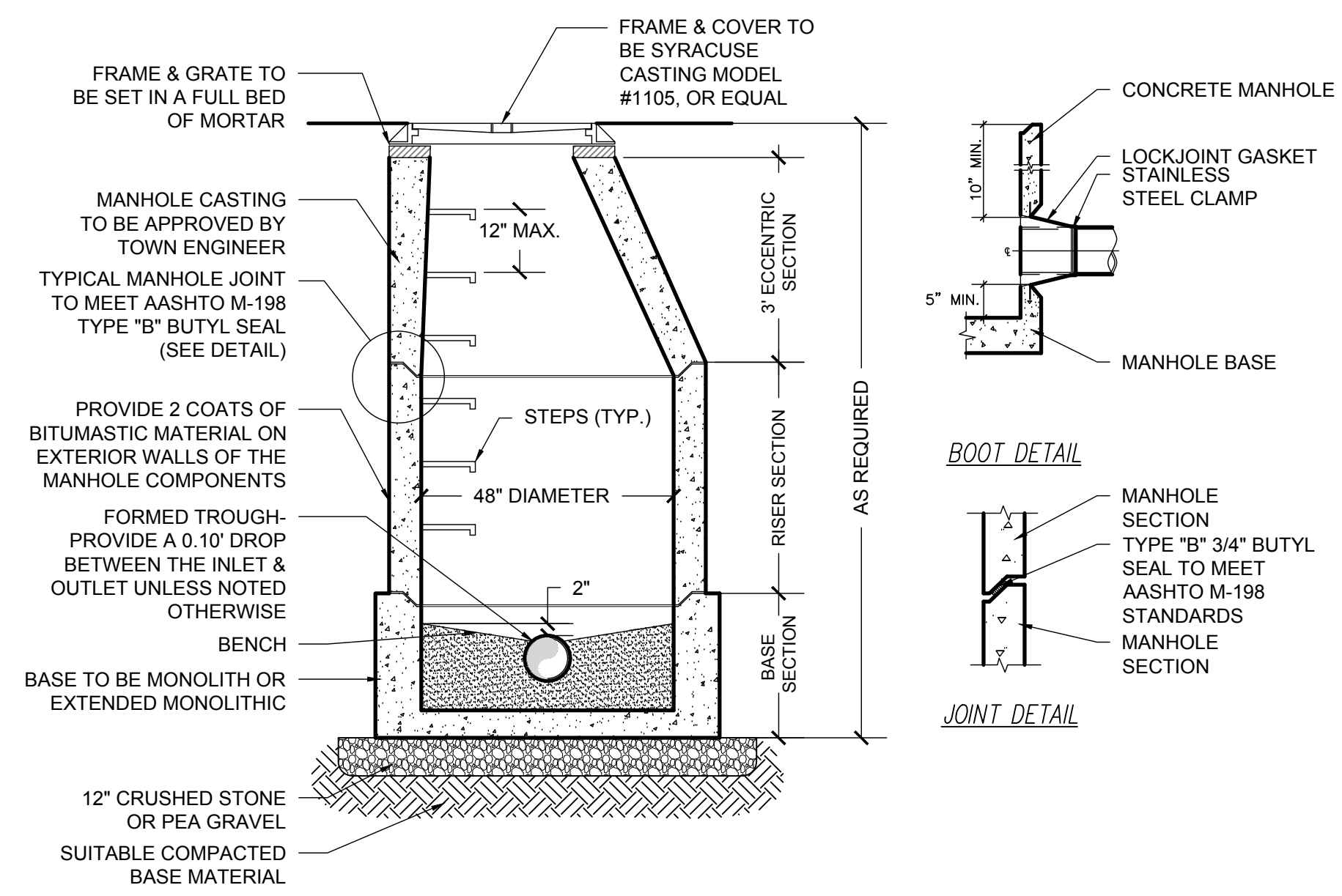
6 UTILITY TRENCH IN CITY R.O.W  
NOT TO SCALE



7 EXISTING MANHOLE PENETRATION DETAIL  
NOT TO SCALE

NOTES:

- PIPE CONNECTION TO BE STANDARD "LOCKJOINT" BOOT 5" OFF BASE OF MANHOLE (SEE DETAIL).
- CONCRETE STRENGTH OF MANHOLE COMPONENTS TO BE 4000 PSI @ 28 DAYS IN ACCORDANCE WITH ASTM C-478-86.
- STEEL REINFORCEMENT OF MANHOLE COMPONENTS TO MEET ASTM A615-A497 REQUIREMENTS.
- LOADING OF MANHOLE COMPONENTS TO MEET H-20 REQUIREMENTS.
- CONCRETE USED IN MANHOLE COMPONENTS TO CONTAIN 6% AIR ENTRAINMENT.
- 4" MAXIMUM FROM MANHOLE TO PIPE JOINT.
- MANHOLE FRAMES, COVERS & STEPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM A-48 CLASS 30B STANDARDS FOR GRAY IRON.
- ALL SANITARY SEWER MANHOLE COVERS SHALL BE NOMINAL 26" DIAMETER CAST IRON AND SHALL READ "SANITARY SEWER". FRAMES SHALL BE 8-INCHES IN HEIGHT AND COVER SHALL BE SYRACUSE CASTING No. 1009 OR AN APPROVED EQUAL.
- ALL SITE SANITARY SEWER UTILITIES ARE TO BE INSTALLED BY A QUALIFIED CONTRACTOR, IN ACCORDANCE WITH GOOD PRACTICE AND INSPECTED BY A LICENSED PROFESSIONAL ENGINEER, IN ACCORDANCE WITH THE DUTCHESS COUNTY SANITARY CODE.
- ALL NEW SANITARY SEWER UTILITIES ARE TO BE EITHER HYDROSTATICALLY OR VACUUM TESTED IN ACCORDANCE WITH ASTM C-244-93(2000) "TEST METHOD FOR SHEET CONCRETE SEWER MANHOLES BY NEGATIVE PRESSURE". SEE STANDARD ON THIS.
- ALL SANITARY SEWER SERVICE LATERALS THAT TIE INTO MANHOLES SHALL BE DIRECTED INTO THE TROUGH OF THE MANHOLE. NO LATERALS SHALL DISCHARGE ONTO THE BENCH. ANY LATERALS 2' OR GREATER ABOVE THE TROUGH SHALL BE DONE USING A DROP MANHOLE.

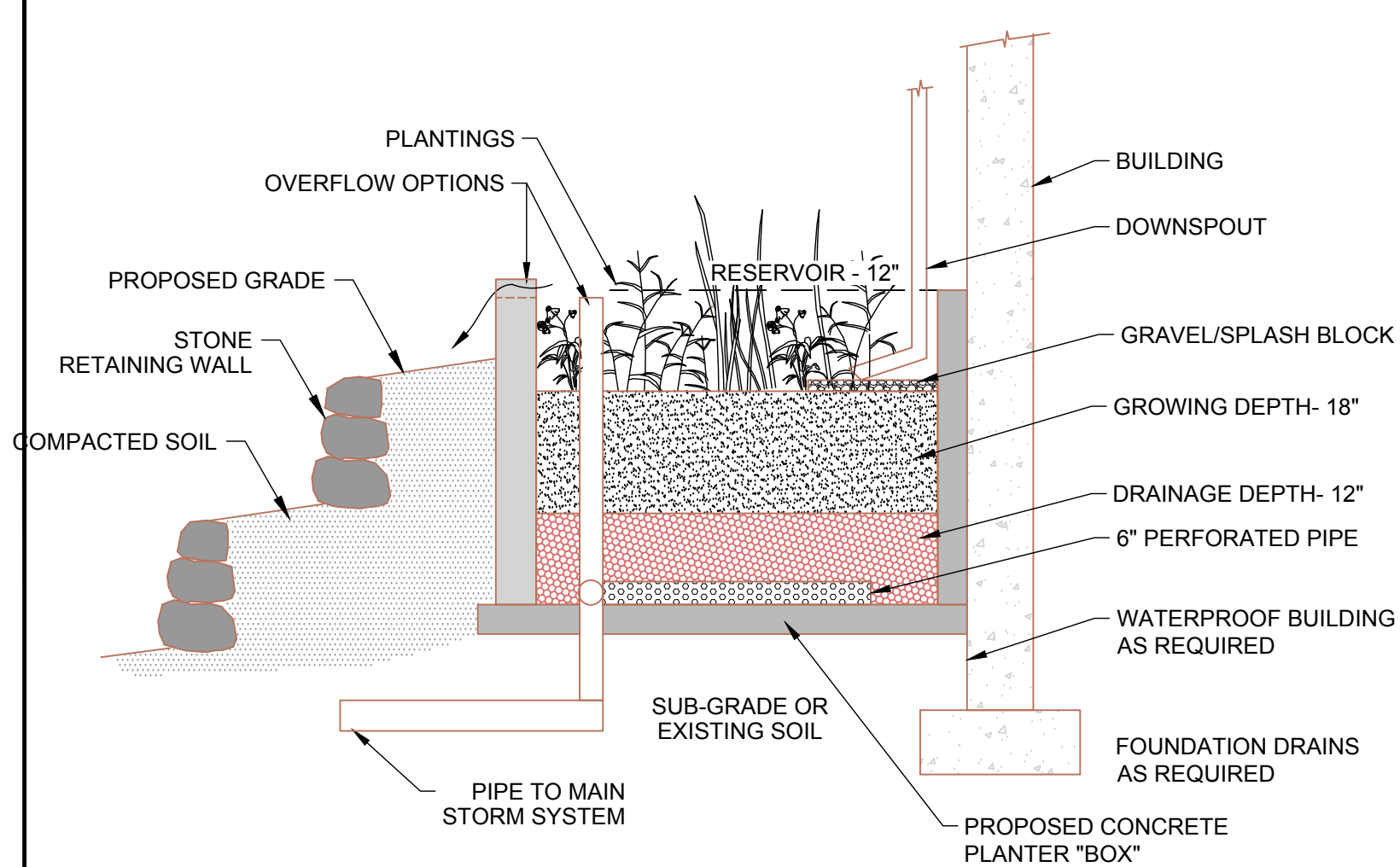


8 PRE CAST CONCRETE MANHOLE  
NOT TO SCALE

Mark A. Day, PE
January 22, 2016
December 28, 2015
November 23, 2015
August 25, 2015
July 28, 2015
Project No. 2015/059 License No. 069646

**M.A. DAY Engineering, PC**  
Consulting Engineers  
3 Van Wyck Lane Suite 2  
Wappingers Falls, New York  
(845)-223-3202

PROJECT		
The View		
City of Beacon		Dutchess County, New York
DRAWING		
Construction Details		
SCALE	DRAWN BY	DRAWING NO.
As Noted	DJD	CD.2
DATE	CHECKED BY	
06-23-15	MAD	8 of 17



**1 FLOW THROUGH STORMWATER PLANTER SECTION**  
NOT TO SCALE

**LANDSCAPE NOTES:**

NO TREES OR SHRUBS SHALL BE PLANTED ON EXISTING FOR PROPOSED UTILITY LINES  
 THE OWNER IS RESPONSIBLE FOR MAINTAINING THE SITE LANDSCAPING AS SHOWN ON THE APPROVED SITE PLAN THROUGHOUT THE DURATION OF USE.  
 THE LANDSCAPE CONTRACTOR SHALL CAREFULLY CORRELATE CONSTRUCTION ACTIVITIES WITH THAT OF THE EARTHWORK CONTRACTOR AND OTHER SITE DEVELOPMENT.  
 THE CONTRACTOR SHALL VERIFY DRAWING DIMENSIONS WITH ACTUAL FIELD CONDITIONS AND INSPECT RELATED WORK AND ADJACENT SURFACES. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF ALL FINISH GRADES WITHIN THE WORK AREA. THE CONTRACTOR SHALL REPORT TO THE LANDSCAPE ARCHITECT AND OWNER ALL CONDITIONS WHICH PREVENT PROPER EXECUTION OF THIS WORK.  
 THE EXACT LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND UNDERGROUND UTILITIES, WHICH MAY NOT BE INDICATED ON THE DRAWINGS, SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROTECT EXISTING STRUCTURES AND UTILITY SERVICES AND IS RESPONSIBLE FOR THEIR REPLACEMENT IF DAMAGED.  
 THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM RUBBISH AND ALL DEBRIS AT ALL TIMES AND SHALL ARRANGE MATERIAL STORAGE SO AS NOT TO INTERFERE WITH THE OPERATION OF THE PROJECT. ALL UNUSED MATERIALS, RUBBISH AND DEBRIS SHALL BE REMOVED FROM THE SITE. ALL LANDSCAPED AREAS MULCHED UNLESS OTHERWISE NOTED.

**WARRANTY:**

ALL PLANT MATERIAL (LAWNS, TREES, SHRUBS, ETC.) AND PLANTING SUPPLIES (EDGING, BARK, MULCH, ETC.) SHALL BE WARRANTED FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM THE DATE OF COMPLETION OF THE LANDSCAPING INSTALLATION. ALL REPLACEMENT STOCK SHALL BE SUBJECT TO THE SAME WARRANTY REQUIREMENTS AS THE ORIGINAL STOCK. ANY DAMAGE DUE TO REPLACEMENT OPERATIONS SHALL BE REPAIRED BY THE LANDSCAPE CONTRACTOR. AT THE END OF THE WARRANTY PERIOD, INSPECTIONS SHALL BE MADE JOINTLY BY LANDSCAPE ARCHITECT, OWNER, TENANT AND LANDSCAPE CONTRACTOR. ALL PLANT AND LAWN AREAS NOT IN A HEALTHY GROWING CONDITION SHALL BE REMOVED AND REPLACED WITH PLANTS AND TURF COVER OF A LIKE KIND AND SIZE BEFORE THE CLOSE OF THE NEXT PLANTING SEASON.

SPECIES AND VARIETY AS SPECIFIED ON THE DRAWINGS AND DELIVERED TO THE SITE SHALL BE CERTIFIED TRUE TO THEIR GENUS, SPECIES AND VARIETY AND AS DEFINED WITHIN THE CURRENT EDITION OF INTERNATIONAL CODE OF NOMENCLATURE FOR CULTIVATED PLANTS, ISSUED BY THE INTERNATIONAL UNION OF BIOLOGICAL SCIENCES. SUBSTITUTIONS ARE NOT PERMITTED WITHOUT TENANT'S LANDSCAPE ARCHITECT'S WRITTEN APPROVAL.

PLANTING STOCK SHALL BE WELL-BRANCHED AND WELL-FORMED, SOUND, VIGOROUS, HEALTHY, FREE FROM DISEASE, SUN-SCALD, WINDBURN, ABRASION, AND HARMFUL INSECTS AND INSECT EGGS; AND SHALL HAVE HEALTHY, NORMAL, UNBROKEN ROOT SYSTEMS. DECIDUOUS TREES AND SHRUBS SHALL BE SYMMETRICALLY DEVELOPED, OF UNIFORM HABIT OF GROWTH, WITH STRAIGHT TRUNKS AND STEMS, AND FREE FROM OBJECTIONABLE DISFIGUREMENTS. EVERGREEN TREES AND SHRUBS SHALL HAVE WELL-DEVELOPED SYMMETRICAL TOPS WITH TYPICAL SPREAD OF BRANCHES FOR EACH PARTICULAR SPECIES OR VARIETY. VINES AND GROUND COVER PLANTS WILL ESTABLISHED SHALL BE USED. PLANTS BUDDING INTO LEAF OR HAVING SOFT GROWTH SHALL BE SPRAYED WITH AN ANTI-DESICCANT AT THE NURSERY BEFORE DIGGING.

ALL STOCK SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN STOCK. BARE ROOT STOCK OF ANY KIND IS UNACCEPTABLE.

**SEED:**

EXPOSED SLOPES AND ALL GRADED AREAS SHALL BE SEEDED WITH THE FOLLOWING GRASS SEED MIX IMMEDIATELY UPON COMPLETION OF ITS CONSTRUCTION, OR IF PLANNED TO BE LEFT UNDISTURBED FOR MORE THAN 14 DAYS. GRASS SEED MIX TO BE APPLIED AT A RATE OF 50 POUNDS PER ACRE. IN THE FOLLOWING PROPORTIONS:

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

GRASS SEED MIX MAY BE APPLIED BY EITHER MECHANICAL OR HYDROSEEDING METHODS. HYDROSEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITION OF THE NYS DOT STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, SECTION 610-3.02, METHOD No. 1.

SEEDED AREAS SHALL BE MULCHED WITH STRAW AT A RATE OF 2 TONS PER ACRE, OR 90 LBS. PER 1,000 SQUARE FEET, SUCH THAT IT FORMS A CONTINUOUS BLANKET.

SEED SHALL BE A BLEND OF CERTIFIED LAWN GRASS AND/OR GROUND COVER PLANT SEEDS COMMON TO THE SITE LOCATION. PROVIDE FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH ESTABLISHED TOLERANCES FOR GERMINATION AND PURITY IN ACCORDANCE WITH THE U.S. DEPARTMENT OF AGRICULTURE RULES AND REGULATIONS UNDER THE LATEST EDITION OF THE FEDERAL SEED ACT. SEED SHALL BE MIXED BY THE DEALER AND SHALL BE DELIVERED TO THE SITE IN SEALED CONTAINERS WHICH SHALL BEAR THE DEALER'S GUARANTEED ANALYSIS.

**MULCHES FOR PLANTINGS:**

MULCH USED IN THE PLANTING BEDS SHALL BE FIRE RETARDANT.

SHALL BE SHREDDED BARK MULCH, MEDIUM SIZE, FROM HARDWOOD TREES. NO PIECES OVER TWO INCHES (2") IN GREATEST DIMENSION. FREE FROM SAWDUST, STONES, DEBRIS, AND DELETERIOUS MATERIALS.

ALL VEGETATION SHOWN ON THIS PLAN SHALL BE MAINTAINED IN A HEALTHY AND VIGOROUS GROWING CONDITION THROUGHOUT THE DURATION OF THE PROPOSED USE. ALL VEGETATION NOT SO MAINTAINED SHALL BE REPLACED WITH NEW VEGETATION AT THE BEGINNING OF THE NEXT GROWING SEASON.

ALL AREAS OF SITE NOT OCCUPIED BY BUILDINGS OR PAVEMENT AND NOT SPECIFIED AS BEING PLANTED WITH TREES, SHRUBS OR GROUND COVER SHALL BE SEEDED.

NO TREES OR SHRUBS SHALL BE PLANTED ON EXISTING OR PROPOSED UTILITY LINES.

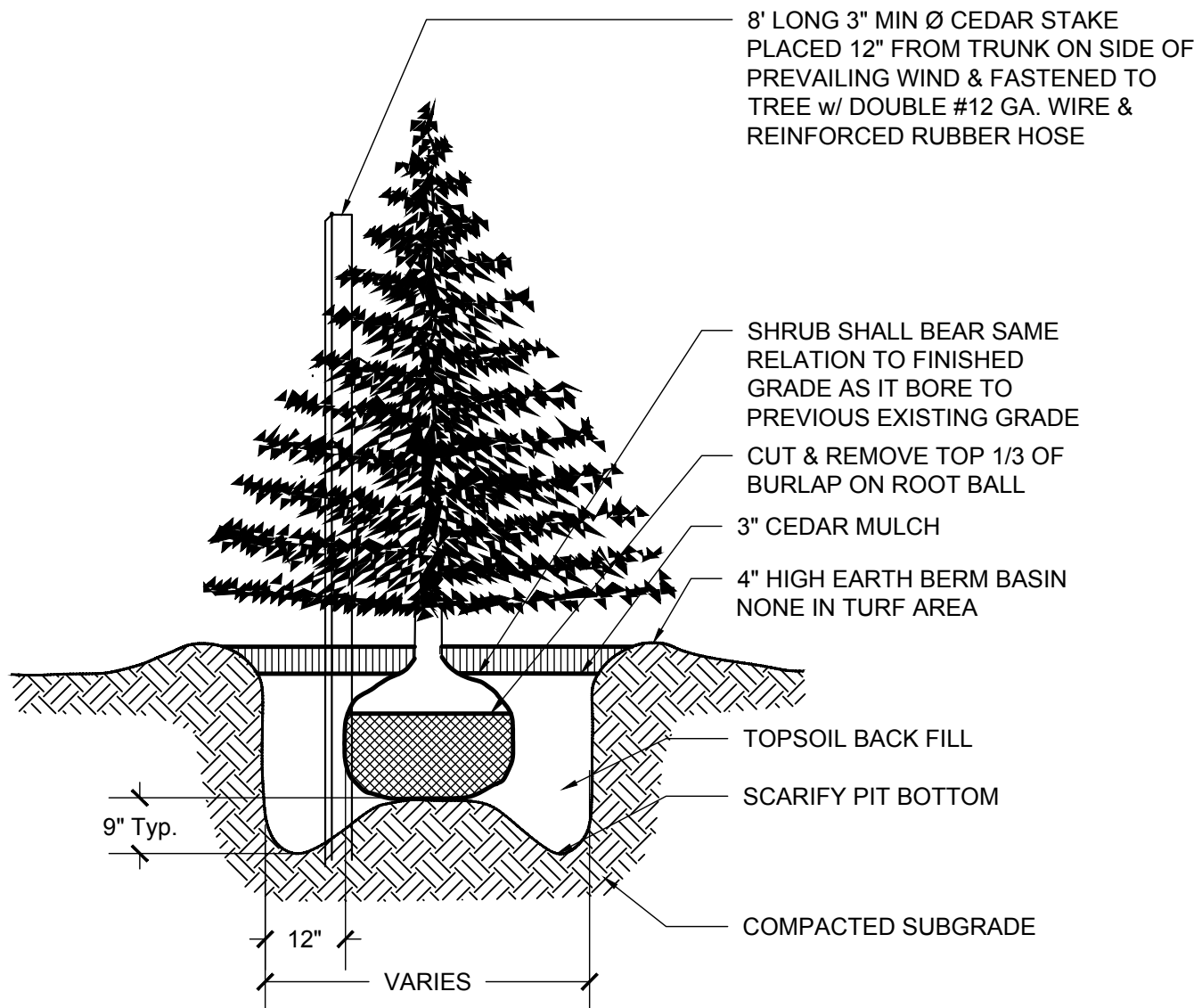
**LONG TERM PLANTING MAINTENANCE NOTES:**

THE OWNER/OPERATOR SHALL BE RESPONSIBLE FOR THE LONG-TERM MONITORING AND MAINTENANCE OF THE PLANTINGS WITHIN THE THE SITE IN PERPETUITY AND TO THE SATISFACTION OF THE VILLAGE.

