MEMORANDUM

CITY OF WATERTOWN, NEW YORK
PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT
245 WASHINGTON STREET, ROOM 305, WATERTOWN, NY 13601
PHONE: 315-785-7741 – FAX: 315-782-9014

TO: Planning Commission Members

FROM: Michael A. Lumbis, Planning and Community Development Director

PRIMARY REVIEWER: Jennifer L. Voss

SUBJECT: Site Plan Approval – VL Main Avenue, 144 Main Avenue, 160 Main Avenue, 160 Rear Main Avenue, 164 Main Avenue and 202 Main Avenue, Parcel Numbers 2-01-332.002, 2-01-301.001, 2-01-301.000, 2-01-302.000, 2-01-332.003 and 2-01-332.004

DATE: July 27, 2023

Request: Site Plan Approval to construct a 15,900 SF, 61-unit, four-story apartment building at **VL Main Avenue, 144 Main Avenue, 160 Main Avenue, 160 Rear Main Avenue, 164 Main Avenue and 202 Main Avenue**, Parcel Numbers 2-01-332.002, 2-01-301.001, 2-01-301.000, 2-01-302.000, 2-01-332.003 and 2-01-332.004

Applicant: LaBella Associates on behalf of Neighbors of Watertown

Proposed Use: Multifamily Apartment Building

Property Owners: Thirtyone Development, LLC, and Lobut Development LLC

Submitted:	
Property Survey: Yes	Preliminary Architectural Drawings: Yes
Site Plan: Yes	Preliminary Site Engineering Plans: Yes
Vehicle and Pedestrian Circulation Plan: Yes	Construction Time Schedule: No
Landscaping and Grading Plan: Yes	Description of Uses, Hours & Traffic Volume: Yes

SEQRA: Unlisted

Jefferson County 239-m Review: No

Zoning Information:	
District: Urban Mixed Use	Maximum Lot Coverage: 90 percent
Setback Requirements: F: 0', S: 0', R: 0'	Buffer Zones Required: Yes

Project Overview: The applicant proposes to construct a 61-unit, four-story multifamily apartment building and a 40-space parking lot on the collective footprint of the six subject parcels. The applicant proposes to assemble the subject parcels prior to construction. The building would be located fronting Main Avenue with surface parking in the rear. The building will be setback approximately eight feet from Main Avenue, using existing curb cuts on both sides of the building to access the parking in the rear.

Existing Conditions: The six subject parcels are currently vacant. There is also a vacant parcel on either side of the proposed project site that will be purchased by Neighbors of Watertown but will not be assembled to become part of the project area. Across Main Avenue to the south is a 41-unit apartment building as well as three commercial buildings. To the north on Main Street West are two Watertown Housing Authority properties with 170-units of housing between the two of them. There is a small commercial plaza on the north side of Main Street West.

Except for the Watertown Housing Authority Properties which are zoned Planned Campus, the rest of the surrounding area is zoned Urban Mixed Use.

Vehicular and Pedestrian Circulation: The applicant proposes to use the existing curb cuts onto Main Avenue that are on each side of the building, allowing access to the parking lot in the rear.

There is an existing sidewalk along the frontage of the building on Main Avenue that will remain. A sidewalk is also proposed along the western side of the building that will connect to the existing sidewalk and continue to the back and eastern side of the building to allow pedestrian access to all entrances.

Parking: The Urban Mixed-Use District allows a maximum of 20 parking spaces; however, the applicant is proposing 40 spaces. Section 310-36 (E)(3) of the Zoning Ordinance states that:

"Over 150 percent and up to 200 percent of the maximum (parking spaces) shall require a Transportation Demand Management Plan (TDMP)."

A Transportation Demand Management Plan was included in the application. The Land Use Code (LUC) 223, Affordable Housing was used to estimate the number of vehicle trips generated for the proposed project. The plan estimates that the project's travel demand is 35 total trips in the weekday AM peak hour and 37 in the weekday PM peak hour. This is below the 100-trip threshold guidance from the NYSDOT and the Institute of Transportation Engineers (ITE) for when a more detailed intersection analysis should be completed, therefore the site-generated traffic will not place an unreasonable burden on the existing roadway network.

While there is on-street parking available along Main Avenue, parking is restricted to one-hour during daytime hours.

Parking demand for the proposed project was calculated using the data in *ITE's Parking Generation Manual, 5th Edition.* Parking demand based on the number of bedrooms and the number of proposed units was generated for Land Use Code (LUC) 223, Affordable Housing. A conservative analysis of parking demand was calculated for the average and 85th percentile conditions. Peak parking demand for the proposed project is 47 spaces based on the average and 66 spaces based on the 85th percentile. The proposed project will provide 40 parking spaces.

The proposed project is located within 300 feet of two bus routes, A-1 State Street-East Main Street and C-1 Northside Loop. There is an existing bus shelter nearby on Mill Street which will allow residents

easier access to the Citibus, especially during inclement weather and to encourage residents to use public transit.

The proposed project will include four bicycle parking spaces to further reduce the demand for parking. The spaces will be placed in a well-lit location and will be conveniently accessible at the rear entrance, protected from vehicular traffic.

Sidewalks are included in the project along the site frontage on both sides of Main Avenue and lead to the city's urban pedestrian network. The proposed project will provide an ADA accessible sidewalk along the frontage and an accessible sidewalk to the rear of the building from the street to reduce the demand on vehicle usage.

While the number of proposed spaces is 200% over the maximum allowed in the Zoning Ordinance, the Transportation Demand Management Plan provided in the application adequately demonstrates that the additional parking will not have a negative impact on the surrounding transportation network or be excessive for the proposed use.

As required by the Parking Standards in Section 310-37 (E), four electric vehicle charging stations are being provided on-site. The proposed parking area design also includes sixteen ADA spaces.

Comprehensive Plan: The project is in the Black River Waterfront character area, which extends along both sides of the Black River throughout the city. The intention of this Character Area is to build on the setting of the river as a reinforcing asset to redevelopment. New development and redevelopment should be oriented around the river in all aspects of design, including preserving views, increased public access where feasible, and integrating green infrastructure or low impact development design (e.g., rain gardens, porous pavers, native plantings, etc.) to treat stormwater runoff before entering the river. Buildings should be placed on the site so that they do not obstruct the public's enjoyment of the river whether physically or visually. Open space should be integrated and developed for all users regardless of abilities

The Black River borders the parcels on the south side of Main Avenue. The proposed project will be built on the north side of the street and will neither obstruct views nor impede access to the river. The total acreage for the project site is approximately 3.4 acres, while only about 1.75 will be built up for the site. This will leave a large amount of open space, meeting the vision for this character area.

Zoning: The proposed apartment building is an allowed use-by-right in the Urban Mixed-Use District with Site Plan Approval. However, the site plan, as proposed, contains two nonconformities that could be legal only with relief in the form of Variances granted by the ZBA.

The form-based dimensional tables for the Urban Mixed-Use District in Section 310-21, contain requirements for building transparency and pedestrian access, each of which have not been met.

The transparency requirements in the Urban Mixed-Use District are 50% minimum transparency on the ground floor front façade and 30% transparency on the upper floor front and corner side façades. The applicant was only able to achieve 43.3% transparency on the ground floor and 27% and 26% transparency on the third and fourth floors, respectively. The applicant must apply to the Zoning Board of Appeals for an area variance to seek relief from the transparency requirements.

Additionally, the Urban Mixed Use District requirements for Pedestrian Access is one functional entryway at least every 30 feet along the front of the building. The proposed building is approximately 226 feet long, with one functional entryway proposed along the front façade. Due to the residential nature of the building, the applicant does not want to provide additional entryways on the front façade in order to control access for safety. Since this is more than the maximum 30 feet without a functional entryway, the applicant must seek relief from this requirement in the form of an application to the Zoning Board of Appeals for an Area Variance.