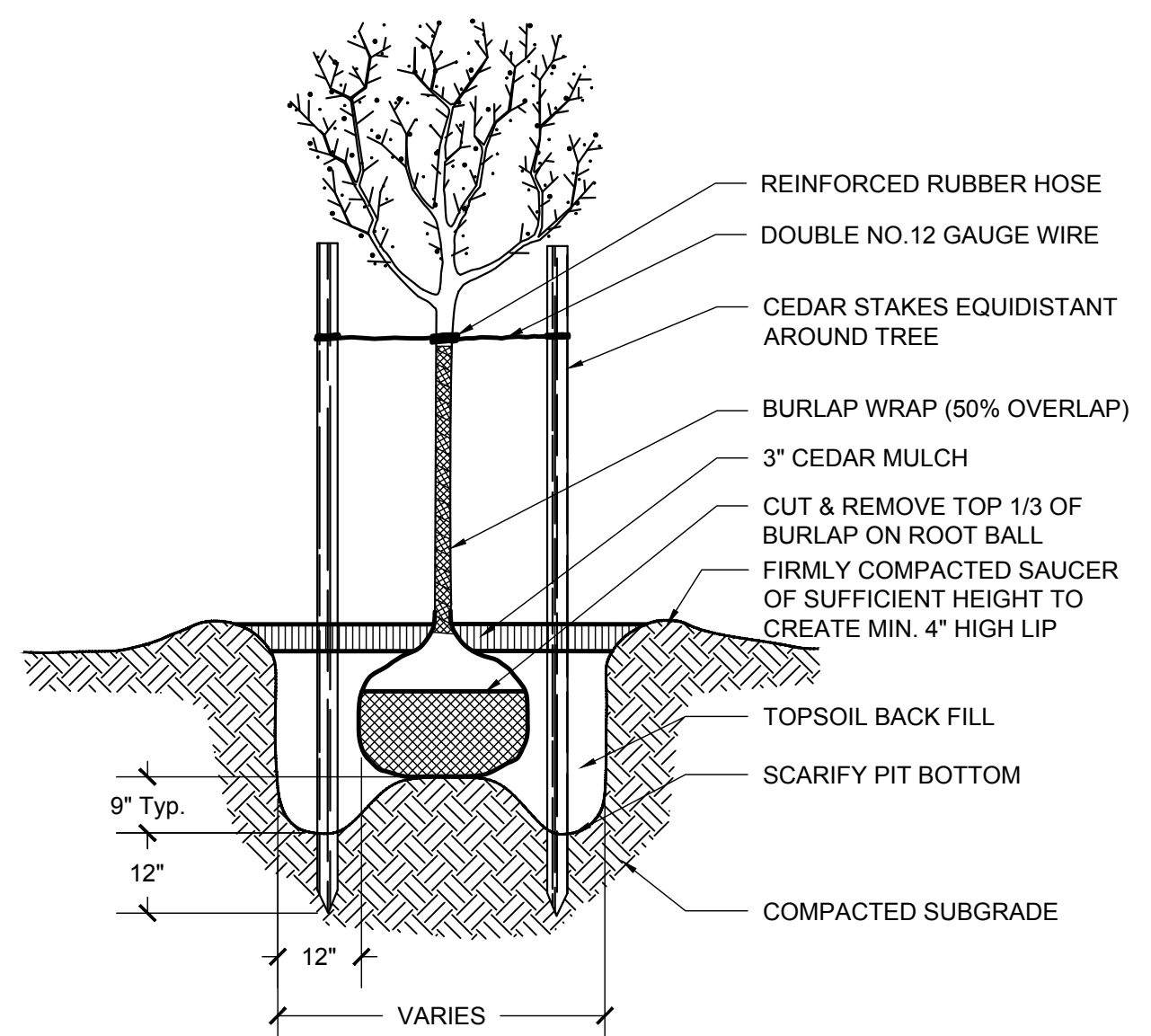
THE COVERAGE OF THE SEEDED AREAS SHALL BE UNIFORM WITH NO BARE AREAS LARGER THAN ONE-HALF SQUARE FEET.

THE ACCEPTABLE DENSITY OF COVERAGE SHALL BE A MINIMUM OF EIGHTY-FIVE PERCENT (85%) OF LANDSCAPE QUANTITY PLANTS SHOWN ON THE APPROVED PLANTING PLAN. IF LESS THAN EIGHTY-FIVE (85%) OF A PARTICULAR PLANT SPECIES SURVIVES, REPLACEMENT WITH SAME AND/OR ALTERNATIVE PLANT SPECIES ACCEPTABLE TO THE VILLAGE PLANNING BOARD SHALL OCCUR, SERVING THE INTENDED FUNCTION OF THE ORIGINALLY PROPOSED PLANTINGS.

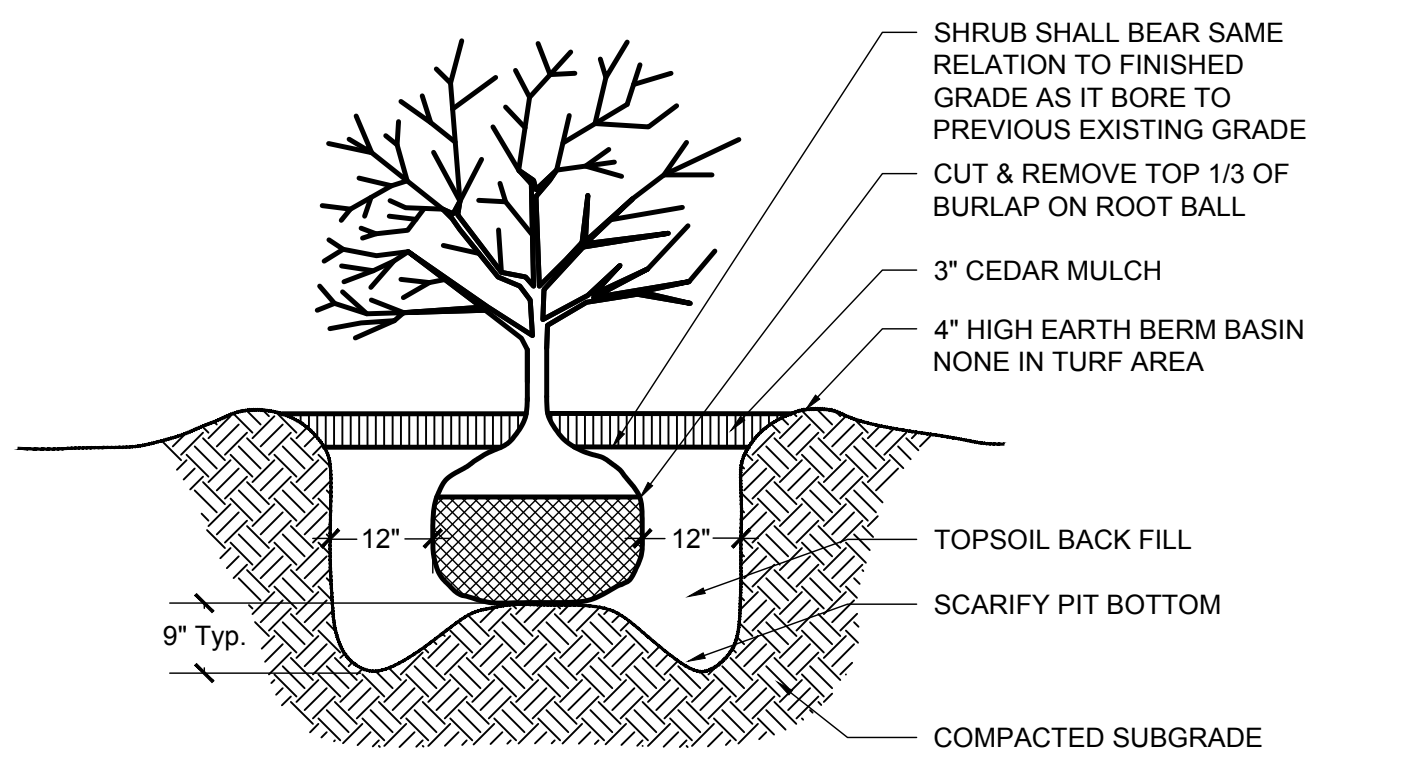
**5 LANDSCAPING NOTES**



**2 EVERGREEN TREE PLANTING DETAIL**  
NOT TO SCALE



**3 DECIDUOUS TREE PLANTING DETAIL**  
NOT TO SCALE

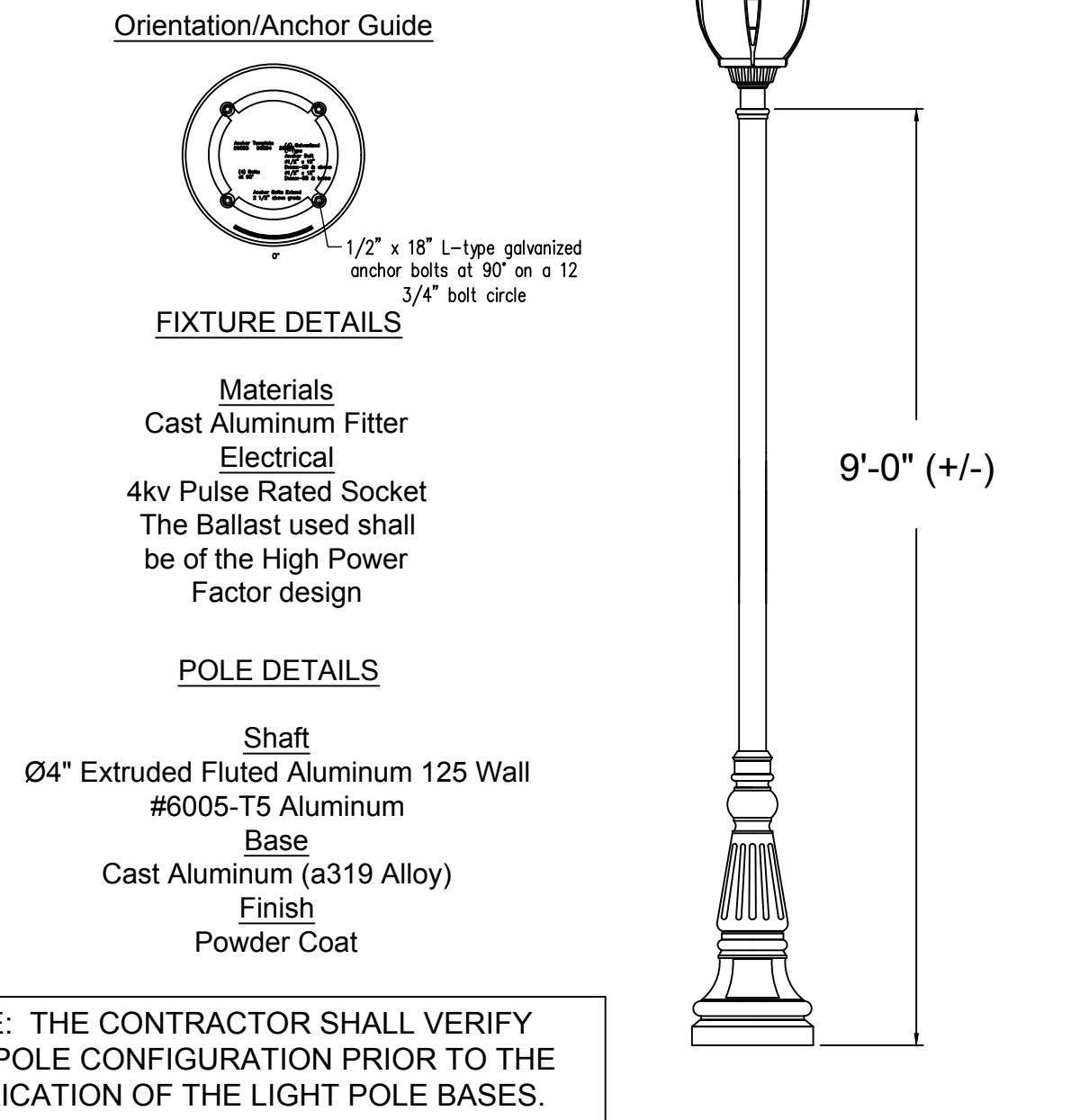


NOTES:  
 1. IF CONTAINERS ARE USED CAREFULLY REMOVE TOP 1/3 OF CONTAINER (IF CONTAINER IS NON-ORGANIC, REMOVE COMPLETELY); CUT VARIOUS SLITS IN ORGANIC CONTAINER TO FACILITATE ROOT PENETRATION (OR REMOVE CONTAINER BOTTOM).  
 2. DO NOT ALLOW ANY PORTION OF CONTAINER TO REMAIN EXPOSED.  
 3. WATER THOROUGHLY SUBSEQUENT TO INSTALLATION.

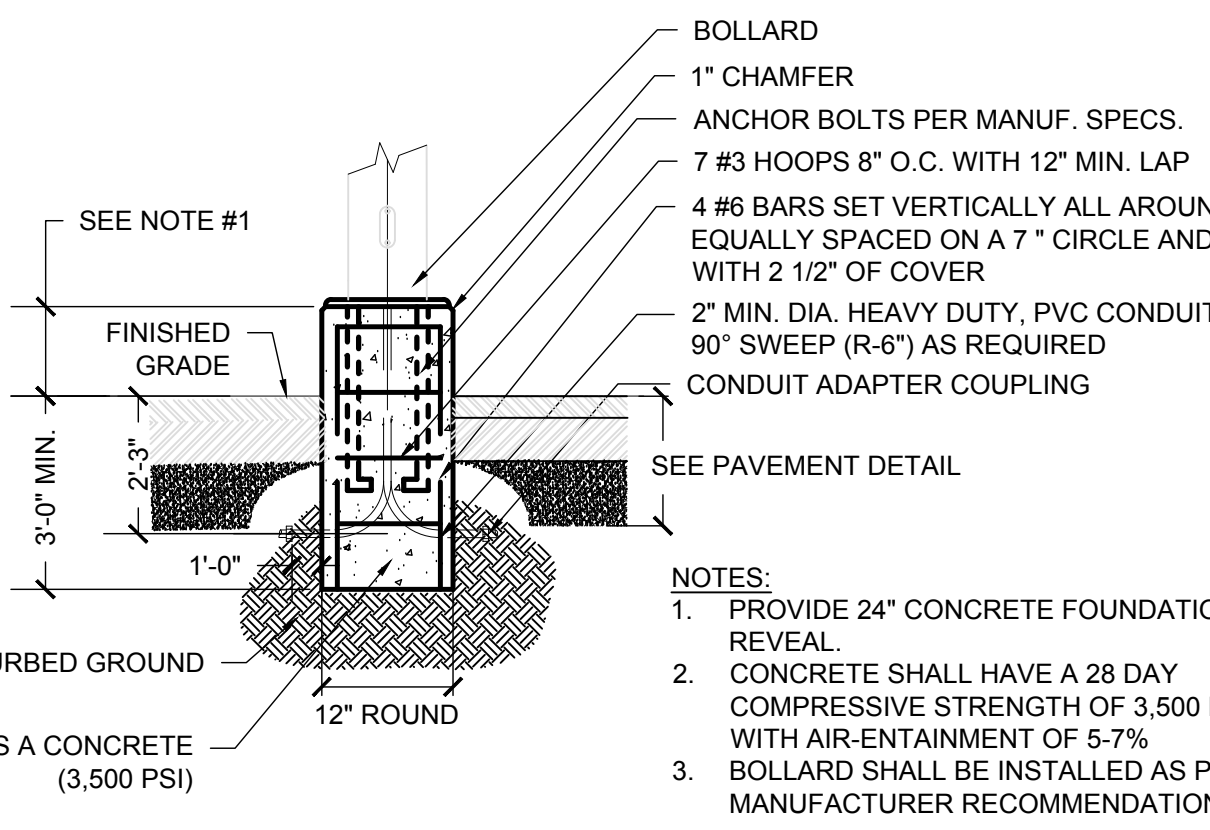
**4 SHRUB PLANTING DETAIL**  
NOT TO SCALE



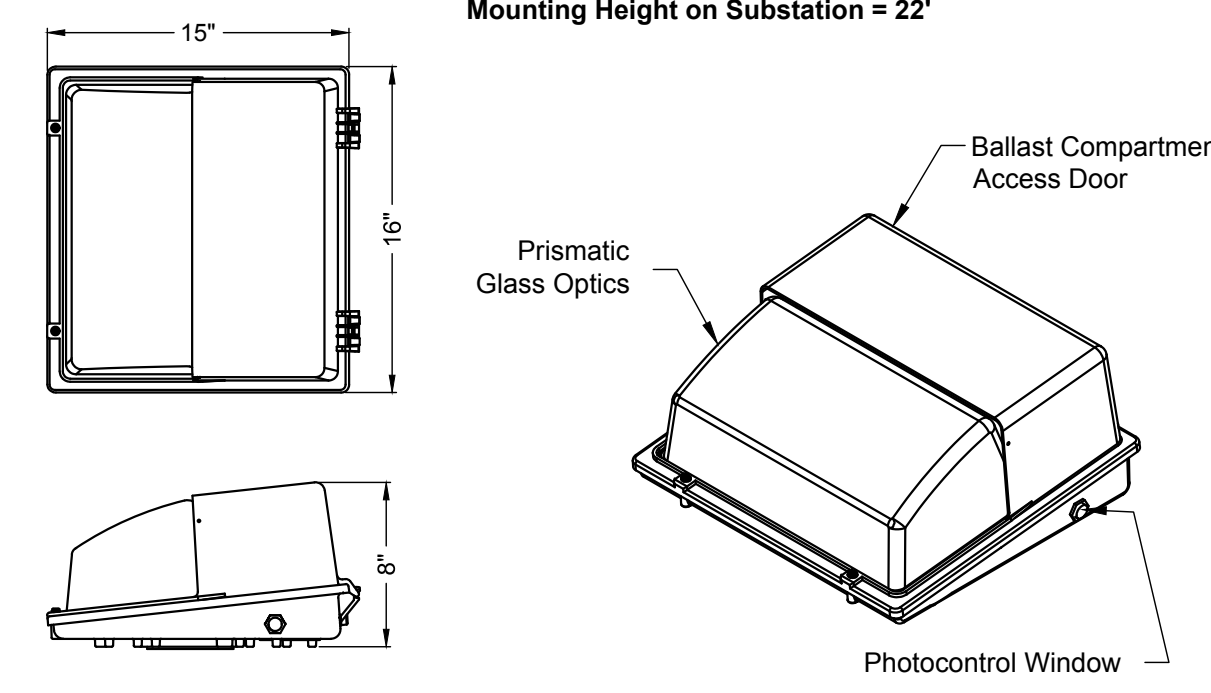
**SENTRY WASHINGTON**  
150 WATT MH  
PART No. SWW-LXFP



**6 LIGHT POLE DETAIL**  
NOT TO SCALE



**7 LIGHT POLE BASE DETAIL**  
NOT TO SCALE



**250W CLEAR METAL HALIDE FIXTURE**

**8 WALL MOUNTED LIGHT FIXTURE**  
NOT TO SCALE

**Wallpack® IV**

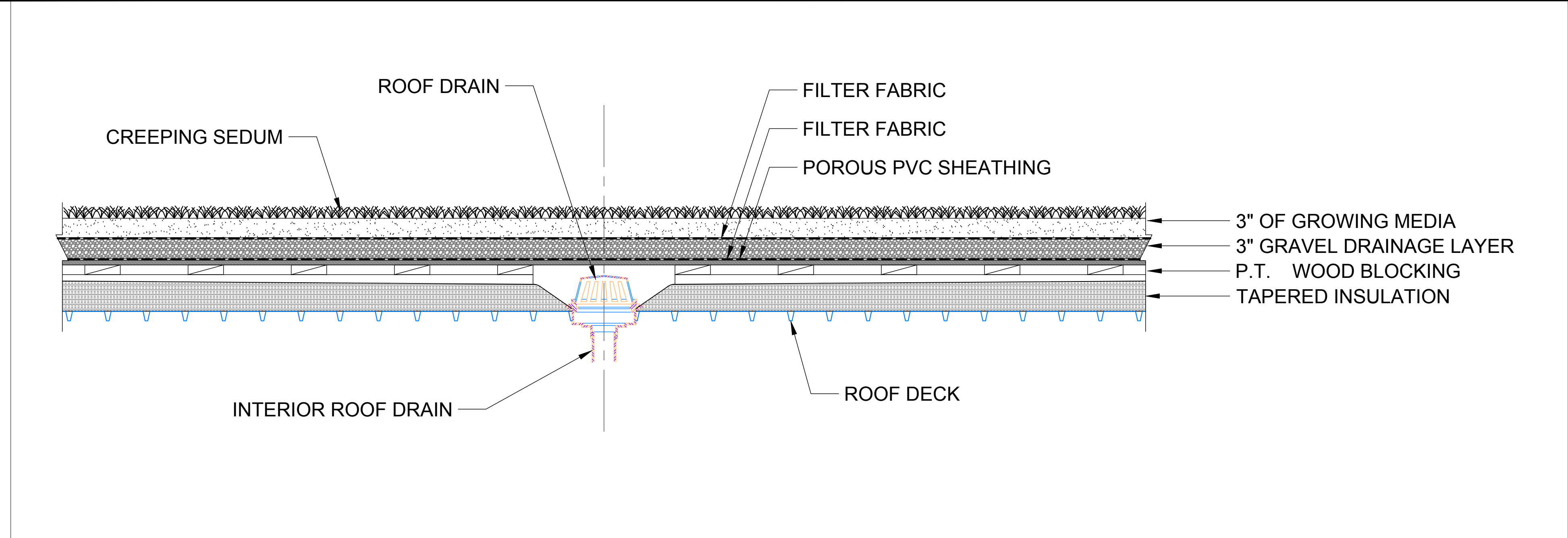
Mark A. Day, PE	
January 22, 2016	
December 28, 2015	
November 23, 2015	
August 25, 2015	
July 28, 2015	
Project No. 2015/059	License No. 069646