Landscaping: The applicant submitted a full Landscaping Plan, which meets the Landscape and Buffer Requirements of Section 310-83. The proposed plan includes interior parking lot landscaping within the parking lot with a large tree and smaller shrubs on each landscaped island. Additionally, the exterior of the parking lot along with the building will be screened with a variety of shade trees. The exterior of the building will be adequately landscaped with a variety of shrubs and perennials, and the dumpster will be screened as well.

SEQR: The proposed site plan is considered an Unlisted Actions under the State Environmental Quality Review Act (SEQRA). SEQRA review for the site plan as well for the required area variances that the applicant is seeking from the Zoning Board of Appeals should be completed in one review as a whole action to avoid segmentation.

The proposed project requires a permit, approval, or funding from several different agencies in addition to the Planning Commission such as the Housing Finance Agency, NYS DEC, NYS OPRHP (SHPO) and the Zoning Board of Appeals. As there are other involved agencies, a coordinated SEQRA review will have to be completed. This requires transmitting a copy of the applications to the agencies and establishing a Lead Agency. Staff feels that the Planning Commission is the most appropriate agency to be designated as the Lead Agency for SEQRA.

Staff has sent a copy of the applications to the various involved agencies and has asked for their concurrence with the Planning Commission being designated as the Lead Agency. Involved agencies have 30 days to respond before the Planning Commission can designate itself as the Lead Agency and complete the SEQRA review.

The Planning Commission may discuss the site plan application with the applicant, but it will not be able to vote on it until the SEQRA review has been completed. Therefore, the application should be tabled until the next meeting. Once the SEQRA review is completed at the next meeting, the Planning Commission can make a determination of significance and then consider the site plan.

Stormwater and Drainage: The applicant has satisfied the stormwater quality and quantity requirements as demonstrated in the SWPPP. The project reduces the impervious area and decreases the post-developed site runoff for the required storm events.

Erosion and Sediment Control: The applicant has provided the necessary erosion and sediment control measures to prevent impact from the land disturbance for the proposed development. The applicant will be required inspect and maintain the E&SC measures on shown on sheet C401 during construction.

Lighting: The applicant submitted a Photometric Plan, consistent with Section 310-84 of the Zoning Ordinance, which requires that light trespass not exceed 0.5 footcandles at the property line. The plan submitted shows light poles along the entrance drives, within the parking lot and near the rear entrance. There is no lighting shown near the front or side entrances, which could be a safety issue for residents

using those areas at night. The applicant shall consider additional lighting near entrances for pedestrian safety.

Miscellaneous: The Site Plan designates two snow storage areas along the north side of the parking lot. The landscaping plan shows trees proposed for this area. Snow removal operations could negatively impact the trees in this area. Per City Code, the applicant will be responsible for maintaining and replacing trees required for site plan approval. To avoid future damage to the trees, the applicant should amend the planting plan to relocate trees from the proposed snow storage areas.

The proposed Site Plan encompasses the lands of six parcels, which Neighbors of Watertown, Inc. does not presently own. Once the real estate purchase is complete, the applicant must assemble the subject parcels into a single parcel by way of a new metes and bounds description filed with the County Clerk. A Building Permit will not be issued prior to assemblage.

Permits: The applicant must obtain the following permits and other documentation, minimally, prior to construction: Building Permit, Water Permit, Sanitary Sewer Permit, Storm Sewer Permit, General City Permit for work within the ROW and a Zoning Compliance Certificate.

Planning Commission Action: Due to the need for the applicant to obtain two Variances from the ZBA and because of the coordinated SEQRA review that is required for the project, Staff recommends that the Planning Commission table this application.

Summary: The following items should be discussed and/or resolved prior to resubmittal by the applicant:

1. The applicant must obtain an Area Variance from the Zoning Board of Appeals granting relief from the transparency requirements in the Urban Mixed Use zoning district.

2. The applicant must obtain an Area Variance from the Zoning Board of Appeals granting relief from the required 30-feet between functional entryways on the front of the building.

3. The applicant shall consider the addition of lighting to the entrances to the building along the front and side for pedestrian safety.

4. To avoid future damage to the trees, the applicant should amend the planting plan to relocate trees from the proposed snow storage areas.

5. The applicant shall assemble all parcels into a single parcel, as proposed, by way of a new metes and bounds description filed with the County Clerk.

6. The applicant must obtain the following permits and other documentation, minimally, prior to construction: Building Permit, Water Permit, Sanitary Sewer Permit, Storm Sewer Permit, General City Permit for work within the ROW and a Zoning Compliance Certificate.

Site Photos

Approximate location of proposed apartment building on Main Avenue

Looking west down Main Avenue near proposed building location

Looking east down Main Avenue near proposed building location

View of proposed site from Mill Street

cc: Michael Delaney, City Engineer
Dana Aikins, Code Enforcement Supervisor
Reginald Schweitzer, Neighbors of Watertown, Inc, 112 Franklin Street, Watertown, NY 13601
Shelby Vakiener, LaBella Associates, 300 State Street, Suite 201, Rochester, NY 14621

July 18, 2023

Michael Lumbis, Planning and Community Development Director
City of Watertown
245 Washington Street, Room 305
Watertown, NY 13601

RE: Neighbors of Watertown – Watertown Apartments
Site Plan application to Planning Commission

Mr. Lumbis:

On behalf of Neighbors of Watertown, Inc., I am pleased to submit an application for site plan approval for an affordable housing project being proposed on Main Ave.

Neighbors of Watertown, Inc. is seeking Site Plan approval to develop an affordable housing project on an approximately 1.9-acre site which spans across 6 parcels (Tax Parcels 2-01-301 (160 Main), 2-01-301.001, 2-01-302, 2-01-332.002, 2-01-332.003, 2-01-332.002), located along Main Ave. just south of Mill Street.

The proposed affordable housing project is composed of a 61-unit, 4-story multi-family apartment building with 40 parking spaces and associated site improvements.

Included for your consideration of our request for Site Plan approval are 10 complete sets of the following items:

- Cover Letter
- Site Plan application
- Boundary and Topographical Survey
- Full set of Site Design plans including
    - Cover sheet
    - General Notes and Legend sheet
    - Existing Conditions and Demolition plan
    - Site Plan
    - Utility Plan
    - Grading and Erosion Control plan
    - Construction Detail sheets
    - Lighting Photometric Plan
    - Landscaping Plan

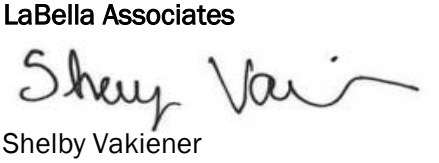
- Emergency Vehicular and Pedestrian Circulation Plan
- Preliminary Stormwater Pollution Prevention plan
- Preliminary Architectural Elevations
- Engineering Report
- SEQR Environmental Assessment Form (Short Form)
- Traffic Demand and Management Plan
- $250 Site Plan Major application fee check (delivered via a separate cover)

- Boundary and Topographical Survey – Stamped Original (delivered via a separate cover)
- Electronic copy of entire submission (PDF) (sent via separate cover on 7/18/2023)

We look forward to presenting this project to the Planning Commission on August 1, 2023. If you have any questions or need any additional information, please feel free to contact me at 585-770-2525 or svakiener@labellapc.com.

Respectfully submitted,

LaBella Associates



Shelby Vakiener
Civil Engineer

City of Watertown
SITE PLAN APPROVAL APPLICATION FORM

City of Watertown, Planning and Community Development Dept.
245 Washington Street, Room 305, Watertown, NY 13601
Phone: 315-785-7741 Email: planning@watertown-ny.gov

Received:

Please Note: The Site Plan Approval Application form is for projects where the building or parking area coverage of the lot will increase by more than 2,500 square feet.

Please provide responses for all sections and submit all required materials as noted on Page 2. Failure to submit all required information by the submittal deadline may result in Staff **not** placing your request on the agenda for the upcoming Planning Board meeting.