**M.A. DAY Engineering, PC**  
*Consulting Engineers*  
 3 Van Wyck Lane Suite 2  
 Wappingers Falls, New York  
 (845)-223-3202

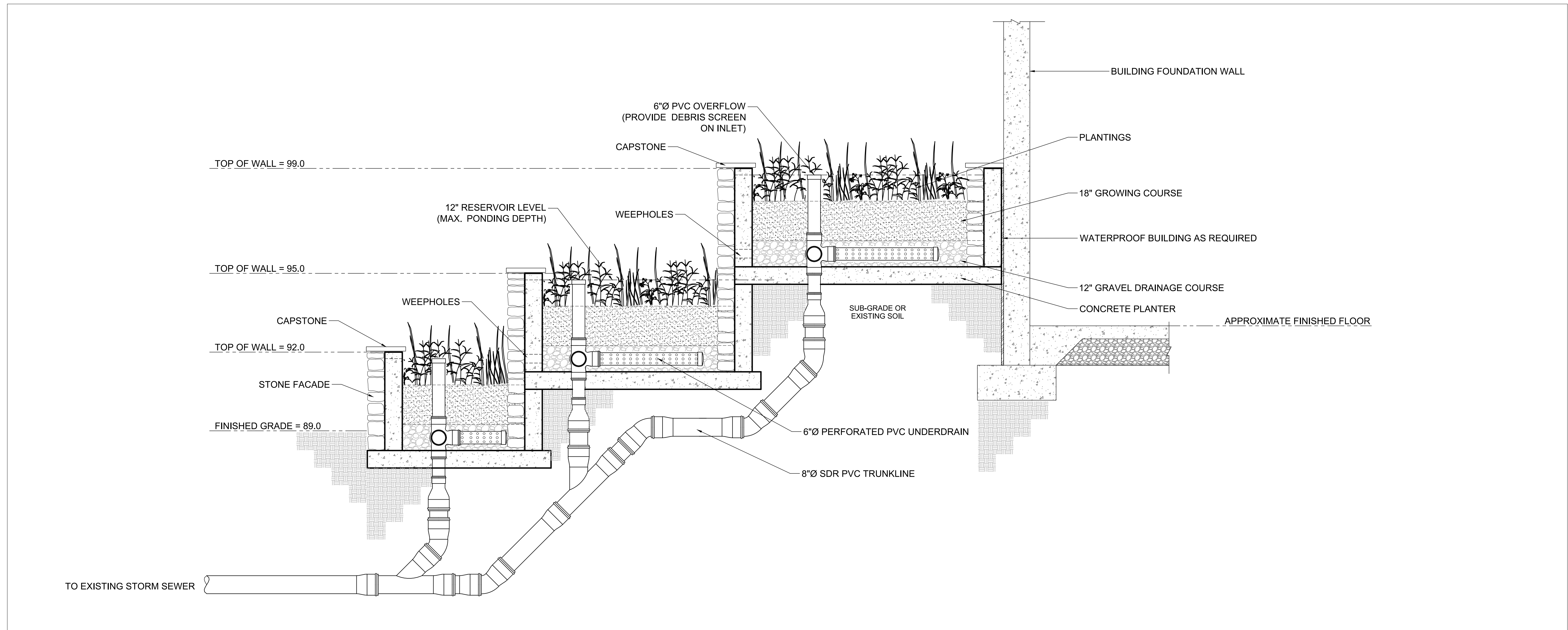
**The View**  
 City of Beacon Dutchess County, New York

**Landscape/Lighting Details**

SCALE	DATE	AS NOTED	DATE	DRWING NO.	DATE
As Noted	06-23-15	DJD	MAD	CD.3	9 of 17



1 ROOFTOP GARDEN DETAIL  
NOT TO SCALE



2 FLOW-THROUGH PLANTERS  
NOT TO SCALE

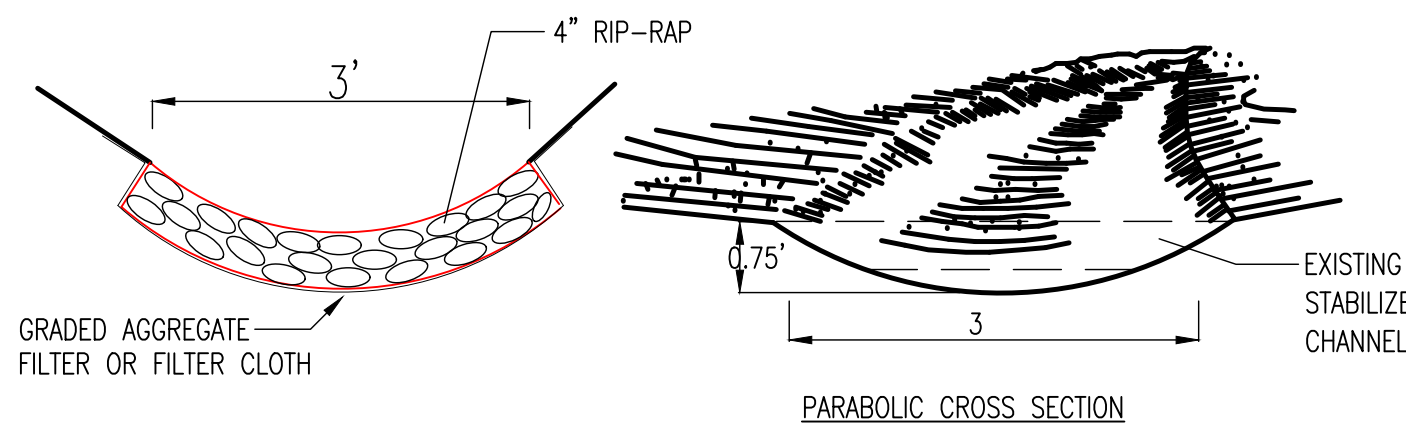
	Mark A. Day, PE
	January 22, 2016
	December 28, 2015
	November 23, 2015
	August 25, 2015
	July 28, 2015
Project No.	2015-059
	License No. 069646

**M.A. DAY Engineering, PC**  
*Consulting Engineers*  
 3 Van Wyck  
 Lane Suite 2  
 Wappingers Falls, New York  
 (845)-223-3202

PROJECT  
**The View**  
 City of Beacon Dutchess County, New York

DRAWING  
**Landscaping Details**

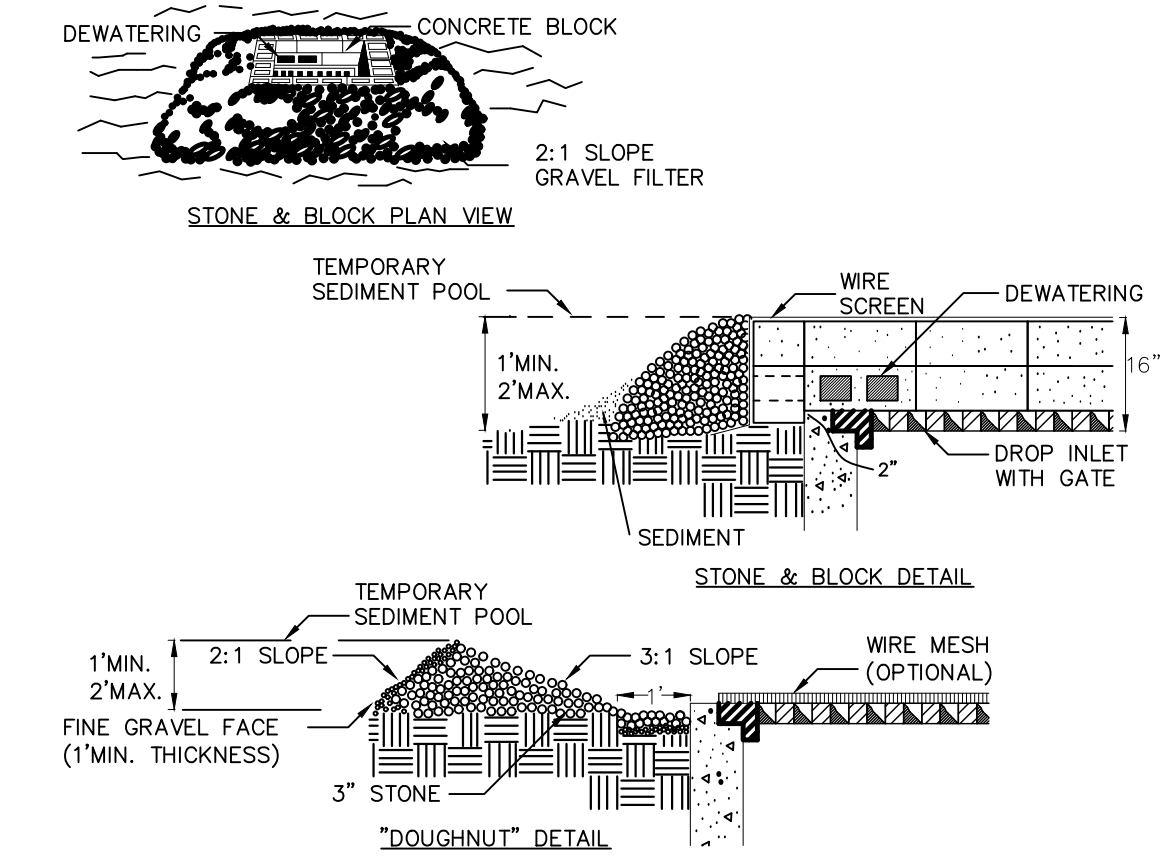
SCALE	DRAWN BY	DRAWING NO.
As Noted	DJD	<b>CD.4</b>
DATE	CHECKED BY	10 of 17
06-23-15	MAD	



**CONSTRUCTION SPECIFICATIONS**

- ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE WATERWAY.
- THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN, AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
- FILLS SHALL BE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETE WATERWAY.
- ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE WATERWAY.

**1 SWALE DETAIL**  
NOT TO SCALE



**CONSTRUCTION SPECIFICATIONS**

- LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
- HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
- USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
- FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE

**5 STONE & BLOCK DROP INLET PROTECTION**  
NOT TO SCALE

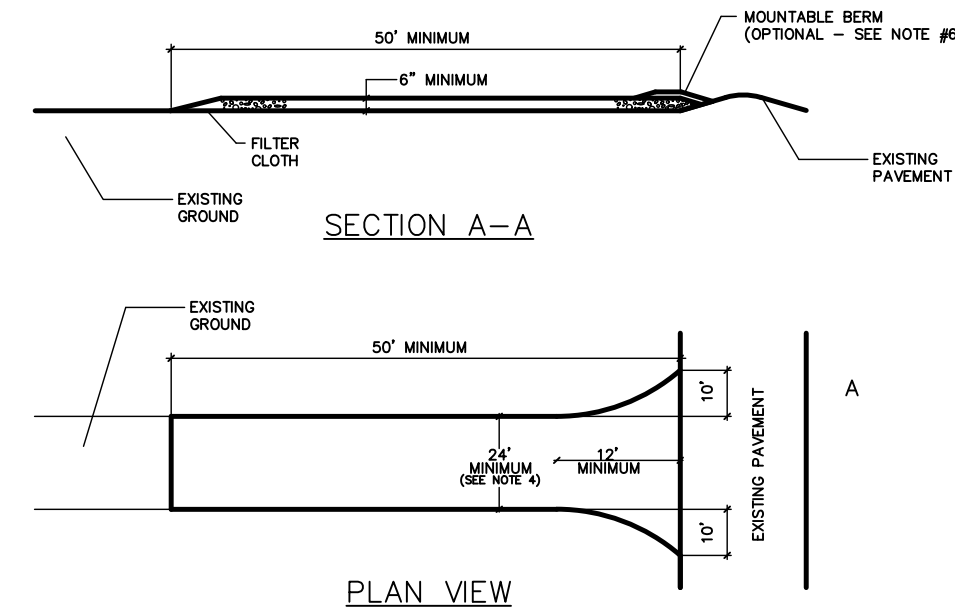
**EROSION AND SEDIMENT CONTROL MEASURES:**

- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IN STRICT COMPLIANCE WITH "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", AUGUST 2005.
- DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
- 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.
- SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISRUPTION.
- PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVEYANCE" SHALL BE AVOIDED. STABILIZATION STRUCTURES SHALL BE INSTALLED AT ALL POINTS OF ENTRY ONTO THE PROJECT SITE.
- SEEDING AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.
- 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.
- WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

**MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES:**

- PERMANENT AND TEMPORARY VEGETATION:**  
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.
- STABILIZED CONSTRUCTION ENTRANCE:**  
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. RESHAPE PAD AS NEEDED FOR DRAINAGE AND

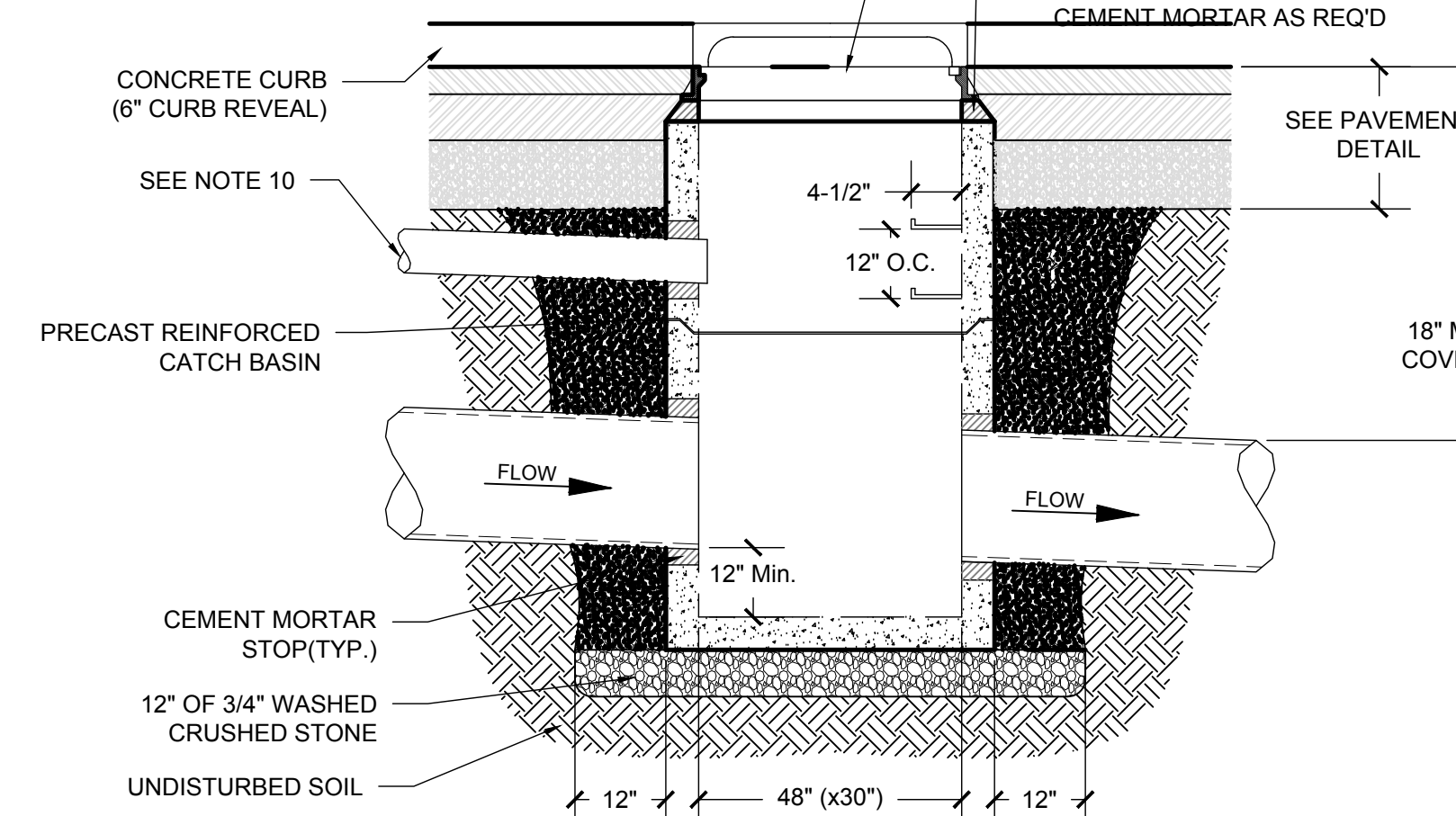
**8 EROSION & SEDIMENT CONTROL NOTES**  
NOT TO SCALE



- NOTES:**
- STONE SIZE - USE #2 STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
  - LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET.
  - THICKNESS - NOT LESS THAN SIX (6) INCHES.
  - WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM AT SINGLE ENTRANCE TO SITE.
  - FILTER CLOTH - WILL BE PLACED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 3:1 SLOPES WILL BE PERMITTED.
  - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
  - 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.
  - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

**3 TEMPORARY SOIL STOCKPILE DETAIL**  
NOT TO SCALE

**NOTE:** THE CONTRACTOR SHOULD BE AWARE THAT DUE TO THE VARYING SIZES & GEOMETRY OF THE PROPOSED STORM SEWER PIPING, THAT ACTUAL CATCH BASIN SIZES SHALL VARY. THE CONTRACTOR SHALL MAINTAIN A MINIMUM DISTANCE OF 3" FROM THE OUTER DIAMETER OF THE PIPE TO THE INSIDE FACE OF THE CATCH BASIN WALL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL ACTUAL CATCH BASIN SIZES.

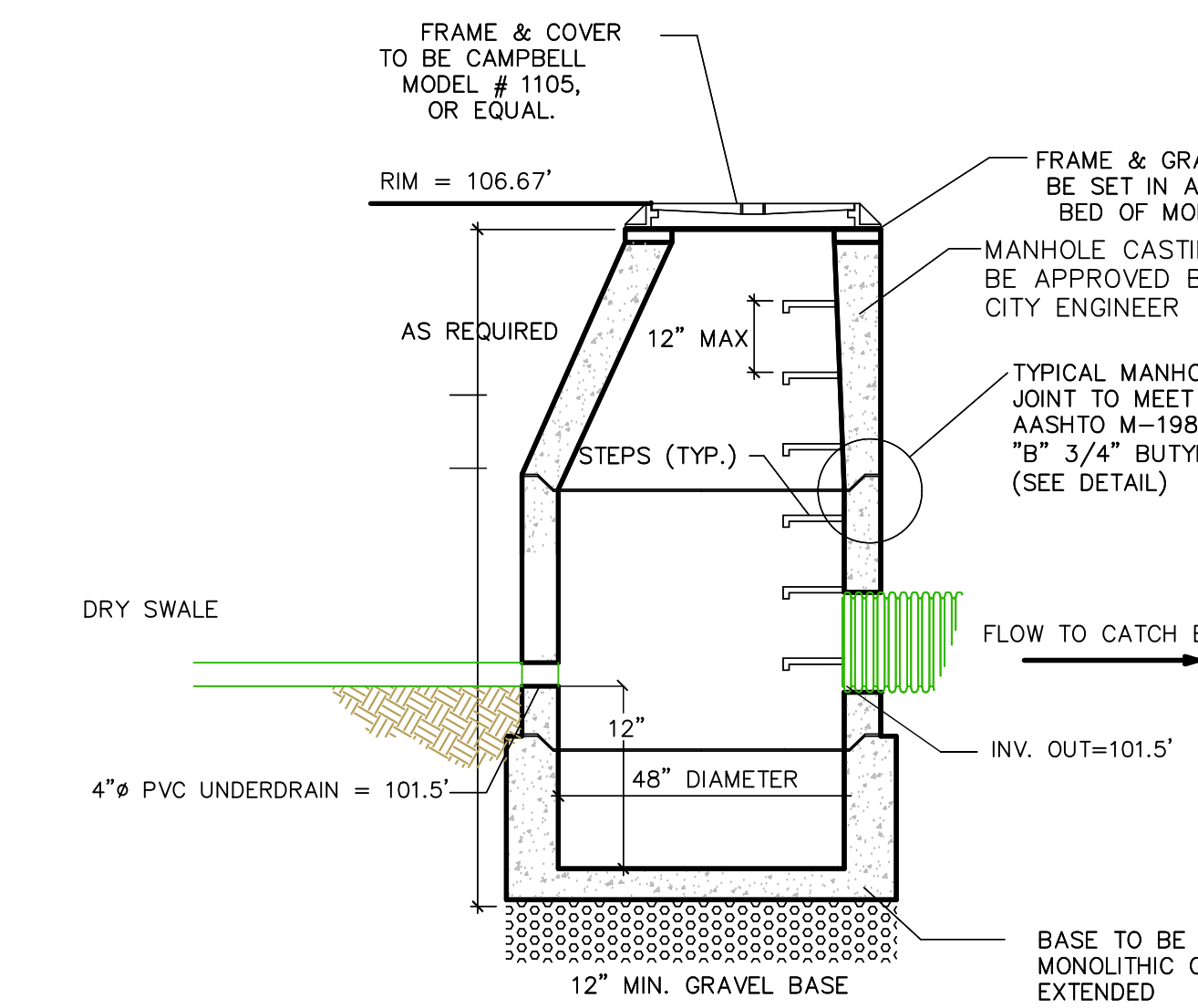


- NOTES:**
- AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
  - MAXIMUM SLOPE OF STOCKPILE SHALL BE 1V:2H.
  - UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
  - SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.
  - HAYBALES TO BE USED WHERE STOCKPILES ARE LOCATED ON PAVED AREAS.