PROPERTY INFORMATION:

PROPOSED PROJECT NAME: Mill and Main Apartments

TAX PARCEL NUMBER: 2-01-301 (160 Main), 2-01-301.001, 2-01-302, 2-01-332.002, 2-01-332.003, 2-01-332.002

PROPERTY ADDRESS: 160 Main Ave

ZONING DISTRICT: UMU - Urban Mixed Use

APPLICANT INFORMATION:

NAME: Neighbors of Watertown, Inc., Reginald J. Schweitzer Jr. - Executive Director

ADDRESS: 112 Franklin Street

Watertown, NY 13601

PHONE NUMBER: (315) 782-8497

E-MAIL ADDRESS: Reg@neighborsofwatertown.com

PROPERTY OWNER INFORMATION (if different from applicant):

NAME: Thirtyone Development, LLC and Lobut Development, LLC, P.J. Simao - Owner

ADDRESS: 137 Main Street

Watertown, NY 13601

PHONE NUMBER: (315) 727-7000

E-MAIL ADDRESS: pj@dealmakerusa.com

ENGINEER/ARCHITECT/LANDSCAPE ARCHITECT INFORMATION:

NAME: LaBella Associates, Shelby Vakiener - Civil Engineer

ADDRESS: 300 State Street, Suite 201

Rochester, NY 14614

PHONE NUMBER: (585) 770-2525

E-MAIL ADDRESS: svakiener@labellapc.com

REQUIRED MATERIALS:

** The following drawings with the listed information **ARE REQUIRED, NOT OPTIONAL.** If the required information is not included and/or addressed, Planning Staff **will not** process the Site Plan Application.

All of the following drawings **must** be adequately dimensioned, including radii and must use darker line work and text for proposed features than for existing features.

☑ **COVER LETTER:** Must clearly and fully explain the proposed project in sufficient detail.

☑ **BOUNDARY and TOPOGRAPHIC SURVEY:** Depict existing features as of the date of the Site Plan Application. A Professional Land Surveyor licensed and currently registered to practice in the State of New York must perform the survey and create the map. **At least one copy** must contain the surveyor's original PLS wet stamp and an original signature. The rest may be copies thereof. The survey drawing **must** depict and label all of the following:

- **All** existing features and utilities on and within 50 feet of the subject property
- **All** existing property lines (bearings and distances), margins, acreage, zoning, easements, right-of-ways, existing land use, reputed owner, adjacent reputed owners and tax parcel numbers
- One-foot contours are with appropriate spot elevations
- North arrow and graphic scale
- All elevations are North American Vertical Datum of 1988 (NAVD88).

☑ **DEMOLITION PLAN** (if applicable)

- Depict and label **all** existing features on and within 50 feet of the subject property and (using darker text) all items proposed for demolition.

☑ **SITE PLAN:** The drawing must clearly label all proposed features as "proposed" and use darker line work and text for all proposed features than for existing features. It must also include a reference to the coordinate system used (NYS NAD83-CF preferred). In addition, the drawing **must** depict and label all of the following:

- **All** proposed **above** ground features
- **All** proposed easements and right-of-ways
- Land use, zoning, and tax parcel number
- Proposed parking and loading spaces, including all required ADA accessible spaces
- Proposed snow storage areas
- Refuse Enclosure Area (Dumpster), if applicable. **Please note:** Section 161-19.1 of the Zoning Ordinance states, "No refuse vehicle or refuse container shall be parked or placed within 15 feet of a party line without the written consent of the adjoining owner, if the owner occupies any part of the adjoining property."
- North arrow and graphic scale

☑ **GRADING PLAN:** This drawing must depict and label **all** of the following:

- **All** proposed **below** ground features, including elevations and inverts
- **All** proposed **above** ground features, including easements and right-of-ways
- One-foot existing contours (shown dashed and labeled with appropriate spot elevations)
- One-foot proposed contours (shown and labeled with appropriate spot elevations)
- Sediment and Erosion control, unless separate drawings are included as part of a Stormwater Pollution Prevention Plan (SWPPP).
- All elevations are North American Vertical Datum of 1988 (NAVD88).

☑ **UTILITY PLAN:** This drawing must include a note stating, "All water main and service work must be coordinated with the City of Watertown Water Department. The Water Department requirements supersede all other plans and specifications provided." It must also depict and label **all** of the following:

- **All** proposed above and below ground features
- **All** existing above and belowground utilities, including water, sanitary water, stormwater, electric, gas, telephone, cable, fiber optic, etc.
- **All** existing and proposed easements and right-of-ways.

☑ **LANDSCAPING PLAN:** This drawing must depict and label **all** of the following:

- **All** proposed **above** ground features
- **All** proposed trees, shrubs, other plantings and other proposed landscaping additions, keyed to a plant schedule that includes the scientific name, common name, size, quantity, etc. **Please note:** For additional landscaping requirements where nonresidential districts and land uses abut land in any residential district, please refer to Section 310-59, Landscaping of the City's Zoning Ordinance.
- **The Site Plan complies with and meets acceptable guidelines set forth in Appendix A - Landscaping and Buffer Zone Guidelines (August 7, 2007).**

☑ **VEHICULAR AND PEDESTRIAN CIRCULATION PLAN**

- Depict all vehicular **and** pedestrian traffic circulation, including a delivery or refuse vehicle and a City fire truck entering and exiting the property.
- Sidewalks within the City Right-of-Way **must** meet Public-Right-of-Way (PROWAG) standards.
- **The Site Plan is consistent with and, wherever possible, incorporates principles set forth in Appendix B – City of Watertown Complete Streets Policy (January 17, 2017).**

☑ **PHOTOMETRIC PLAN** (if applicable): This drawing must depict and label **all** of the following:

- **All** proposed **above** ground features
- Photometric spot elevations or labeled photometric contours of the property. **Please note:** Light spillage across **all** property lines shall not exceed 0.5 foot-candles.

☑ **CONSTRUCTION DETAILS and NOTES:**

- Provide all details and notes necessary to complete the project including, but not limited to, landscaping, curbing, catch basins, manholes, water line, pavement, sidewalks, trench, lighting, trash enclosure, etc.
- Provide maintenance and protection and traffic plans and notes for all required work within City streets including driveways, water laterals, sanitary laterals, storm connections, etc.
- The drawings must include the following note: "All work to be performed within the City of Watertown margin will require sign-off from a Professional Engineer, licensed and currently registered to practice in the State of New York, that the work was built according to the approved site plan and applicable City of Watertown standards. Compaction testing will be required for all work to be performed within the City of Watertown margin and must be submitted to the City of Watertown Codes Department."

☑ **PRELIMINARY ARCHITECTUAL PLANS** (if applicable): These plans must include **all** of the following for proposed buildings: Floor plan drawings, including finished floor elevations, exterior elevations including exterior materials and colors, as well as roof outlines depicting shape, slope and direction.

☑ **ENGINEERING REPORT**

**** The engineering report at a minimum must include the following:**

- Project location and description
- Existing and proposed sanitary sewer flows and summary
- Water flows and pressure
- Storm Water Pre and Post Construction calculations and summary
- Traffic impacts
- Lighting summary
- Landscaping summary

☑ **COMPLETED SEQR ENVIRONMENTAL ASSESSMENT FORM:** (Contact us if you need help choosing between the Short EAF and the Full EAF). The Complete EAF is available online at: http://www.dec.ny.gov/permits/6191.html

☑ **GENERAL INFORMATION**

- **All** items must include a valid stamp and an <u>original</u> signature by a Professional Engineer, Architect, Landscape Architect, or Surveyor licensed and currently registered to practice in the State of New York.

- If required, submit a copy of the Stormwater Pollution Prevention Plan (SWPPP) to the City of Watertown Engineering Department for review to obtain an MS4 SWPPP Acceptance Form.

<u>Post Construction SWPPP Requirements to Complete:</u>
In accordance with City Code Section 260, provide the following:
- *Submit a detailed as-built topographic and boundary survey of the site with all stormwater practices.*
- *Perform and submit results of insitu infiltration testing, updated drainage area maps and hydraulic calculations in a comprehensive Engineering Report based on As-Built Conditions.*
- *Submit a detailed post construction Maintenance Plan for all Stormwater Management Practices (SMP's) and provide a Maintenance Agreement with irrevocable letter of credit for approval. Maintenance Agreement shall be filed at the County Clerk's Office as a deed restriction on the property.*

- ** If required, a copy of all submittals sent to the New York State Department of Environmental Conservation (NYSDEC) for the sanitary sewer extension permit will also be sent to the City of Watertown Engineering Department.