**7 PRE CAST CONCRETE CATCH BASIN DETAIL**  
NOT TO SCALE

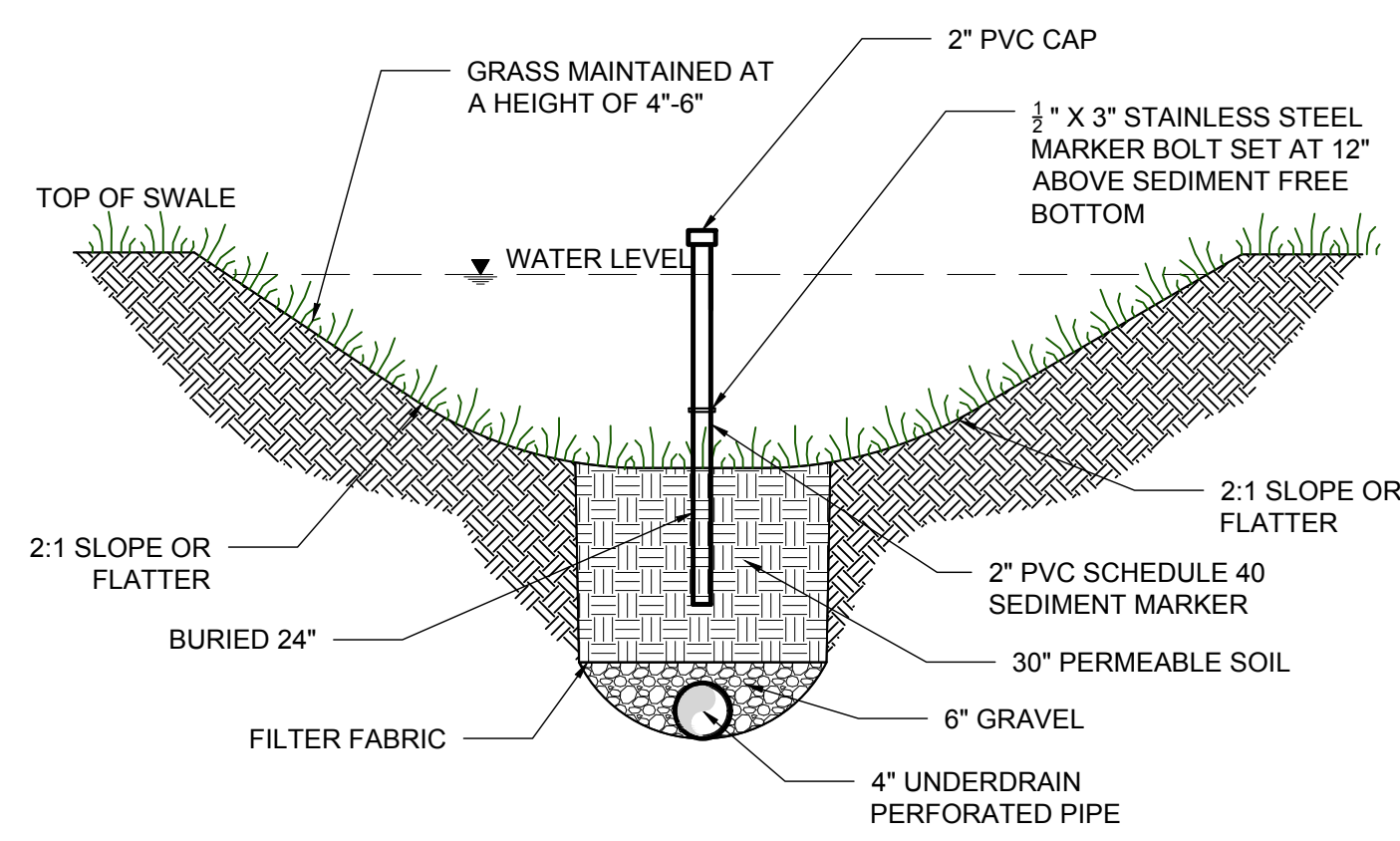
- ALL SEDIMENT & EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THESE PLANS & DETAILS. CHANGES, OMISSIONS AND/OR OTHER ALTERATIONS CAN NOT BE MADE TO THESE PLANS WITHOUT THE CONSENT OF THE DESIGN ENGINEER.
- SILT FENCE SHALL BE INSTALLED AS SHOWN ON THIS DRAWING PRIOR TO BEGINNING ANY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

KENTUCKY BLUEGRASS	40%
CREeping RED FESCUE	40%
RYE GRASS	20%
- GRASS SEED MIX MAY BE APPLIED BY EITHER MECHANICAL OR HYDROSEEDING METHODS. HYDROSEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITION OF THE NYSDOT STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, SECTION 610-3.02, METHOD No. 1.
- SEEDING AREAS SHALL BE MULCHED WITH STRAW AT A RATE OF 2 TONS PER ACRE, OR 90 LBS. PER 1,000 SQUARE FEET, SUCH THAT IT FORMS A CONTINUOUS BLANKET.
- SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS BY THE OWNER'S FIELD REPRESENTATIVE.
- DUST SHALL BE CONTROLLED BY SPRINKLING OF WATER OR OTHER APPROVED METHODS AS NECESSARY AS DIRECTED BY THE OWNER'S FIELD REPRESENTATIVE.
- CUTS AND FILLS SHALL NOT ENDANGER ADJOINING PROPERTY, NOR DIVERT SURFACE WATER ONTO ADJOINING PROPERTIES.
- ALL FILLS SHALL BE COMPACTED TO PROVIDE STABILITY OF MATERIALS AND TO PREVENT SETTLEMENT.
- EXCAVATIONS AND FILLS TO BE ROLLED, SEALED AND STABILIZED AT COMPLETION OF EACH DAY'S WORK.
- THE OWNER'S FIELD REPRESENTATIVE SHALL INSPECT THE DOWNSTREAM CONDITIONS FOR EVIDENCE OF SEDIMENTATION ON A WEEKLY BASIS AND AFTER RAINSTORMS.
- AS WARRANTED BY FIELD CONDITIONS, SPECIAL ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES MAY BE ADDED TO THIS PLAN BY THE SITE ENGINEER, TOWN ENGINEER AND HIGHWAY SUPERINTENDENT. ANY REVISIONS TO THIS PLAN MUST BE SUBMITTED TO THE SITE ENGINEER. ANY CHANGES DEEMED NECESSARY TO THIS PLAN SHALL BE DICTATED BY THE SITE ENGINEER AS NECESSARY TO CARRY-OUT THE INTENT OF THIS PLAN.



**10 DRY SWALE OVERFLOW MANHOLE**  
NOT TO SCALE

**6 DRY SWALE DETAIL**  
NOT TO SCALE

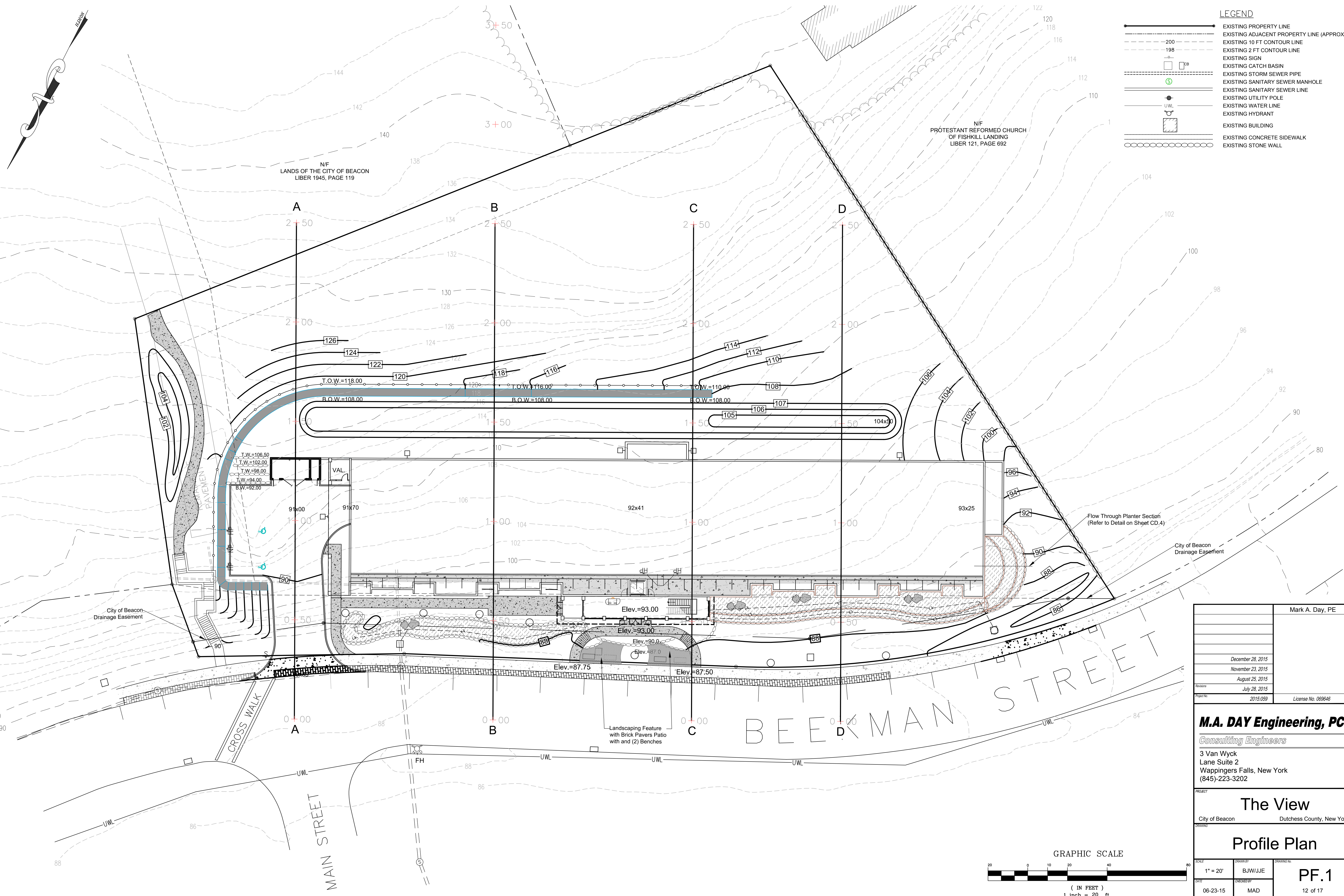


**SPDES GENERAL PERMIT GP-0-15-002 COMPLIANCE NOTES:**

- THE CONTRACTOR AND HIS/HER SUBCONTRACTORS SHALL READ AND UNDERSTAND THE CONDITIONS OF THE "NYSDCP SPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES", GP-0-10-001 FOR THIS PROJECT.
- THE CONTRACTOR AND HIS/HER SUBCONTRACTORS SHALL SIGN A COPY OF THE GENERAL PERMIT, GP-0-10-001, CERTIFICATION STATEMENT AS IDENTIFIED IN THE APPENDICES OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS NECESSARY FOR THE WORK OUTLINED HEREIN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF ALL STORMWATER POLLUTION PREVENTION MEASURES OUTLINED IN THE SWPPP AND PROJECT PLANS.
- THE CONTRACTOR SHALL HOLD A PRECONSTRUCTION CONFERENCE WITH THE OWNER'S REPRESENTATIVES AT LEAST ONE WEEK PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- THE CONTRACTOR/OWNER SHALL HAVE A QUALIFIED PROFESSIONAL, AS DEFINED WITHIN THE NYSDCP SPDES GENERAL PERMIT GP-0-10-001, CONDUCT AN INITIAL SITE ASSESSMENT PRIOR TO CONSTRUCTION FOLLOWING THE COMMENCEMENT OF CONSTRUCTION AT LEAST EVERY 7 CALENDAR DAYS. REFER TO SWPPP FOR INSPECTION GUIDELINES.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, A QUALIFIED PROFESSIONAL (Hired BY CONTRACTOR OR OWNER) SHALL CONDUCT AN ASSESSMENT OF THE SITE AND CERTIFY THAT THE APPROPRIATE EROSION AND SEDIMENT CONTROL STRUCTURES AS DEPICTED ON THE PLANS HAVE BEEN ADEQUATELY INSTALLED AND IMPLEMENTED. CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER ONCE THE EROSION AND SEDIMENT CONTROL STRUCTURES HAVE BEEN INSTALLED. REFER TO SWPPP FOR INSPECTION GUIDELINES.
- THE OWNER/OPERATOR 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 POST AT THE SITE, IN A PUBLICLY ACCESSIBLE LOCATION, A SUMMARY OF THE SITE INSPECTION ACTIVITIES ON A MONTHLY BASIS.

**9 SEEDING & MULCHING NOTES**  
NOT TO SCALE

Mark A. Day, PE	
January 22, 2016	
December 28, 2015	
November 23, 2015	
August 25, 2015	
July 28, 2015	
2015/059	License No. 069646
<b>M.A. DAY Engineering, PC</b> Consulting Engineers	
3 Van Wyck Lane Suite 2 Wappingers Falls, New York (845)-223-3202	
PROJECT: <b>The View</b>	
City of Beacon	Dutchess County, New York
<b>Stormwater Details</b>	
SCALE: As Noted	DRAWN BY: DJD
DATE: 06-23-15	CHECKED BY: MAD
<b>SW.1</b> 11 of 17	



**LEGEND**

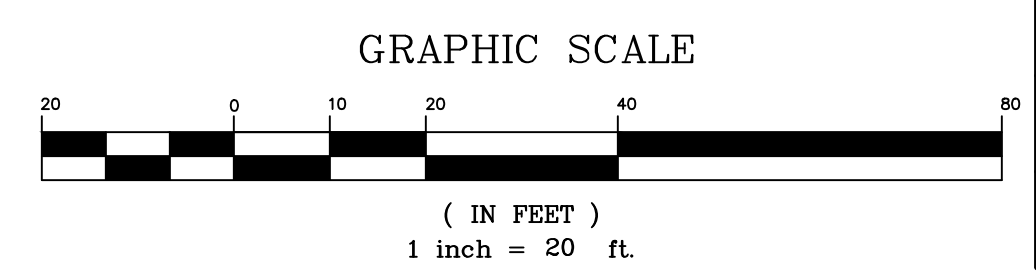
	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE (APPROX.)
	EXISTING 10 FT CONTOUR LINE
	EXISTING 2 FT CONTOUR LINE
	EXISTING SIGN
	EXISTING CATCH BASIN
	EXISTING STORM SEWER PIPE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING SANITARY SEWER LINE
	EXISTING UTILITY POLE
	EXISTING WATER LINE
	EXISTING HYDRANT
	EXISTING BUILDING
	EXISTING CONCRETE SIDEWALK
	EXISTING STONE WALL

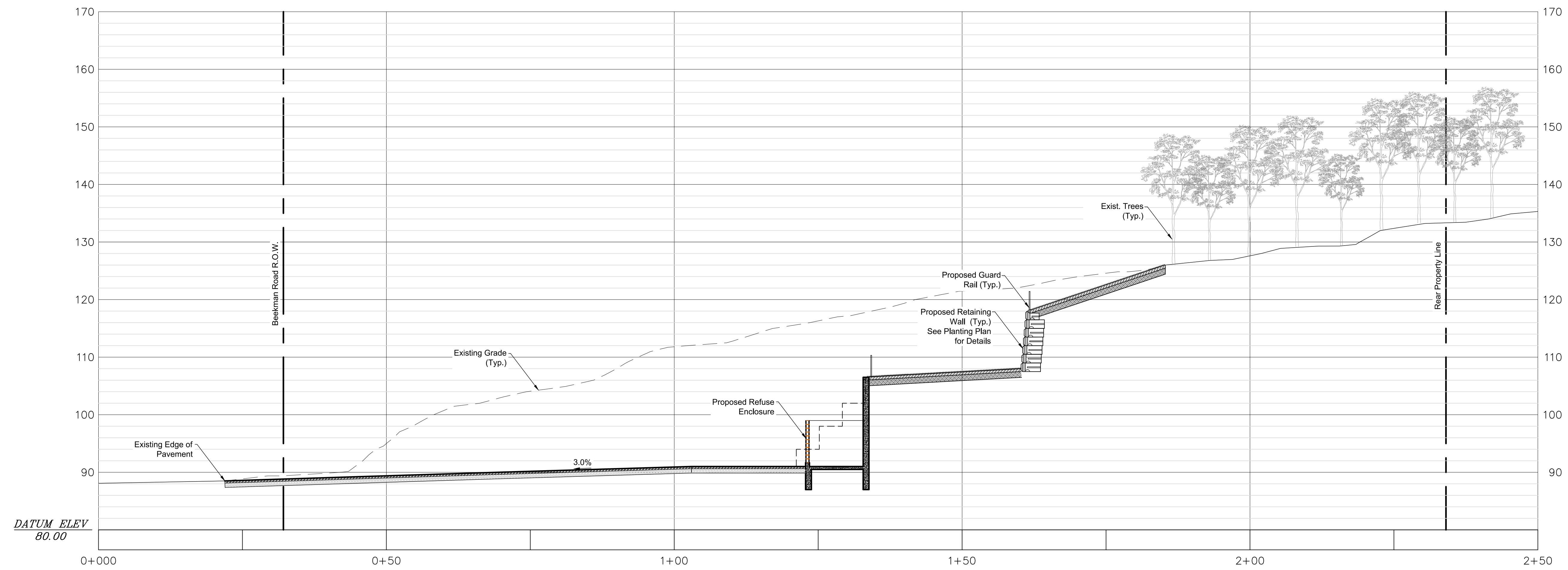
Mark A. Day, PE
December 28, 2015
November 23, 2015
August 25, 2015
July 28, 2015
2015/059
License No. 069646

**M.A. DAY Engineering, PC**  
*Consulting Engineers*  
 3 Van Wyck Lane Suite 2  
 Wappingers Falls, New York  
 (845)-223-3202

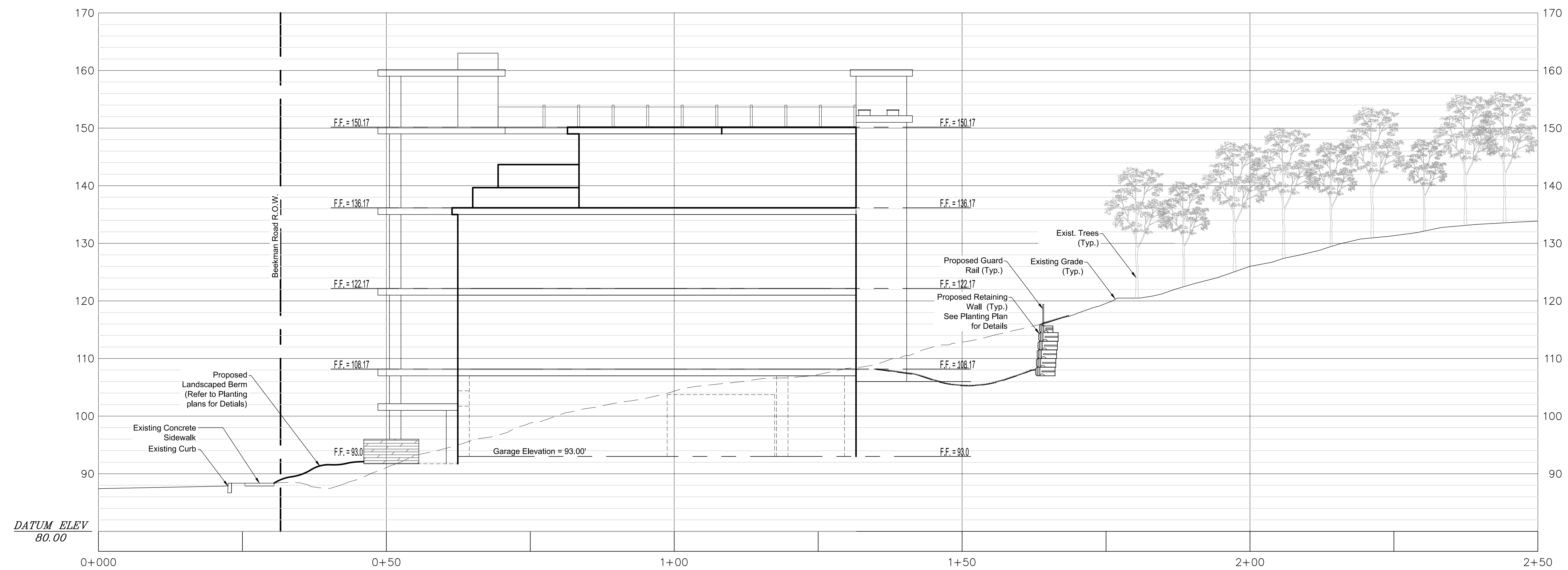
**The View**  
 City of Beacon Dutchess County, New York

<b>Profile Plan</b>		
SCALE	DRAWN BY	DRAWING NO.
1" = 20'	BJW/JJE	PF.1
DATE	CHECKED BY	
06-23-15	MAD	12 of 17





1 SECTION "A-A"  
Scale: 1" = 10'



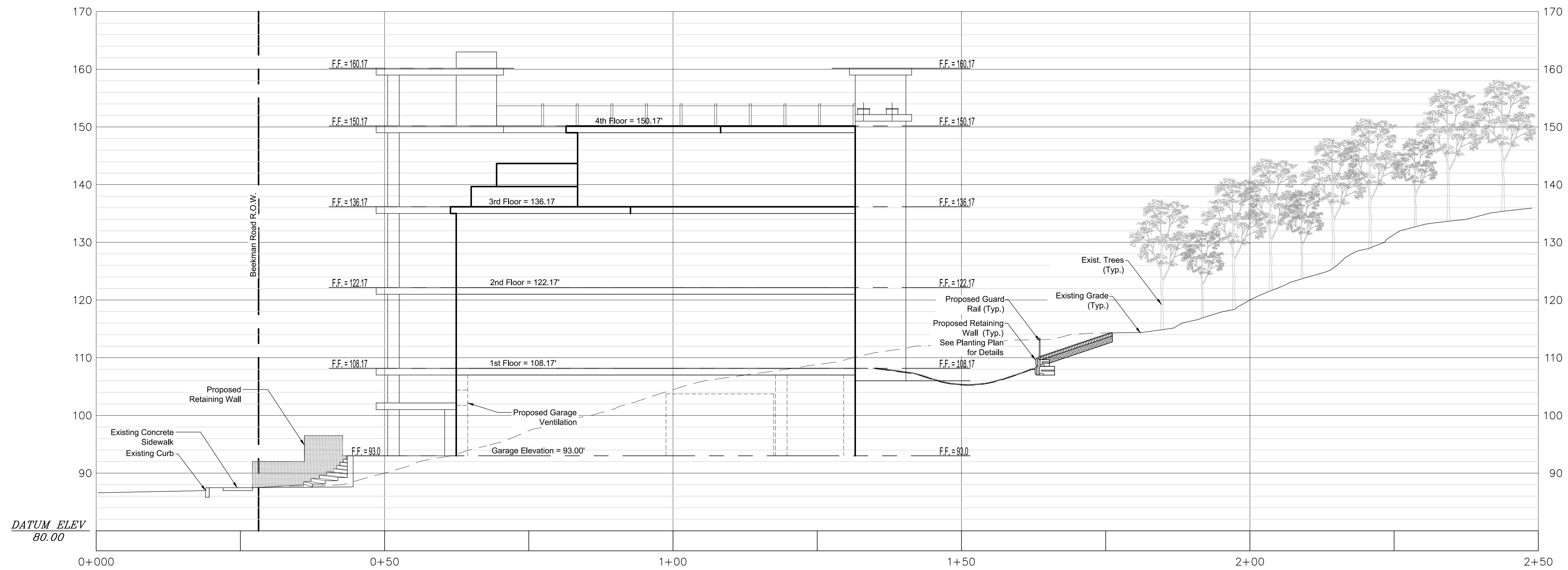
2 SECTION "B-B"  
Scale: 1" = 10'

Mark A. Day, PE	
December 28, 2015	
November 23, 2015	
August 25, 2015	
July 28, 2015	
Project No.	2015-059
License No.	069646

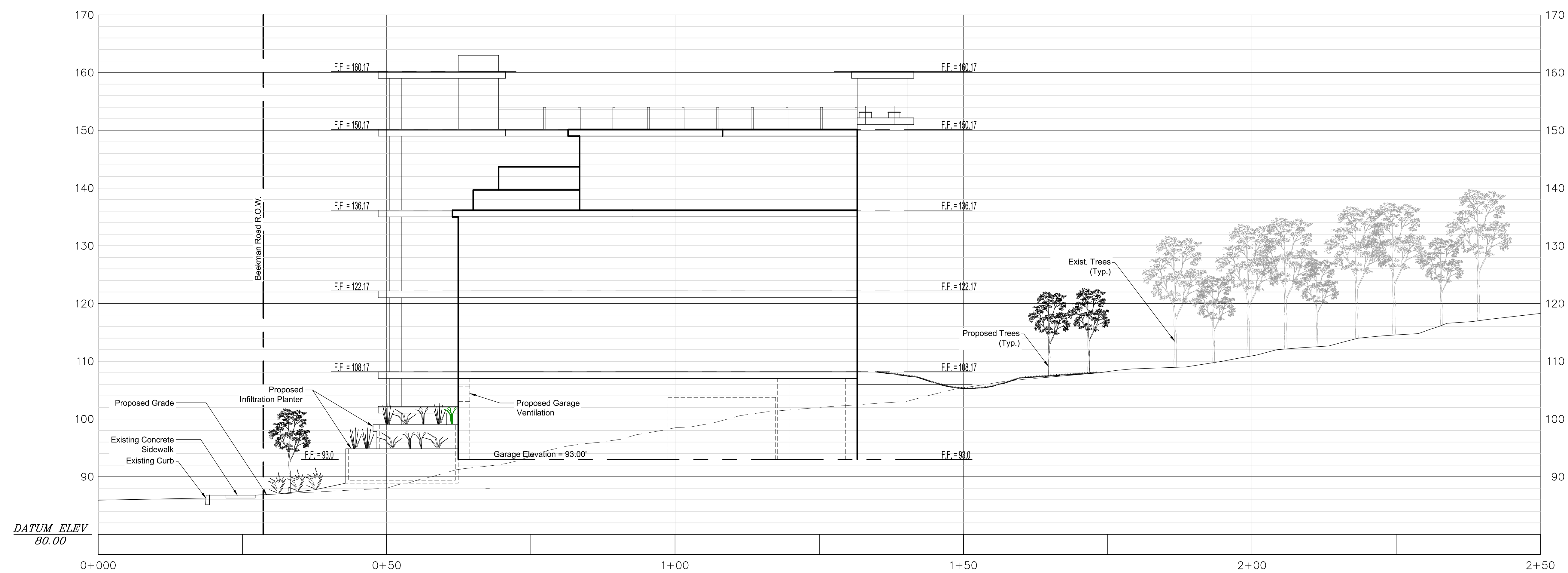
**M.A. DAY Engineering, PC**  
*Consulting Engineers*  
 3 Van Wyck Lane Suite 2  
 Wappingers Falls, New York  
 (845)-223-3202

**The View**  
 City of Beacon Dutchess County, New York

<b>Profile Plan</b>		
SCALE	DRAWN BY	DRAWING NO.
1" = 10'	BJW/JJE	PF.2
DATE	CHECKED BY	
06-23-15	MAD	13 of 17



1 SECTION "C-C"  
Scale: 1" = 10'



2 SECTION "D-D"  
Scale: 1" = 10'


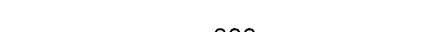
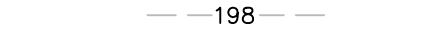

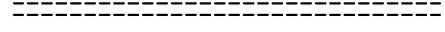


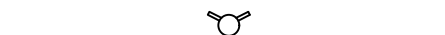







	Mark A. Day, PE
	December 28, 2015
	November 23, 2015
	August 25, 2015
	July 28, 2015
Project No.	2015-059
	License No. 069646

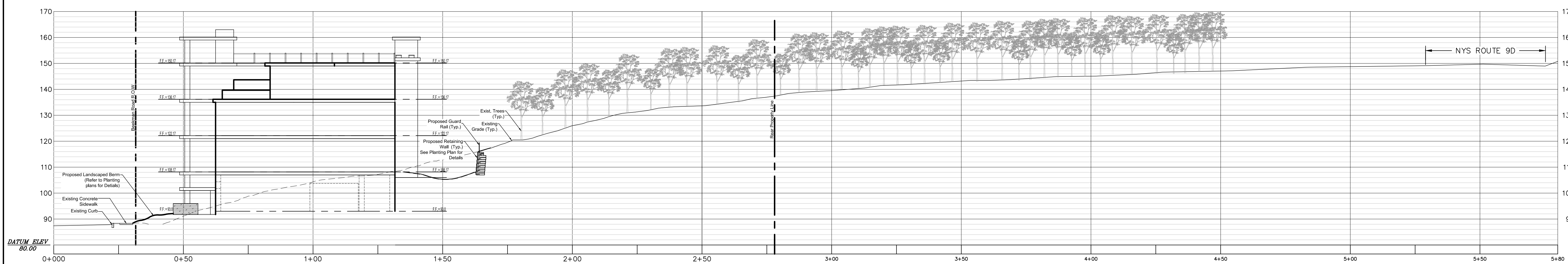
**M.A. DAY Engineering, PC**  
Consulting Engineers  
3 Van Wyck  
Lane Suite 2  
Wappingers Falls, New York  
(845)-223-3202

PROJECT  
**The View**  
City of Beacon Dutchess County, New York

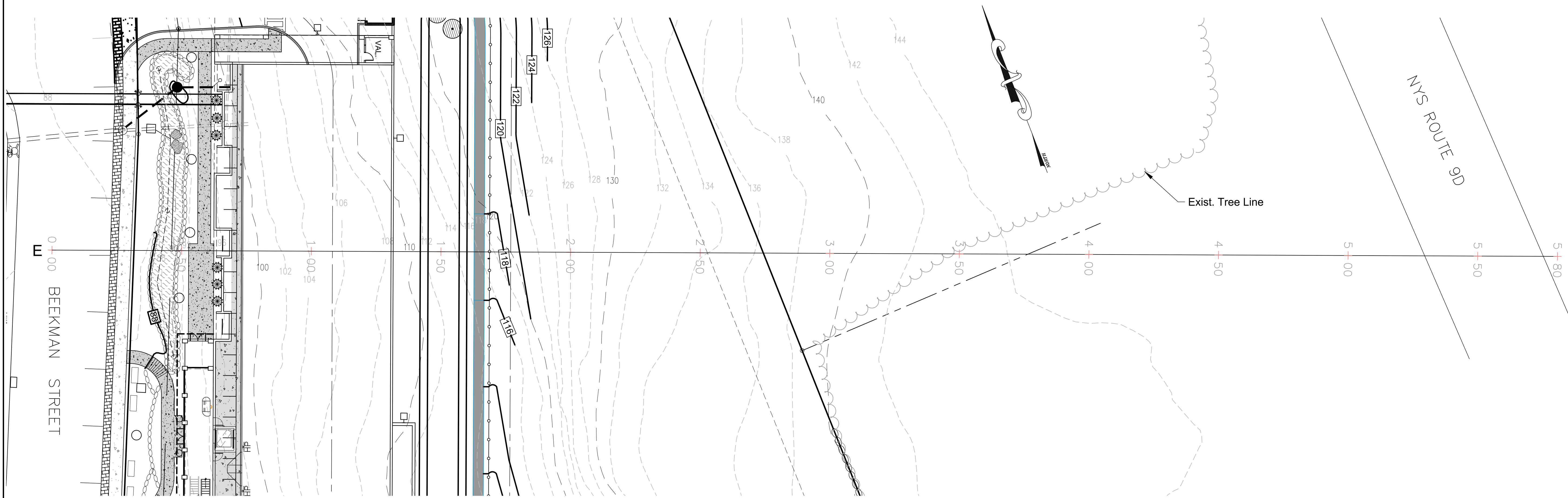
DRAWING <b>Profile Plan</b>		
SCALE 1" = 20'	DRAWN BY BJW/JJE	DRAWING NO. <b>PF.3</b> 14 of 17
DATE 06-23-15	CHECKED BY MAD	

LEGEND

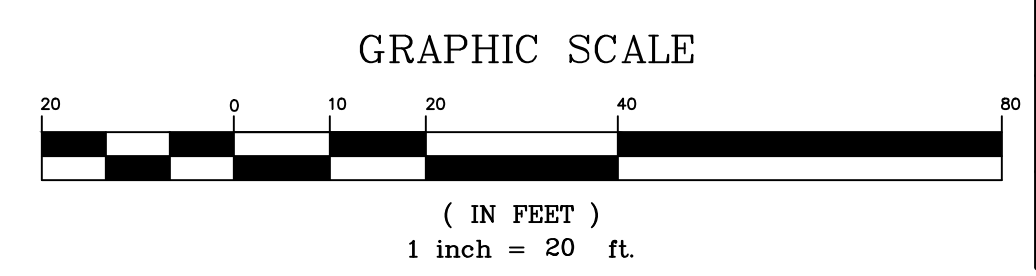
-  EXISTING PROPERTY LINE
-  EXISTING ADJACENT PROPERTY LINE (APPROX.)
-  EXISTING 10 FT CONTOUR LINE
-  EXISTING 2 FT CONTOUR LINE
-  EXISTING SIGN
-  EXISTING CATCH BASIN
-  EXISTING STORM SEWER PIPE
-  EXISTING SANITARY SEWER MANHOLE
-  EXISTING SANITARY SEWER LINE
-  EXISTING UTILITY POLE
-  EXISTING WATER LINE
-  EXISTING HYDRANT
-  EXISTING BUILDING
-  EXISTING CONCRETE SIDEWALK
-  EXISTING STONE WALL



1 SECTION "E-E"  
Scale: 1" = 20'



2 PLAN VIEW  
Scale: 1" = 20'



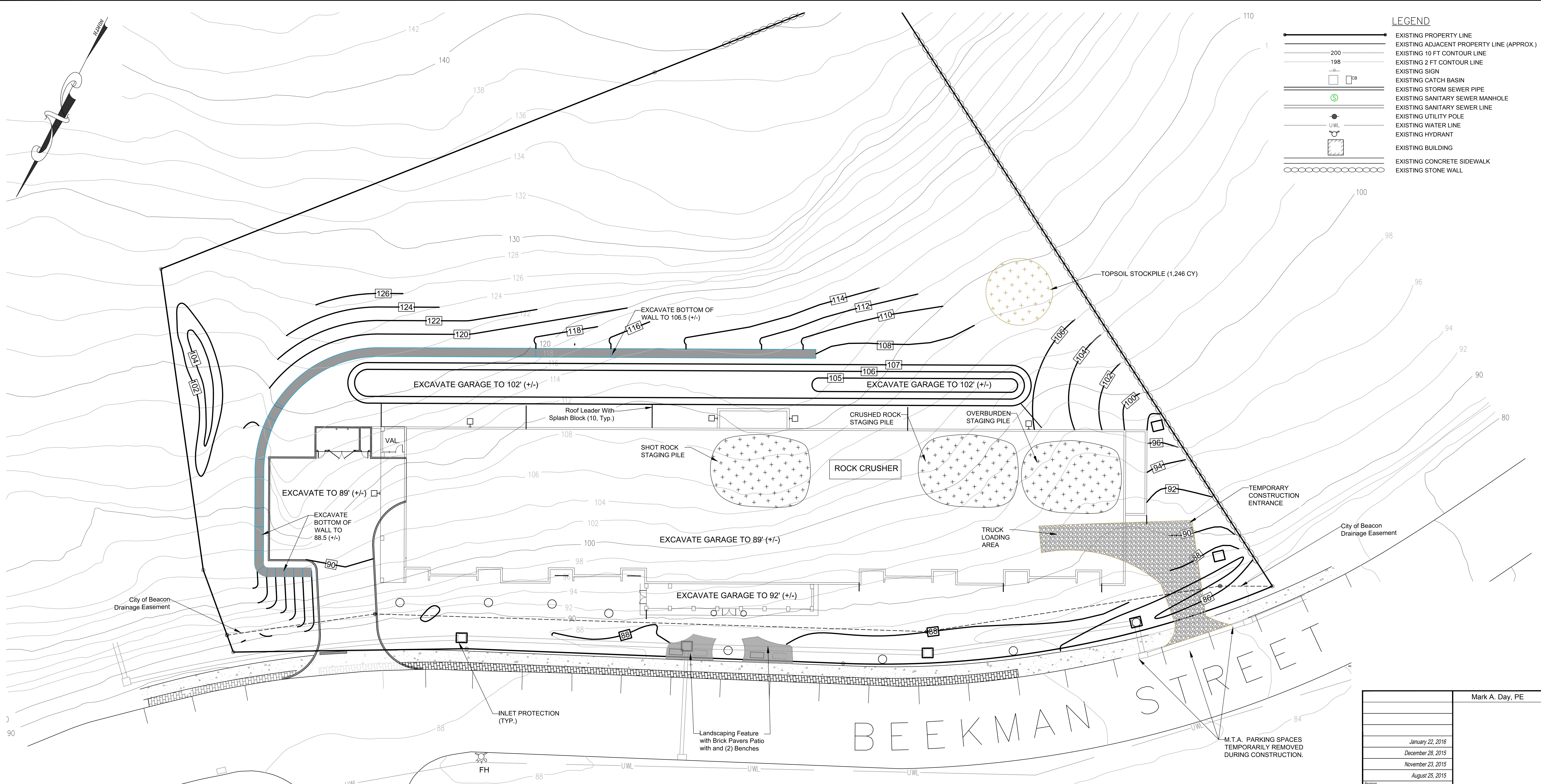
Mark A. Day, PE	
December 28, 2015	
November 23, 2015	
August 25, 2015	
July 28, 2015	
Project No.	2015-059
License No.	069646

**M.A. DAY Engineering, PC**  
*Consulting Engineers*  
 3 Van Wyck  
 Lane Suite 2  
 Wappingers Falls, New York  
 (845)-223-3202

PROJECT  
**The View**  
 City of Beacon Dutchess County, New York

DRAWING <b>Plan &amp; Profile</b>		
SCALE 1" = 20'	DRAWN BY BJW/JJE	DRAWING NO. <b>PF.4</b>
DATE 06-23-15	CHECKED BY MAD	15 of 17





**LEGEND**

	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE (APPROX.)
	EXISTING 10 FT CONTOUR LINE
	EXISTING 2 FT CONTOUR LINE
	EXISTING SIGN
	EXISTING CATCH BASIN
	EXISTING STORM SEWER PIPE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING SANITARY SEWER LINE
	EXISTING UTILITY POLE
	EXISTING WATER LINE
	EXISTING HYDRANT
	EXISTING BUILDING
	EXISTING CONCRETE SIDEWALK
	EXISTING STONE WALL

**CONSTRUCTION PHASING**

1. A BLASTING PLAN SHALL BE PREPARED BY A BLASTING COMPANY CERTIFIED TO OPERATE IN THE STATE OF NEW YORK. ALL FEDERAL, STATE AND LOCAL REGULATIONS SHALL BE FOLLOWED. THE BLASTING PLAN SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO THE BEGINNING OF ANY WORK ON THE SITE.
2. ALL EXCAVATION WORK HOURS SHALL BE BETWEEN 7AM & 4PM ON WEEKDAYS ONLY. THERE SHALL BE NO EXCAVATION OR CRUSHING OPERATIONS ON LEGAL HOLIDAYS.
3. INSTALL TEMPORARY CONSTRUCTION ENTRANCE ON WEST END OF SITE.
4. INSTALL ALL EROSION CONTROL MEASURES PRIOR TO CLEARING AND GRUBBING THE SITE. REFER TO SHEET 6 OF THIS PLAN SET.
5. THE LIMITS OF THE SITE WORK AND GRADE STAKES SHALL BE INSTALLED BY THE SURVEYOR.
6. ALL CLEARING AND GRUBBING SHALL BE COMPLETED.
7. THE TOPSOIL STOCKPILE AREA SHALL BE PREPPED.
8. STRIP & STOCKPILE THE TOPSOIL (1,246 CY BASED ON 6" DEPTH).
9. STABILIZE THE TOPSOIL STOCKPILE
10. OVERBURDEN SHALL BE REMOVED FROM THE WEST END OF THE SITE TOWARDS THE EAST END OF THE SITE. (4,550 CY BASED ON BORINGS). APPROXIMATELY 3,500 CY OF OVERBURDEN WILL BE EXPORTED OFF-SITE.
11. SOME OF THE OVERBURDEN WILL REMAIN IN PLACED AND USED FOR BACKFILL MATERIAL BEHIND THE BUILDING.

**CONSTRUCTION PHASING - CONT'D:**

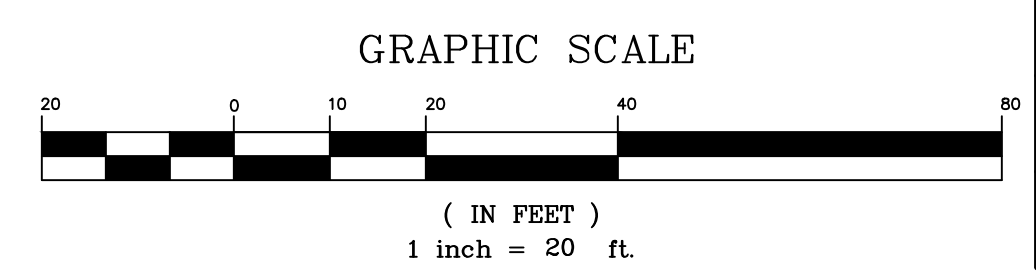
12. ONCE THE OVERBURDEN IS REMOVED, BLASTING OF APPROXIMATELY 11,655 CY OF MATERIAL SHALL BEGIN.
13. THE CONTRACTOR SHALL UTILIZE A PRIMARY ROCK CRUSHER, AS NECESSARY, TO CRUSH THE SHOT ROCK. THE CRUSHED MATERIAL SHALL BE STOCKPILED AND REMOVED TO AN OFFSITE LOCATION APPROXIMATELY 3 MILES SOUTH ON ROUTE 9D IN THE TOWN OF FISHKILL. SOME OF THE MATERIAL SHALL REMAIN ON SITE AND BE USED FOR BEDDING AND SUBBASE MATERIAL. APPROXIMATELY 9,500 CY SHALL BE EXPORTED TO AN OFF-SITE LOCATION.
14. SHOT ROCK SHALL BE PLACED IN A TEMPORARY STOCKPILE UNTIL IT IS LOADED INTO THE CRUSHER.
15. CRUSHED ROCK SHALL BE STORED IN A SEPARATE PILE UNTIL SUCH TIME THAT IT IS HAULED OFF-SITE.
16. IT IS ESTIMATED THAT THE WITH A 20% FLUFF FACTOR, THE REMOVAL OF THE ROCK AND OVERBURDEN (3,500 + 9,500 CY) OFF THE SITE SHALL REQUIRE APPROXIMATELY 780 TRUCK TRIPS. WITH 6 TRUCKS AND AN ESTIMATED CYCLE TIME OF 1 HOUR, EACH TRUCK SHALL HAUL 8 LOADS PER DAY. AT 8 LOADS PER DAY PER TRUCK, THE ENTIRE EXPORT OPERATION SHALL TAKE APPROXIMATELY 17 DAYS.
17. ONCE SOUTH END OF THE SITE HAS BEEN PREPPED, THE RETAINING WALL ON THE EAST & SOUTH SIDE OF THE SITE SHALL BE CONSTRUCTED.