- ** If required, a copy of all submittals sent to the New York State Department of Health (NYSDOH) will also be sent to the City of Watertown Engineering Department.

- ** When NYSDEC or NYSDOH permitting is required, the property owner/applicant shall retain a licensed Professional Engineer to perform inspections of the proposed utility work and to certify the completed works were constructed in substantial conformance with the approved plans and specifications.**

- Signage is not approved as part of this submission. It requires a Sign Permit from the City Code Enforcement Bureau. See Section 310-52.2 of the Zoning Ordinance.

- For non-residential uses, the applicant must include the proposed Hours of Operation.

<u>OPTIONAL MATERIALS</u>:

☐ **PROVIDE AN ELECTRONIC (.DWG) COPY OF THE SITE PLAN WITH AS-BUILT REVISIONS.** This will assist the City in keeping our GIS mapping up-to-date.

SUBMITTAL INSTRUCTIONS:

☑ Submit 15 complete collated sets of all required materials, addressed to:

Michael A. Lumbis, Planning and Community Development Director
City of Watertown
245 Washington Street, Room 305
Watertown, NY 13601

If the application requires Jefferson County Planning Board review, then the applicant must submit 16 "sets." Planning Staff will inform the applicant if this is necessary.

☑ Submissions must be collated and properly folded.

☑ If the applicant is not the property owner, the submission must include a signature authorization form or letter signed by the owner authorizing the applicant to apply on behalf of the owner.

☑ For any item(s) not checked in the Site Plan Approval Checklist, attach an explanation and comments.

☑ Provide an electronic copy of the entire submission in the form of a single, combined PDF file of the entire application, including cover letter, plans, reports, and all submitted material.

☑ Submit the required Application Fee

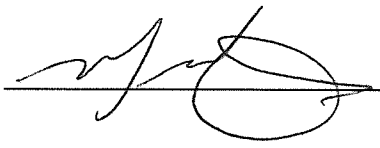
$150 for Site Plan Minor

$250 for Site Plan Major (any proposal to disturb more than 1 acre represents a Site Plan Major)

SIGNATURE

I certify that the information provided above is true to the best of my knowledge.

Applicant's name (please print) Reginald J. Schweitzer Jr. - Executive Director, Neighbors of Watertown, Inc