**CONSTRUCTION PHASING - CONT'D:**

18. THE RETAINING WALL SHALL BE BACKFILLED AND THE UPPER SLOPE SHALL BE GRADED, SEEDED AND MULCHED.
19. THE FOUNDATION WALLS FOR THE BUILDING SHALL BE FORMED AND PLACED.
20. THE DECK SHALL BE PLACED AND THE FOUNDATION BACKFILLED.
21. THE AREA AROUND THE FOUNDATION SHALL BE BACKFILLED, SEEDED AND MULCHED AND STABILIZED.
22. THE WEST END OF THE SITE SHALL CONTINUE TO BE USED AS A CONSTRUCTION ENTRANCE AND STAGING AREA WHILE THE BUILDING IS BUILT.
23. PAVEMENT OF THE ENTRANCE ROAD AND PARKING AREA SHALL BE COMPLETED.
24. THE UTILITY WORK SHALL BE COMPLETED.
25. THE SITE SHALL BE STABILIZED AND THE LANDSCAPING AND THE LAWNS SHALL BE INSTALLED ONCE THE BUILDING HAS BEEN COMPLETED.

**BLASTING NOTES:**

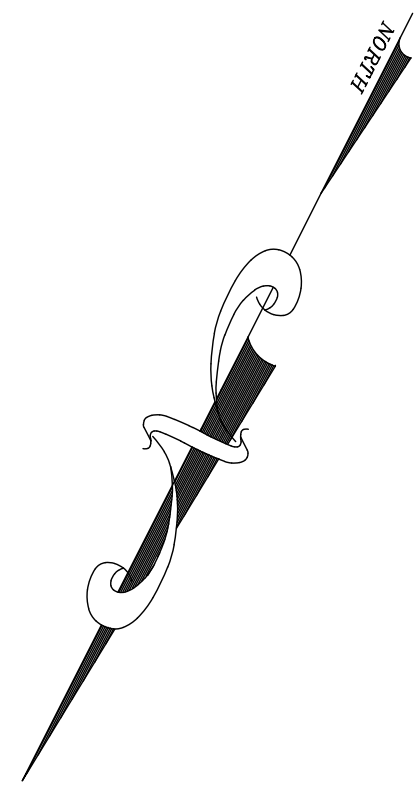
1. THE CONTRACTOR SHALL SUBMIT A BLASTING PLAN IN ACCORDANCE WITH THE REQUIREMENTS OUTLINED IN CHAPTER 11 OF THE CITY OF BEACON CODE.
2. ALL REQUIREMENTS OF CHAPTER 11 SHALL BE THE RESPONSIBILITY OF THE BLASTING CONTRACTOR.



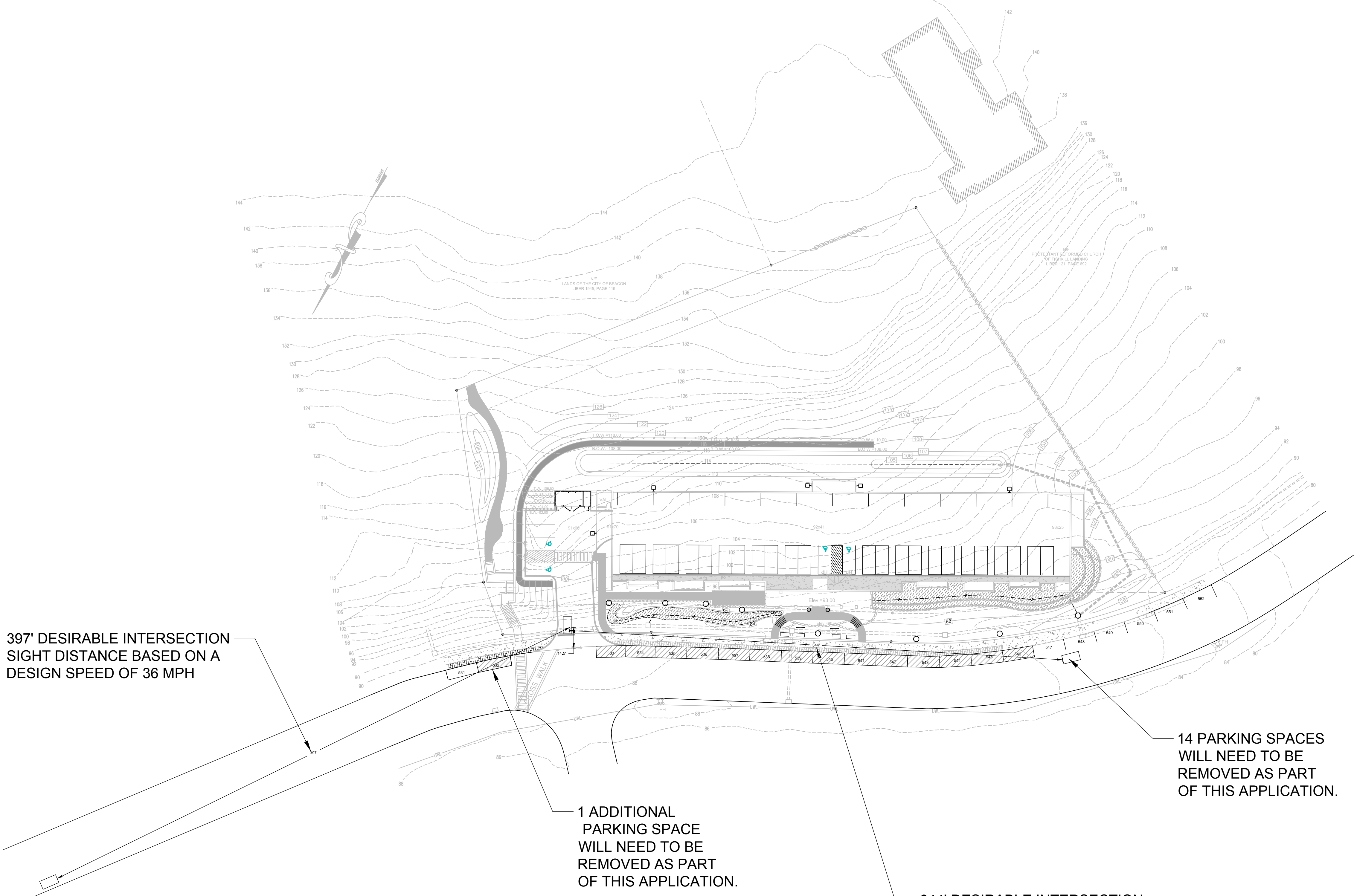
Mark A. Day, PE	
January 22, 2016	
December 28, 2015	
November 23, 2015	
August 25, 2015	
July 28, 2015	
Project No. 2015-059	License No. 069646

**M.A. DAY Engineering, PC**  
*Consulting Engineers*  
 3 Van Wyck Lane Suite 2  
 Wappingers Falls, New York  
 (845)-223-3202

<b>The View</b>		
City of Beacon		Dutchess County, New York
<b>Construction Phasing Plan</b>		
SCALE 1" = 20'	DRAWN BY DJD	<b>CP.1</b> 16 of 17
DATE 06-23-15	CHECKED BY MAD	



LEGEND	
	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE (APPROX.)
	EXISTING 10 FT CONTOUR LINE
	EXISTING 2 FT CONTOUR LINE
	EXISTING SIGN
	EXISTING CATCH BASIN
	EXISTING STORM SEWER PIPE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING SANITARY SEWER LINE
	EXISTING UTILITY POLE
	EXISTING WATER LINE
	EXISTING HYDRANT
	EXISTING BUILDING
	EXISTING CONCRETE SIDEWALK
	EXISTING STONE WALL

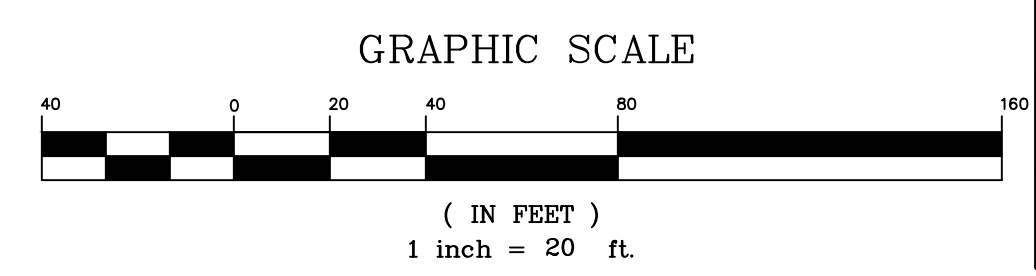


Mark A. Day, PE
January 22, 2016
December 28, 2015
November 23, 2015
August 25, 2015
July 28, 2015
Project No. 2015-059
License No. 069646

**M.A. DAY Engineering, PC**  
 Consulting Engineers  
 3 Van Wyck Lane Suite 2  
 Wappingers Falls, New York  
 (845)-223-3202

**The View**  
 City of Beacon Dutchess County, New York

Sight Distance		
SCALE 1" = 40'	DRAWN BY DJD	DRAWING NO. <b>SD.1</b> 17 of 17
DATE 06-23-15	CHECKED BY MAD	



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

---

John J. Lanc, P.E., L.S., P.P.  
David E. Higgins, P.E.  
Rodney C. Knowlton, L.S.

Arthur R. Tully, P.E.  
John J. O'Rourke, P.E.  
John D. Russo, P.E.

February 4, 2016

Mr. Jay Sheers, Chairman  
Beacon Planning Board  
City of Beacon City Hall  
1 Municipal Plaza  
Beacon, NY 12508

RE: The View – 26 Beekman Street  
City of Beacon  
Tax Map No. 5954-26-660924

Dear Mr. Sheers:

Our office has reviewed the plans entitled “The View – Site Plan”, as prepared by M.A. Day Engineering, P.C., and consisting of the following sheets:

- Sheet 1 of 17 (TS.1), entitled “Title Sheet”, with the latest revision date of January 22, 2016.
- Sheet 2 of 17 (EC.1), entitled “Existing Conditions”, with the latest revision date of January 22, 2016.
- Sheet 3 of 17 (SP.1), entitled “Site Plan”, with the latest revision date of December 28, 2015.
- Sheet 4 of 17 (UP.1), entitled “Utility & Grading Plan”, with the latest revision date of January 22, 2016.
- Sheet 5 of 17 (LLP.1), entitled “Landscape & Lighting Plan”, with the latest revision date of January 22, 2016.
- Sheet 6 of 17 (ESC.1), entitled “Erosion & Sediment Control Plan”, with the latest revision date of January 22, 2016.
- Sheet 7 of 17 (CD.1), entitled “Construction Details 1”, with the latest revision date of January 22, 2016.
- Sheet 8 of 17 (CD.2), entitled “Construction Details 2”, with the latest revision date of December 28, 2015.
- Sheet 9 of 17 (CD.3), entitled “Landscape/Lighting Details”, with the latest revision date of January 22, 2016.
- Sheet 10 of 17 (CD.4), entitled “Landscaping Details”, with the latest revision date of January 22, 2016.
- Sheet 11 of 17 (SW.1), entitled “Stormwater Details”, with the latest revision date of January 22, 2016.
- Sheet 12 of 17 (PF.1), entitled “Profile Plan”, with the latest revision date of December 28, 2015.

- Sheet 13 of 17 (PF.2), entitled “Profile Plan”, with the latest revision date of December 28, 2015.
- Sheet 14 of 17 (PF.3), entitled “Profile Plan”, with the latest revision date of December 28, 2015.
- Sheet 15 of 17 (PF.4), entitled “Plan and Profile”, with the latest revision date of December 28, 2015.
- Sheet 16 of 17 (CP.1), entitled “Construction Phasing Plan”, with the latest revision date of January 22, 2016.
- Sheet 17 of 17 (SD.1), entitled “Sight Distance”, with the latest revision date of January 22, 2016.

Our office has also received a report entitled “Storm Water Pollution Prevention Plan for The View Site Plan”, with the latest revision date January 20, 2016, as prepared by M.A. Day Engineering; a Traffic Study Letter, dated of January 20, 2016, as prepared by JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC.; a correspondence from Austin Powder – NorthAmerican Quarry & Construction, dated January 23, 2016, and a correspondence from GeoSonics dated January 25, 2016. Based on our review of the submitted materials we offer the following comments:

General Comments:

1. The applicant has submitted a correspondence from NorthAmerican Quarry & Construction with regards to the proposed preliminary blasting plan to be conducted on site. Prior to any blasting work occurring on site, a full blasting plan shall be prepared in accordance with Chapter 111 of the City Code, which shall be reviewed by the City of Beacon Building Department, prior to the issuance of a Blasting Permit. Based upon the preliminary submitted blasting plan, the plan will need to be revised to adjust the allowable times for blasting to between 8:00am to 5:00pm, include competent persons with red flags along the road when blasting, mapping showing the precise locations of the intended detonation of explosives and the size of the charges to be detonated, and other information as may be deemed necessary by the Building Department.
2. The applicant’s traffic engineer has provided correspondence indicating that construction truck traffic is not expected to cause a significant impact to Beekman Street.

Sheet 3 of 17 – Site Plan:

1. The flow-through planter is incorrectly labeled as an infiltration planter, just to the right side of the center of the building on this sheet. This label should be corrected.
2. One of the proposed light poles is shown directly on top of the existing catch basin at the east side of the site adjacent to Beekman Street. Light pole locations should be checked and moved to prevent interference with other utilities at the site.

Sheet 4 of 17 – Utility & Grading Plan:

1. Roof leader connections to the west flow-through stormwater planter should be shown on the plans.

2. The construction detail for the stormwater planters on sheet 10 describes 3 levels within the stormwater planters separated by retaining walls. The locations of these walls on are not clear on the plans, as line types for what appear to be retaining walls match other lines in the area. The number of levels in the two front stormwater planters appear to have only 2 levels, not matching the construction detail. It should be clarified if 3 levels will be constructed for all stormwater planter areas.
3. The 2 proposed catch basins in the site entrance installed onto the existing stormwater pipe have identical inverts. Each of these catch basins should have different inverts in and out, as they are being installed on an existing sloped drainage line.
4. What appears to be a sewer cleanout is located to the left side of the sewer service leaving the building. Why is the cleanout located to the left of the service line, instead of directly over the service line as shown on the construction detail? If the location is correct as shown on the plan, then the construction detail should be revised.

Sheet 6 of 17 – Erosion Control:

1. Silt fence or diversion swales should be provided along the rear of the project to prevent run-on into the construction area.

Sheet 7 of 17 – Construction Details:

1. Dimensions of the swale uphill of the proposed rear retaining wall should be noted in the retaining wall construction detail.

SWPPP Comments:

1. Section 4.6 on page 20 of the report should be revised to note that control of the channel protection volume is not required due to the piped connection to the Hudson River. It should also note that quantity control is required since the site discharges to the City of Beacon stormwater system and flows cannot be increased to the system.

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

Very truly,

LANC & TULLY, P.C.



John Russo, P.E.

Cc: David Stolman, AICP, PP  
Nick Ward-Willis, Esq.  
Tim Dexter, Building Inspector



## FREDERICK P. CLARK ASSOCIATES, INC.

PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK FAIRFIELD, CONNECTICUT

DAVID H. STOLMAN  
AICP, PP  
PRESIDENT

MICHAEL A. GALANTE  
EXECUTIVE  
VICE PRESIDENT

350 THEO. FREMD AVE.  
RYE, NEW YORK 10580  
914 967-6540  
FAX: 914 967-6615

CONNECTICUT  
203 255-3100

HUDSON VALLEY  
845 297-6056

LONG ISLAND  
516 364-4544

www.fpclark.com

email@fpclark.com

### MEMORANDUM

---

To: Jay Sheers, Chairman, and the City of Beacon Planning Board

Date: February 5, 2016

Subject: **The View – Beekman Street – Site Plan and Special Use Permit Applications**

As requested, we have reviewed the following plans generally entitled, "The View," last revised January 22, 2016, prepared by M.A. Day Engineering, PC:

1. Sheet TS.1, 1 of 17, "Title Sheet;"
2. Sheet EC.1, 2 of 17, "Existing Conditions;"
3. Sheet SP.1, 3 of 17, "Site Plan;"
4. Sheet UP.1, 4 of 17, "Utility & Grading Plan;"
5. Sheet LP.1, 5 of 17, "Landscape and Lighting Plan;"
6. Sheet ESC.1, 6 of 17, "Erosion & Sediment Control Plan;"
7. Sheet CD.1, 7 of 17, "Construction Details;"
8. Sheet CD.2, 8 of 17, "Construction Details;"
9. Sheet CD.3, 9 of 17, "Landscape/Lighting Details;"
10. Sheet CD.4, 10 of 17, "Landscaping Details;"
11. Sheet SW.1, 11 of 17, "Stormwater Details;"
12. Sheet PF.1, 12 of 17, "Profile Plan;"
13. Sheet PF.2, 13 of 17, "Profile Plan;"
14. Sheet PF.3, 14 of 17, "Profile Plan;"
15. Sheet PF.4, 15 of 17, "Plan & Profile;"
16. Sheet CP.1, 16 of 17, "Construction Phasing Plan;"
17. Sheet SD.1, 17 of 17, "Sight Distance."

We have also received and reviewed the Traffic Impact Study prepared by John Meyer Consulting last revised December 22, 2015, the application forms and the Environmental Assessment Forms (EAF).









**City of Beacon Planning Board**  
**2/9/2016**

**Title:**

**290 East Main Street**

**Subject:**

Review application for Subdivision Approval (lot line realignment), 290 East Main Street, submitted by Gerald Bell

**Background:**

**ATTACHMENTS:**

Description	Type
Application	Application
Letter of Transmittal	Cover Memo/Letter
Letter of Intent	Cover Memo/Letter
Environmental Assessment E Main Street	Backup Material
Environmental Assessment Laurel Street	Backup Material
Subdivision Plat	Plans
Engineer Review Letter	Consultant Comment
Planner Review Letter	Consultant Comment

**APPLICATION FOR SUBDIVISION APPROVAL**

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

**IDENTIFICATION OF APPLICANT**

	<i>(For Official Use Only)</i>	
Name: _____	Preliminary Application Rec'd _____	Date _____
Address: _____	Application Fee: _____	Initials _____
_____	Public Hearing _____	
Signature: _____	Preliminary Plat Approved: _____	
Date: _____	Final Plat Approved: _____	
Phone: _____	Recreation Fee: _____	
	Performance Bond: _____	

**IDENTIFICATION OF REPRESENTATIVE / DESIGN PROFESSIONAL**

Name: _____	Phone: _____
Address: _____	Fax: _____
_____	Email address: _____

**IDENTIFICATION OF SUBJECT PROPERTY:**

Subdivision name or identifying title: \_\_\_\_\_

---

Street which property abuts: \_\_\_\_\_

Current Tax Map Designation: Section \_\_\_\_\_ Block \_\_\_\_\_ Lot(s) \_\_\_\_\_

Property ~~XXXX~~ (does not) connect directly into a (State) (County) highway.

Land in subdivision ~~XX~~ (is not) within 500 feet of a Municipal boundary.

Total area of property is \_\_\_\_\_

**ITEMS TO ACCOMPANY THIS APPLICATION**

- a. One electronic and five (5) **folded** copies of a subdivision plat showing the location of the subject property and the proposed development with respect to neighboring properties and developments.
- b. An application fee, payable to the City of Beacon, computed per the attached fee schedule.
- c. An initial escrow amount, payable to the City of Beacon, as set forth in the attached fee schedule.

## APPLICATION FEES

<b>Site Plan</b>	<b><u>Residential</u></b> \$500 + \$250 per dwelling unit
	<b><u>Commercial</u></b> \$500 + \$250 per 1,000 s.f.
<b>Special Use Permit</b>	<b><u>Residential</u></b> \$500 + \$250 per dwelling unit
	<b><u>Commercial</u></b> \$500 + \$250 per 1,000 s.f.
<b>Subdivision</b>	\$ 750 for 2-4 lots + \$100 per lot
	\$1,000 for 5 or more lots + \$300 per lot
<b>Zoning Board of Appeals</b>	<b>Use Variance</b> \$500
	<b>Area Variance</b> \$250
	<b>Interpretation</b> \$250

## ESCROW FEES

### ALL SUBDIVISIONS, AND RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

No. of Lots or Dwelling Units	Initial Deposit	Depleted to	Replenishment
1-5 (including lot-line realignment)	\$ 2,500	\$ 1,000	Current bills + \$1,000
6-15	\$ 7,500	\$ 2,500	Current bills + \$1,000
Over 15	\$ 15,000	\$ 5,000	Current bills + \$5,000

### NON-RESIDENTIAL SITE PLAN AND SUP APPLICATIONS

	Initial Deposit	Depleted to	Replenishment
Existing Buildings/Change of Use with no site development	\$ 1,500	\$ 1,000	Current bills + \$500
Up to 3,000 s.f. gross floor area	\$ 2,500	\$ 1,000	Current bills + \$1,000
3,000 to 10,000 s.f. gross floor area	\$ 2,500 + \$0.50 per sq.ft. over 3,000	\$ 2,500	Current bills + \$2,500
Over 10,000 s.f. gross floor area	\$ 7,500 + \$0.50 per sq.ft. over 10,000	\$ 2,500	Current bills + \$2,500

### ZONING

<i>* if required by Chairman</i>	Initial Deposit	Depleted to	Replenishment
Use Variance*	\$ 1,000	\$500	Current bills + \$500
Area Variance*	\$ 1,000	\$500	Current bills + \$500
Interpretation*	\$ 1,000	\$500	Current bills + \$500

### ARCHITECTURAL REVIEW OR CERTIFICATE OF APPROPRIATENESS *(if not currently before PB)*

<i>* if required by Chairman</i>	Initial Deposit	Depleted to	Replenishment
Single Family House*	\$500	\$250	Current bills + \$250
All others*	\$500	\$250	Current bills + \$250

# APPLICATION PROCESSING RESTRICTION LAW

## Affidavit of Property Owner

Property Owner: \_\_\_\_\_

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

\_\_\_\_\_

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

\_\_\_\_\_

Applicant Address: \_\_\_\_\_

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 (5%) interest in a corporation or partnership or other business.

I, \_\_\_\_\_, the undersigned owner of the above referenced property, hereby affirm that I have reviewed my records and verify that the following information is true.

1. No violations are pending for ANY parcel owned by me situated within the City of Beacon \_\_\_\_\_
2. Violations are pending on a parcel or parcels owned by me situated within the City of Beacon \_\_\_\_\_
3. ALL tax payments due to the City of Beacon are current \_\_\_\_\_
4. Tax delinquencies exist on a parcel or parcels owned by me within the City of Beacon \_\_\_\_\_
5. Special Assessments are outstanding on a parcel or parcels owned by me in the City of Beacon \_\_\_\_\_
6. ALL Special Assessments due to the City of Beacon on any parcel owned by me are current \_\_\_\_\_

\_\_\_\_\_  
Signature of Owner

\_\_\_\_\_  
Title if owner is corporation

Office Use Only:	NO	YES	Initial
Applicant has violations pending for ANY parcel owned within the City of Beacon (Building Dept.)	___	___	___
ALL taxes are current for properties in the City of Beacon are current (Tax Dept.)	___	___	___
ALL Special Assessments, i.e. water, sewer, fines, etc. are current (Water Billing)	___	___	___

**CITY OF BEACON  
PRELIMINARY SUBDIVISION PLAT  
AND CONSTRUCTION PLANS SPECIFICATION FORM**

**Name of Application:** \_\_\_\_\_

<b>PRELIMINARY SUBDIVISION PLAT</b>	<b>YES</b>	<b>NO</b>
The preliminary plat shall be clearly marked "Preliminary Plat", shall be drawn to a convenient scale but not less than 1" = 100', and shall contain the following information:		
Proposed subdivision name or identifying title, name, and address of property owner and subdivider (if other than owner), name and address of the surveyor and/or engineer preparing the plan, scale, approximate true North point, and date.		
The approximate location and dimensions of all property lines, the total acreage of the proposed subdivision, the location of any zoning, special district or municipal boundary lines affecting the subdivision, and the names of owners of record of properties adjoining and directly across the street from proposed subdivision.		
The location of all existing structures and pertinent features, including railroads, water bodies, water courses, wetlands, rock outcroppings, wooded areas, major trees, and stone walls, that may influence the design of the subdivision, plus accurate topography at a vertical contour interval of not more than two (2) feet. The topographic data shall be determined by field survey unless the Planning Board specifically waives this requirement and/or permits the substitution of topographic information obtained from other sources determined satisfactory for the particular case.		
The location and status of existing streets or private roads, easements and rights-of-way (if any), proposals for the layout of new streets or private roads (including widths and approximate curve radii) and any proposed easements, rights-of-way and/or reservations.		
The names of existing streets or private roads and proposed names for new streets or private roads.		
The proposed arrangement of lots, including identifying numbers and approximate area and dimensions of each.		
Location, size and nature of any area proposed to be reserved for park purposes.		
A site location sketch, at a scale of one inch equals 400 feet, showing the general situation within 1,000 feet of the applicant's property with respect to surrounding properties, streets and private roads.		
Where the preliminary plat includes only a portion of an applicant's contiguous holding, the applicant shall also indicate, on a sketch at a scale of not less than one inch equals 200 feet, the probable future street or private road system, lot arrangement and location of park and other reservations for the remaining portion of the tract. Such sketch shall be for the purpose of guiding the Planning Board in reviewing the proposed preliminary plat and shall include topographic data with a vertical contour interval of not more than five feet plus any other information determined necessary by the Planning Board.		
Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board.		

<b>PRELIMINARY CONSTRUCTION PLANS</b>	<b>YES</b>	<b>NO</b>
The preliminary construction plans shall be drawn at the same scale as the preliminary plat and shall include the following information:		
Location and sizes of any existing water, sewer storm drainage and other utility lines and structures within and nearby the proposed subdivision.		
The proposed system for the provision of water supply and fire protection facilities, sewage disposal, stormwater drainage, and other utility services.		
Proposed street or private road profiles and cross-sections showing the approximate grade of proposed streets or private roads, the relationship of existing to proposed grades, and the proposed grades, and the proposed vertical curvature along the center line of all new streets or private roads.		
Location of all existing and proposed monuments and other subdivision improvements.		
Such additional information as may be required by this chapter, the Zoning chapter, or the Planning Board.		

**CITY OF BEACON  
FINAL SUBDIVISION PLAT  
AND CONSTRUCTION PLANS SPECIFICATION FORM**

**Name of Application:** \_\_\_\_\_

<b>FINAL SUBDIVISION PLAT</b>	<b>YES</b>	<b>NO</b>
The final subdivision plat shall be drawn clearly and legibly on transparent tracing cloth with black waterproof ink, at a scale no smaller than one inch equals 100 feet but preferably at a scale of one inch equals 50 feet. The sheet size shall not exceed 36 inches by 48 inches. If the size of proposed subdivision required a drawing larger than this, two or more sheets may be submitted, with match lines clearly indicated, and an index map shall be prepared on the same size sheet.		
The final plat shall contain the following information:		
Proposed subdivision name or identifying title, name, and address of owner of record and of subdivider (if other than owner), certification and seal of the registered engineer or licensed land surveyor who prepared the plat, names of the owners of record of adjoining properties and of properties directly across the street or private road, graphic scale, approximate true North point, and date.		
The location and dimensions of all boundary lines of the proposed subdivision, and all existing and proposed streets, private roads, lot lines, easements and rights-of-way, with sufficient data to readily determine the location, bearing and length of all such lines and to reproduce such lines upon the ground.		
The names of all existing and proposed streets and private roads.		
The locations of all water bodies and watercourses.		
The location of all existing buildings, including identification of all buildings to be removed as a condition of plat approval.		
The total acreage included in the entire subdivision, and the identification number and acreage of all lots and land reservations within the proposed subdivision.		
Location of all existing and proposed monuments.		
A site location map, at a scale of one inch equals 400 feet, showing the location of the subject property with respect to neighboring properties, streets and private roads.		
Notations explaining any drainage, sight slope, street widening, park area or other reservations or easements, including any self-imposed restrictions or covenants.		
Endorsement of approval by the Dutchess County Health Department.		
Plan for the provisional delivery of mail, as approved by the local postmaster.		
Endorsement of the owner as follows:  <p style="text-align: center;">“Approved for filing: _____”</p> <p>Owner _____ Date _____</p>		



<b>FINAL SUBDIVISION PLAT (continued)</b>	<b>YES</b>	<b>NO</b>
<p>Form for endorsement by Planning Board Chairman as follows:</p> <p>“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.</p> <p>Signed this _____ day of _____, 20_____, by _____, Chairman  _____, Secretary</p> <p>In absence of the Chairman or Secretary, the Acting Chairman or Acting Secretary Respectively may sign in this place.</p>		
Such additional information as may be required by Chapter 195 – Subdivision of Land; Chapter 223 – Zoning; or the Planning Board.		
Stormwater pollution prevention plan. A stormwater pollution prevention plan consistent with the requirements of Chapter 190 and with the terms of preliminary plan approval shall be required for final subdivision plat approval. The SWPPP shall meet the performance and design criteria and standards in Chapter 190, Article II. The approved final subdivision plat shall be consistent with the provisions of Chapter 190.		

Note: Does Not Apply. No proposed construction!

<b>FINAL CONSTRUCTION PLANS</b>	<b>YES</b>	<b>NO</b>
Final construction plans and profiles shall be prepared for all proposed streets, private roads and other required improvements. Plans shall be drawn at the same scale as the final plat and on the same size sheets, but not on the same sheets. The following information shall be shown:		
Plans and profiles showing the location and a typical cross-section of street and/or private road pavements including curbs and gutters, sidewalks, manholes and catch basins; the location of street or private road trees, lighting and signs; the location, size and invert elevations of existing and proposed sanitary sewers, stormwater drains and fire hydrants; the location and size of all water, gas or other underground utilities or structures; and the location and design of any other required improvements.		
Profiles showing existing and proposed elevations along the center line of all streets and private roads. Where a proposed street or private road intersects an existing street or private road, the elevation along the center line of the existing street or private road within 100 feet of intersection, shall be shown. All elevations must be referred to established U.S. Government of approved local benchmarks, where they exist within ½ mile of the boundary of the subdivision.		
The Planning Board may require, where steep slopes exist, cross-sections showing existing and proposed elevations of all new streets and private roads every 100 feet at five points on a line at right angles to the center line of the street or private road, said elevation points to be at the center line of the street or private road, each property line, and points 30 feet inside each property line.		
Location, size, elevation and other appropriate description of any existing facilities which will be connected to proposed facilities and utilities within the subdivision.		





# ACES

*Automated Construction Enhanced Solutions, Inc.*  
Professional Land Surveying • GPS Services • Engineering-Surveying & CAD Consulting

01/26/16

The City of Beacon  
1 Municipal Plaza  
Beacon, NY 12508  
845-838-5020

Re: Subdivision Application To Planning Board for Lot Line Revision prepared for:

James Bell  
5 Laurel Street  
Beacon, NY 12508

Gerald W. Bell  
290 East Main Street  
Beacon, NY 12508

Attn: Lt. Timothy P Dexter C.P.C.A.

Pursuant to our meeting this afternoon please find attachments transmitted in PDF format via e-mail consisting of the following:

Lot Line Revision Plan  
Subdivision Application  
Short Environmental Assessment Forms (2)  
Letter of Intent

The following wet signed copies were delivered by hand today:

Lot Line Revision Plan (eight 24"x36" signed by Gerald W. Bell and James Bell, signed/sealed color copies)  
Application For Subdivision Approval Sheet (signed by Gerald W. Bell)  
Application Processing Restriction Form – Affidavit Of Property Owner (signed by Gerald W. Bell)

Along with checks payable to the City of Beacon as follows:

\$750.00      Application Fee  
\$2,500.00    Escrow Account

Please contact me at your convenience if there are any questions, comments, concerns, or additional items required.

I appreciate very much your consideration and having the opportunity to act as the sponsor for this project

Best Regards,

*Jonathan N. Millen, L.L.S., NY Lic. No. 050746*

**Applicant's Letter Of Intent**

01/26/16

James Bell  
5 Laurel Street  
Beacon, NY 12508

Gerald W. Bell  
290 East Main Street  
Beacon, NY 12508

Attention To: City of Beacon Planning Board

Please be advised that Mr. Jonathan N. Millen, a New York State Licensed Land Surveyor has been retained to prepare a Lot Line Revision Plan for our properties located at:

5 Laurel Street - Tax ID# 6054-48-429603 (lands of James Bell)  
290 East Main Street - Tax ID# 6054-48-444607 (lands of Gerald W. Bell)

Said purpose of Lot Line Revision is for Mr. James Bell to relinquish an area of 0.062 acres to be conveyed to the lands of Mr. Gerald W. Bell accordingly.

We have reviewed the proposed Preliminary Plat – Lot Line Revision Plan and are in agreement with the changes to the Lot Lines as shown on the Plan included with this submission.

\_\_\_\_\_  
James Bell

\_\_\_\_\_  
Date

\_\_\_\_\_  
Gerald W. Bell

\_\_\_\_\_  
Date

# *Short Environmental Assessment Form*

## *Part 1 - Project Information*

### Instructions for Completing

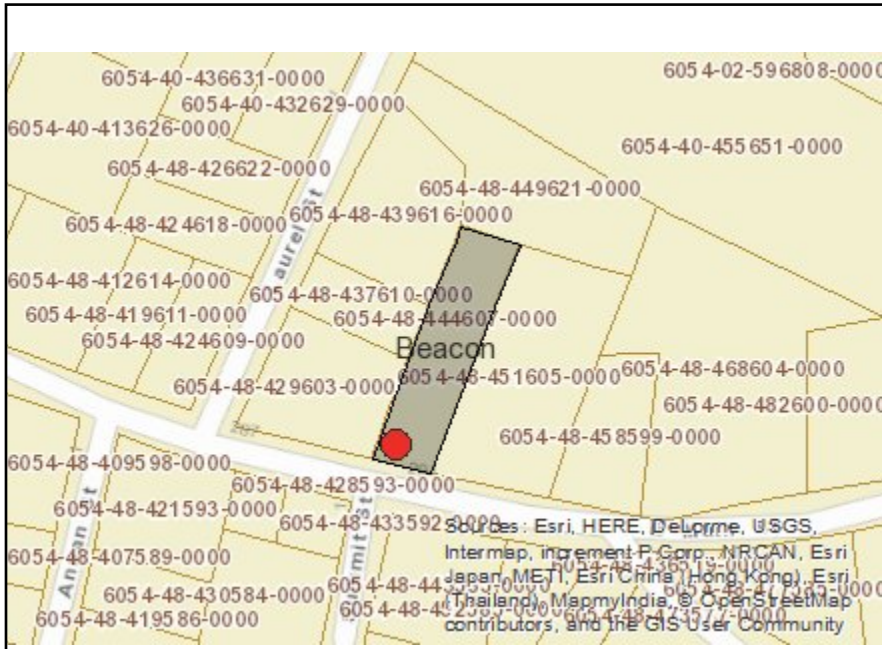
**Part 1 - Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. 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.

<b>Part 1 - Project and Sponsor Information</b>				
Name of Action or Project:				
Project Location (describe, and attach a location map):				
Brief Description of Proposed Action:				
Name of Applicant or Sponsor:		Telephone:		
		E-Mail:		
Address:				
City/PO:		State:	Zip Code:	
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.			<b>NO</b>	<b>YES</b>
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval:			<b>NO</b>	<b>YES</b>
3.a. Total acreage of the site of the proposed action? _____ acres				
b. Total acreage to be physically disturbed? _____ acres				
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres				
4. Check all land uses that occur on, adjoining and near the proposed action.				
<input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential (suburban)				
<input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____				
<input type="checkbox"/> Parkland				



<p>18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)?          If Yes, explain purpose and size: _____          _____          _____</p>	<p><b>NO</b></p>	<p><b>YES</b></p>
<p>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: _____          _____          _____</p>	<p><b>NO</b></p>	<p><b>YES</b></p>
<p>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: _____          _____          _____</p>	<p><b>NO</b></p>	<p><b>YES</b></p>
<p><b>I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE</b></p> <p>Applicant/sponsor name: _____ Date: _____</p> <p>Signature: _____</p>		



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



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National Register of Historic Places]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	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]	No
Part 1 / Question 20 [Remediation Site]	No



# *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.

<b>Part 1 - Project and Sponsor Information</b>				
Name of Action or Project:				
Project Location (describe, and attach a location map):				
Brief Description of Proposed Action:				
Name of Applicant or Sponsor:		Telephone:		
		E-Mail:		
Address:				
City/PO:		State:	Zip Code:	
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.			<b>NO</b>	<b>YES</b>
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval:			<b>NO</b>	<b>YES</b>
3.a. Total acreage of the site of the proposed action? _____ acres				
b. Total acreage to be physically disturbed? _____ acres				
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres				
4. Check all land uses that occur on, adjoining and near the proposed action.				
<input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential (suburban)				
<input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____				
<input type="checkbox"/> Parkland				

5. Is the proposed action, a. A permitted use under the zoning regulations?	<b>NO</b>	<b>YES</b>	<b>N/A</b>
b. Consistent with the adopted comprehensive plan?			
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	<b>NO</b>	<b>YES</b>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____ _____	<b>NO</b>	<b>YES</b>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	<b>NO</b>	<b>YES</b>	
b. Are public transportation service(s) available at or near the site of the proposed action?			
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?			
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ _____	<b>NO</b>	<b>YES</b>	
10. Will the proposed action connect to an existing public/private water supply?  If No, describe method for providing potable water: _____ _____	<b>NO</b>	<b>YES</b>	
11. Will the proposed action connect to existing wastewater utilities?  If No, describe method for providing wastewater treatment: _____ _____	<b>NO</b>	<b>YES</b>	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?  b. Is the proposed action located in an archeological sensitive area?	<b>NO</b>	<b>YES</b>	
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: _____ _____ _____	<b>NO</b>	<b>YES</b>	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input type="checkbox"/> Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	<b>NO</b>	<b>YES</b>	
16. Is the project site located in the 100 year flood plain?	<b>NO</b>	<b>YES</b>	
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? <input type="checkbox"/> NO <input type="checkbox"/> YES  b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: <input type="checkbox"/> NO <input type="checkbox"/> YES _____ _____	<b>NO</b>	<b>YES</b>	

<p>18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)?          If Yes, explain purpose and size: _____          _____          _____</p>	<p><b>NO</b></p>	<p><b>YES</b></p>
<p>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: _____          _____          _____</p>	<p><b>NO</b></p>	<p><b>YES</b></p>
<p>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: _____          _____          _____</p>	<p><b>NO</b></p>	<p><b>YES</b></p>
<p><b>I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE</b></p> <p>Applicant/sponsor name: _____ Date: _____</p> <p>Signature: _____</p>		



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

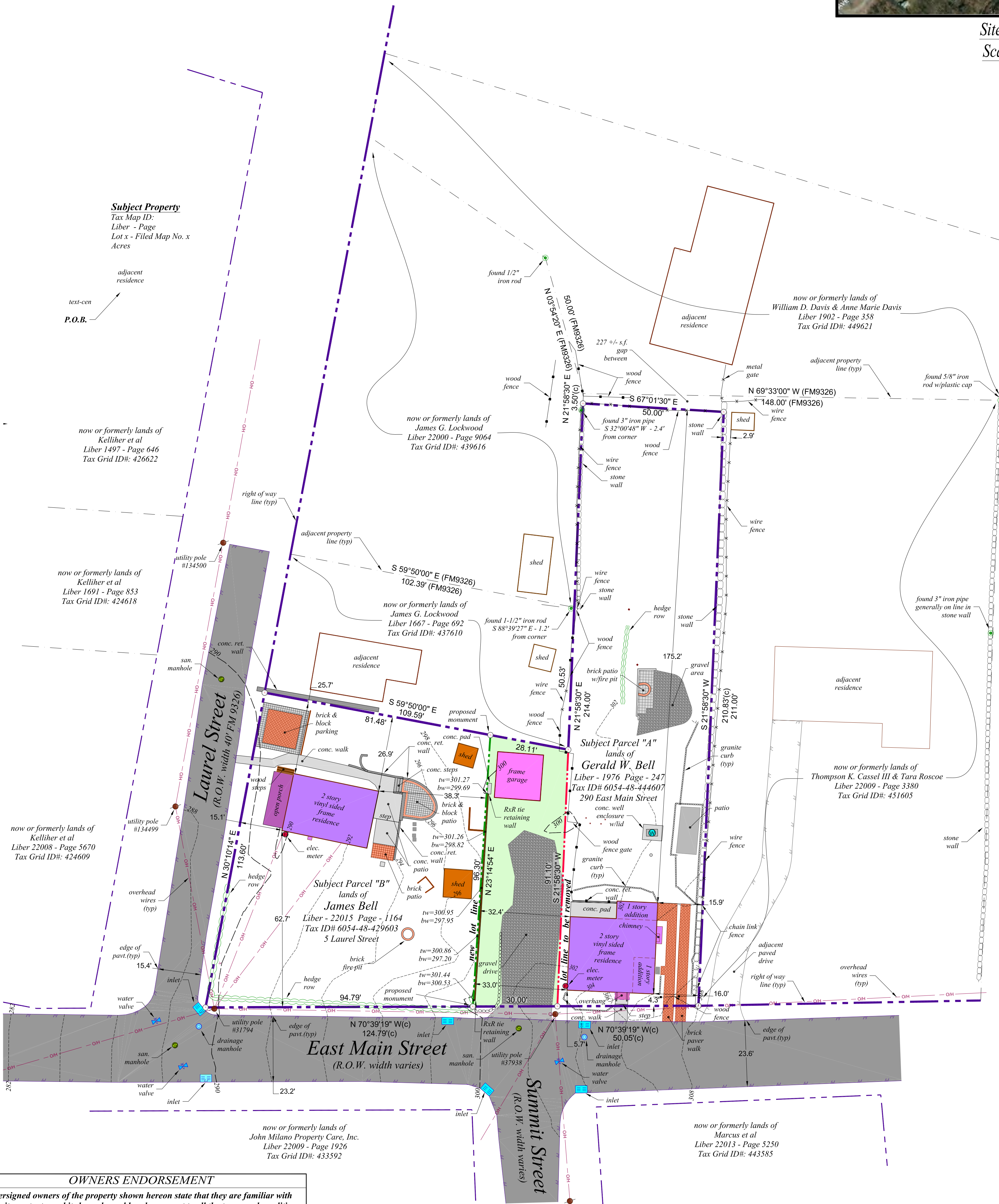


Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National Register of Historic Places]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies 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]	No
Part 1 / Question 20 [Remediation Site]	No

**North**  
Basis of Bearings  
per  
Filed Map No. 9326



Site Location Map  
Scale: 1"=400'



Parcel "A"		Parcel "B"	
Existing Area	10,619.12 sq. ft. 0.244 Acres	Existing Area	11,902.67 sq. ft. 0.273 Acres
Area To Be Added	2,711.47 sq. ft. 0.062 Acres	Area To Be Removed	2,711.47 sq. ft. 0.062 Acres
New Area	13,330.62 sq. ft. 0.306 Acres	New Area	9,191.20 sq. ft. 0.211 Acres

**OWNERS ENDORSEMENT**

The undersigned owners of the property shown hereon state that they are familiar with this map, its contents, and its legends, and hereby consent to all the terms and conditions as stated hereon and to the filing of this map in the Office of The Dutchess County Clerk. Approved for filing:

Owners Signature \_\_\_\_\_ Date \_\_\_\_\_  
Owners Signature \_\_\_\_\_ Date \_\_\_\_\_

**PLANNING BOARD ENDORSEMENT**

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 \_\_\_\_\_

**CERTIFIED TO:**

Gerald W. Bell  
James Bell  
The City of Beacon

**SURVEYOR'S CERTIFICATION:**

I hereby certify to the hereon listed parties that this map shows the results of an actual on the ground survey, per record description, of the land shown hereon, located at 290 East Main Street and S Laurel Street, in the City of Beacon, County of Dutchess, State of New York. That it represents an on the ground field survey of the indicated premises, completed on January 19, 2016, performed in accordance with the current existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc., and is to the best of my knowledge, belief, and information, accurate and correct, except as shown hereon: "there are no encroachments either way across property lines; title lines and lines of actual possession are the same".

Signature \_\_\_\_\_ Date \_\_\_\_\_ Jonathan N. Millen, L.L.S.  
196 Sara Lane - Suite 102  
Newburgh, NY 12550

**SURVEYOR NOTES:**

- Copyright © 2016, Jonathan N. Millen, L.L.S. All Rights Reserved. Reproduction or copying of this document is a violation of copyright law unless permission of the author and/or copyright holder is obtained.
- Unauthorized alteration of an item in any way, or addition to a survey map for any person, unless acting under the direction of a licensed land surveyor, is a violation of section 7209, subdivision 2, of the New York State Education Law.
- Only boundary survey maps bearing the surveyor's signature overlaid with embossed seal are genuine true and correct copies of the surveyor's original work and opinion. Copies without an embossed seal and underlying signature may contain unauthorized and undetectable modifications, deletions, additions, and changes, and are not to be relied upon. A copy of this document without the proper application of the surveyor's embossed seal should be assumed to be an unauthorized copy.
- 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 this survey map was prepared, to the title company, to the governmental agency, and to the lending institution.
- The certifications herein are not transferable.
- 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 unless indicated otherwise.
- This survey is subject to the findings of a title report and or title search.
- Surveyed as per research for deeds, record maps/documents, and prior survey maps in conjunction with natural, artificial, informational, and parole evidence discovered during the course of the survey.
- Subject to any conditions, restrictions, covenants and/or right-of-ways/easements of record, if any.

**NOTE:**  
Elevation datum is per Filed Map No. 9326.

**REFERENCES:**

- Tax Maps for the City of Beacon, Dutchess County, New York.
- Various Deeds of Record - Liber and Page as shown:
- A map entitled, "Map of Lands Owned By I. H. Teller Known As Mountain Avenue Park", prepared by Sidney Scofield, C.E., dated August 30, 1873, retraced by, and re-filed in the Office of the Dutchess County Clerk in 1956 as Filed Map No. 280.
- A map entitled, "Preliminary Subdivision Plat Lands Of Mary B. Lockwood", prepared by Richard G. Barger, dated May 29, 1991, last revised August 26, 1991, and filed in the Office of the Dutchess County Clerk on October 10, 1991 as Filed Map No. 9326.

DATE	REVISION

**SCHEDULE OF REGULATIONS DIMENSIONAL TABLE**  
ZONING DISTRICT: R-1-10

	REQUIRED	Parcel "A"	Parcel "B"
Minimum Lot Area:	10,000 s.f./du	13,330.62 s.f.	9,191.20 s.f.
Minimum Lot Width:	85 ft.	50 ft.	104.0 ft.
Minimum Lot Depth:	100 ft.	212.5 ft.	81.1 ft.
Minimum Front Setback:	35 ft.	4.3 ft.	15.1 ft.
Minimum Side Setback:	15 ft. tot. 40 ft.	15.9 tot. 48.3 ft.	32.4 tot. 88.9 ft.
Minimum Rear Setback:	35 ft.	175.2 ft.	38.3 ft.
Maximum Building Coverage:	25%	8.7%	8.0%
Maximum Number Dwl./Units:	1	1	1

**Preliminary Plat**

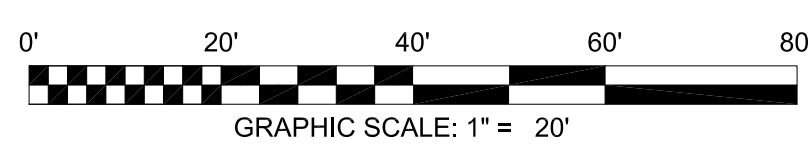
**Lot Line Revision**

Lands of  
**Gerald W. Bell**  
and  
**James Bell**

Automated Construction Enhanced Solutions, Inc.  
**Professional Land Surveying**  
196 Sara Lane - Suite 102, Newburgh, NY 12550  
Office: 845-943-7198 Field: 914-906-8830 E-Mail: jmillenlls@acessurveying.com

Prepared For Tax Map Parcel Lot #s  
444607 aka 290 East Main Street  
and  
429603 aka 5 Laurel Street  
situated in the  
City of Beacon  
County of Dutchess, New York 12508

SCALE: 1" = 20' DATE: 01/26/2016 JOB No. 15041BEL DRAWN BY: jmm



**Jonathan N. Millen, L.L.S.**  
PROFESSIONAL LAND SURVEYOR  
CERTIFIED TO BE CORRECT AND ACCURATE  
N.Y. LIC. No. 050746



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

---

John J. Lenc, P.E., L.S., P.P.  
David E. Higgins, P.E.  
Rodney C. Knowlton, L.S.

Arthur R. Tully, P.E.  
John J. O'Rourke, P.E.  
John D. Russo, P.E.

February 4, 2016

Mr. Jay Sheers  
Beacon Planning Board Chair  
City of Beacon  
1 Municipal Plaza  
Beacon, NY 12508

RE: Bell Subdivision  
City of Beacon  
Tax Map No. 6054-48-444607 & 429603

Dear Mr. Sheers:

Our office has reviewed the plan entitled "Preliminary Plat – Lot Line Revision for Lands of Gerald W. Bell and James Bell", dated January 26, 2016, as prepared by Jonathan Millen, LLS. The plan shows Gerald Bell (Parcel "A") is to acquire 2,711.47 square feet of land from James Bell (Parcel "B").

Based upon our review of the plan, we offer the following comments:

1. Plan should show paved interconnection of brick parking area on Parcel "B" to Laurel Street.

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

Very truly,  
LANC & TULLY, P.C.

  
John Russo, P.E.

Cc: Nicholas Ward-Willis, City Attorney  
David Stolman, City Planner  
Tim Dexter, Building Inspector



**FREDERICK P. CLARK ASSOCIATES, INC.**  
PLANNING, TRANSPORTATION, ENVIRONMENT AND DEVELOPMENT  
RYE, NEW YORK FAIRFIELD, CONNECTICUT

DAVID H. STOLMAN  
AICP, PP  
PRESIDENT

MICHAEL A. GALANTE  
EXECUTIVE  
VICE PRESIDENT

350 THEO. FREMD AVE.  
RYE, NEW YORK 10580  
914 967-6540  
FAX: 914 967-6615

CONNECTICUT  
203 255-3100

HUDSON VALLEY  
845 297-6056

LONG ISLAND  
516 364-4544

[www.fpclark.com](http://www.fpclark.com)

[email@fpclark.com](mailto:email@fpclark.com)

## MEMORANDUM

---

To: Jay Sheers, Chairman, and the City of Beacon Planning Board

Date: February 5, 2016

Subject: **Bell Lot Line Realignment – 290 East Main Street and 5 Laurel Street**

As requested, we have reviewed the plan entitled “Preliminary Plat, Lot Line Revision Lands of Gerald W. Bell and James Bell,” prepared Jonathan N. Millen, LLS, dated January 26, 2016. We have also received and reviewed the application forms and the Environmental Assessment Form.

### Proposal

The Application seeks a lot line realignment to reconfigure 2 lots in the R1-10 One-Family Residence District. A portion of parcel number 6054-48-429603 (Parcel B) is proposed to be conveyed to parcel 6054-48-444607 (Parcel A).

### Analysis and Recommendations

1. The Application should be revised to add the owner information for 5 Laurel Street.
2. The Applicant is proposing to convey 0.062 acres from Parcel B to Parcel A which will result in Parcel B becoming a non-conforming lot. A variance may be required for the proposed lot configuration.
3. Parcel A has an existing, non-conforming lot width of 50 feet where 85 feet is required. The additional area to be conveyed to Parcel A will increase the lot width to 80 feet. However, the lot width will still be non-conforming. A variance may be required for the proposed lot configuration.





**City of Beacon Planning Board**  
**2/9/2016**

**Title:**

**New Single Family House**

**Subject:**

New single family house - Green Subdivision; Lot #3, Pocket Road

**Background:**

**ATTACHMENTS:**

Description	Type
Application	Application
Elevations	Plans
Subdivision Plat	Plans

ARCHITECTURAL REVIEW BOARD APPLICATION

pd. cash

Date: 01-26-2016

Project Address: Pocket Rd. - Green Sub. Lot #3

Project Architect/Engineer: C. Nespie & Assocs.

Owner/Builder: MARK FINKELSTEIN

Contact Phone No.: 914 355-0487

Approval Requested: Certificate of Appropriateness New Single Family House

Color/Materials:

Siding: Vinyl

Roofing: Asphalt

Windows: Color: White Type: double hung

Trim: white

Garage Door: as shown. white

Stone/Brick: n/a

Signature of Owner

FOR OFFICE USE ONLY:

The Architectural Review Board has reviewed the plans submitted for approval for the project listed above and has determined:

Plan Denied (Date)

Plan Approved (Date)

Subject to the following:

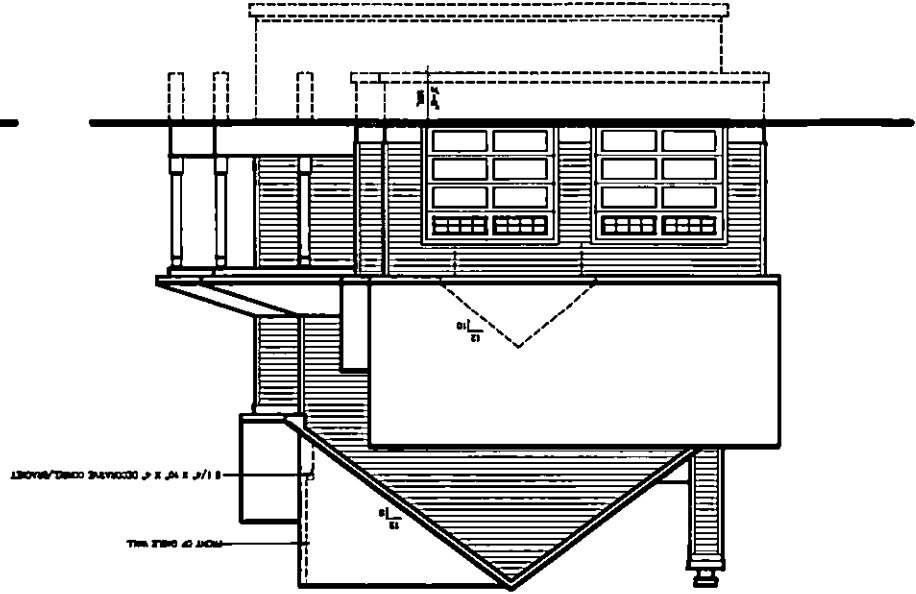
FEE: \$100.00





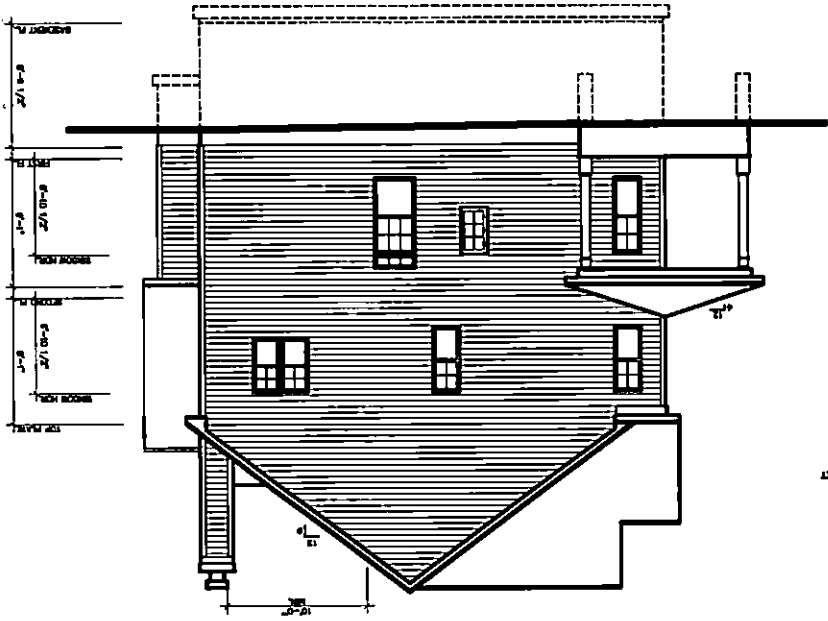
LEFT SIDE ELEVATION

SCALE 1/8" = 1'-0"



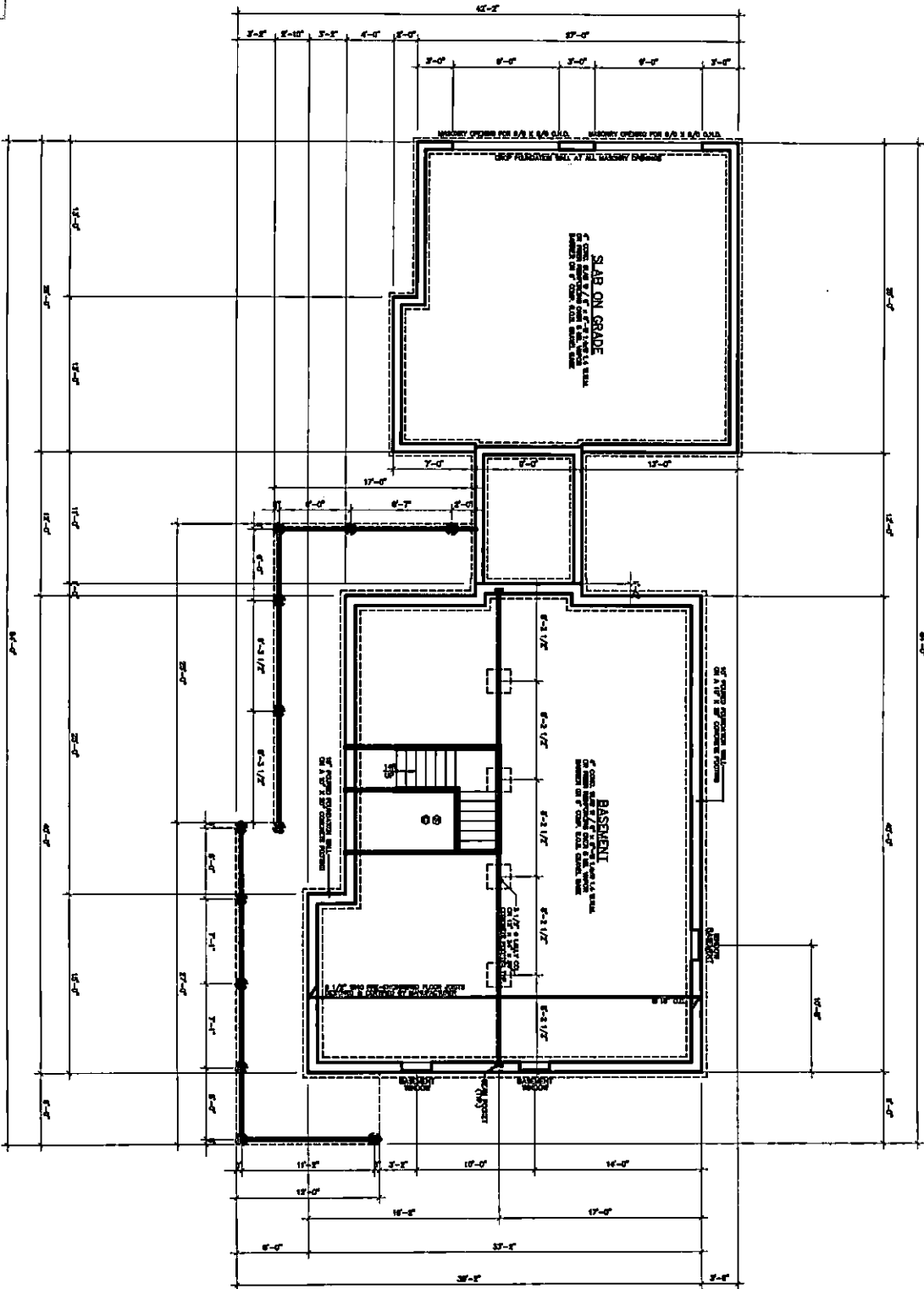
RIGHT SIDE ELEVATION

SCALE 1/8" = 1'-0"







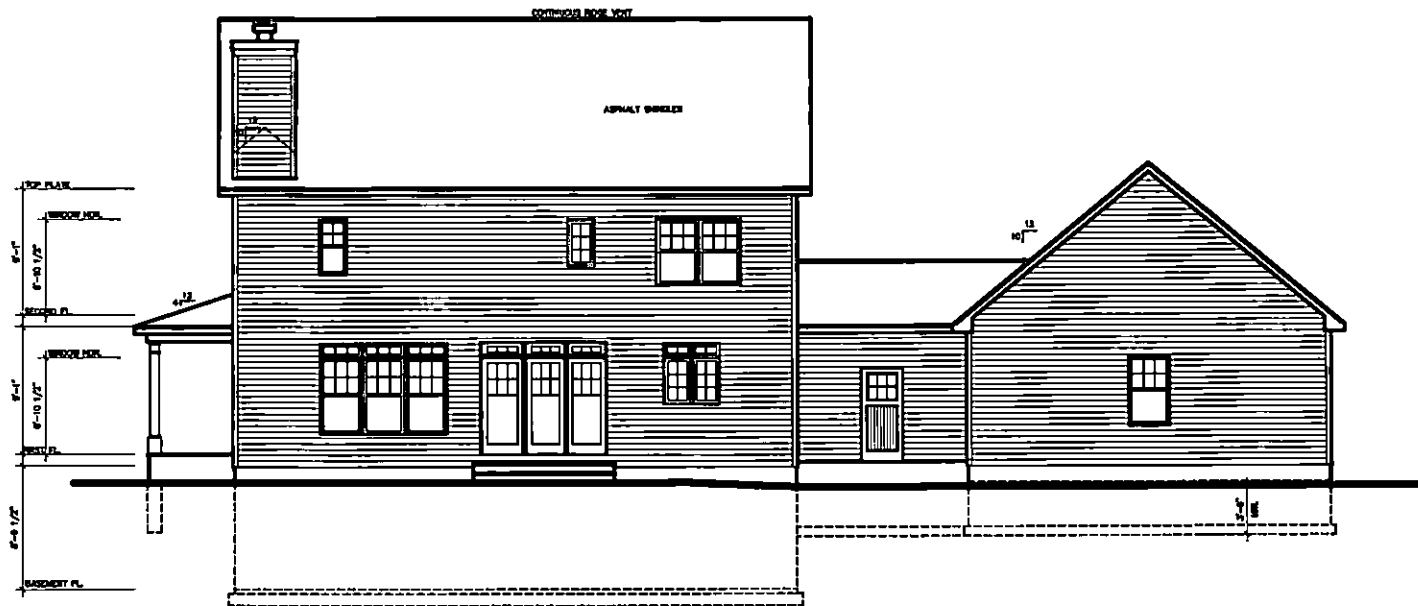


**BASEMENT PLAN**

- 1. INTERPRETED TO NOT SHOW DETAIL OF MASONRY WORK UNLESS INDICATED WITH LETTERS & FIGURES.
- 2. TO BE INSTALLED ON SLOTTED FLOOR CONTAINING A SUTTING AREA OR OTHER WORKING SPACES TO BE INSTALLED WITHIN 18 FEET OF EACH SLOTTING AREA.

SCALE 1/8" = 1'-0"

**NOTES:**  
 1. ALL DIMENSIONS UNLESS NOTED TO BE OTHERWISE SHALL BE TO FACE.  
 2. ALL FINISHES SHALL BE TO BE AS NOTED.  
 3. ALL WORK SHALL BE TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND SPECIFICATIONS.  
 4. ALL WORK SHALL BE TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND SPECIFICATIONS.  
 5. ALL WORK SHALL BE TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND SPECIFICATIONS.  
 6. ALL WORK SHALL BE TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND SPECIFICATIONS.  
 7. ALL WORK SHALL BE TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND SPECIFICATIONS.  
 8. ALL WORK SHALL BE TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND SPECIFICATIONS.  
 9. ALL WORK SHALL BE TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND SPECIFICATIONS.  
 10. ALL WORK SHALL BE TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND SPECIFICATIONS.





N/F  
JOSEPH  
RS, INC.

LOT #4  
THOMAS ESTATE  
SUBDIVISION

LOT #3  
THOMAS ESTATE  
SUBDIVISION

N/F  
LORI JOSEPH  
BUILDERS, INC.

SEE  
TURNAROUND  
DETAIL ABOVE

\*SEE GENERAL NOTE 12

PROP. 50' WIDE  
PRIVATE ROAD ACCESS  
AND UTILITY EASEMENT  
(SEE SURVEY NOTE 4)

PROP. 12'  
WIDE DRIVE W/P.

150' CENTRAL  
HUDSON GAS &  
ELECTRIC EASEMENT

N51°05'46"W  
4.88'

49.51'

N47°02'40"W  
355.42'

N41°12'20"E 318.53'

S41°31'20"W  
534.23'

S48°47'40"E  
27.02'

N41°12'20"E  
36.00'

LOT 3

LOT 1

LOT 2

EXIST.  
HOUSE

FORMERLY NYC  
LIBER 1734  
FORMERLY SKI MOUNTA  
LIBER 131.  
LANDS  
SCENIC HUDSON 1

LIBER 1306 CP 738,  
DUTCHESS SKI CORP  
TO BRUNEL  
ACCESSORS AND/OR ASSIGNS A  
ALL ORDINARY PURPOSES FOR  
AND EGRESS BY WAY OF THE  
3 ROAD WAY, FROM EAST MAIN  
TO SAID LANDS N/F BRUNEL

N/F  
JOSEPH  
LIBER 1813 CP 784

S69°42'22"W

279.15'

N30°47'12"W

461.58

309.87 S57°10'34"W

S58°08'50"W

OWNER'S CONSENT  
THE UNDERSIGNED OWNER OF THE