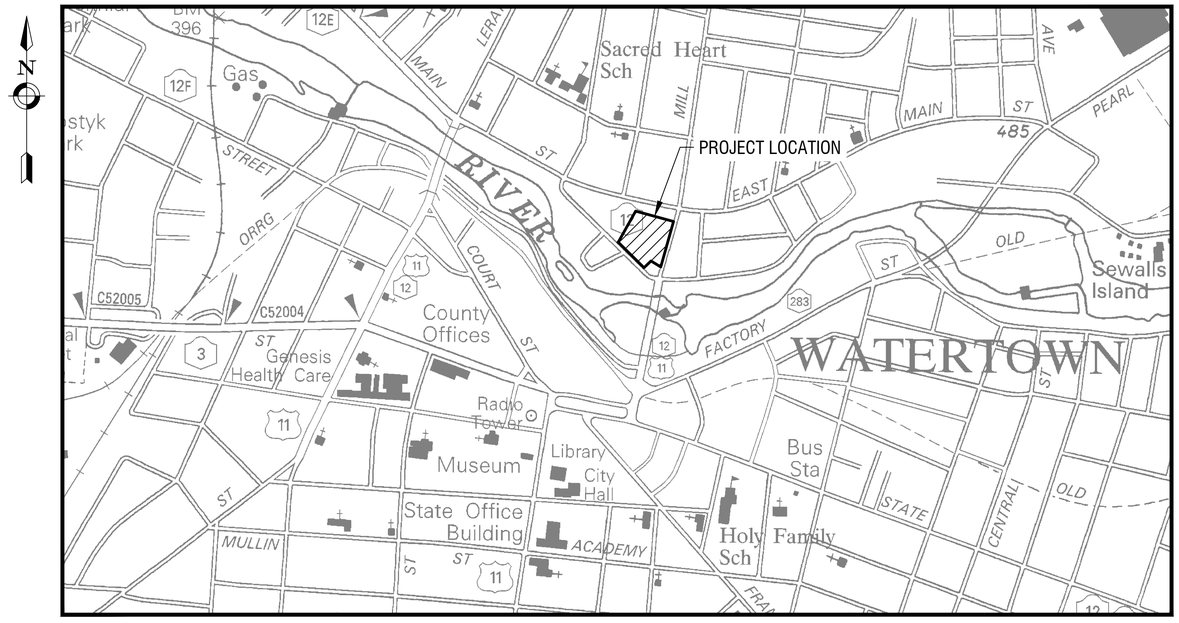
Applicant's Signature  Date: 7/18/2023

Meeting Information: The Planning Board normally meets at 3:00 p.m. on the first Tuesday of every month in Council Chambers at City Hall, 245 Washington Street. The application deadline is 14 days prior to the scheduled meeting date. Planning Board action does not represent final approval, as the Planning Board only votes to make a recommendation to City Council, which holds the sole authority to grant Site Plan Approval.

Occasionally, due to holidays or other reasons, meetings may occur on other dates and/or times. The City will announce any changes to meeting dates in advance on its website at www.watertown-ny.gov. Planning Staff *strongly* recommends scheduling a pre-application meeting prior to submitting a Site Plan Application. The entire site plan application process typically takes four-to-six weeks, depending on whether the application requires Jefferson County Planning Board review.

MILL AND MAIN APARTMENTS

160 MAIN AVE
WATERTOWN, NY 13601



LOCATION MAP
N.T.S.

NEIGHBORS OF WATERTOWN INC.

112 FRANKLIN STREET,
WATERTOWN, NY 13601
PROJECT NO: 2232540
JULY 2023

LaBella
Powered by partnership.

300 State Street, Suite 201
Rochester, NY 14614
585-454-6110

labellapc.com

ISSUED FOR SITE PLAN APPROVAL
JULY 2023

NEIGHBORS OF WATERTOWN INC.
PROJECT NO: 2232540

MILL AND MAIN APARTMENTS
160 MAIN AVE WATERTOWN, NY 13601

GENERAL NOTES

1. THE CONTRACTOR ALONE SHALL BE RESPONSIBLE TO LOCATE UTILITIES OUTSIDE THE RIGHT-OF-WAY INCLUDING PRIVATE ROADS.
2. SITE DRAINAGE, INCLUDING THE PROJECT SITE AND ADJACENT PRIVATE AND PUBLIC ROADWAYS, DRIVES, PARKING AREAS OR PROPERTIES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING ALL MATERIALS, TOOLS AND EQUIPMENT, INCLUDING SPECIAL CUTTING DEVICES, NECESSARY TO PERFORM THE WORK CONTAINED IN THIS CONTRACT.
4. THE SIZES AND MATERIAL OF CONSTRUCTION OF WATER MAINS, SANITARY SEWERS AND STORM SEWERS TO REMAIN ARE REPUTED. THE CONTRACTOR SHALL VERIFY SIZES OF ALL UTILITIES WHERE CONNECTIONS TO SAID EXISTING UTILITIES ARE REQUIRED. EXCAVATION TO VERIFY THESE UTILITIES SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
5. THE CONTRACTOR SHALL PROTECT ALL EXISTING SITE AMENITIES NOT DESIGNATED FOR REMOVAL.
6. UNLESS OTHERWISE INDICATED ON THE PLANS OR DIRECTED BY THE ARCHITECT/ENGINEER, THE CONTRACTOR IS RESPONSIBLE FOR PRESERVING AND PROTECTING FROM DAMAGE ALL TREES, SHRUBS AND PLANTS IN THE VICINITY OF THE PROPOSED WORK.
7. THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL EXISTING UTILITIES DESIGNATED TO REMAIN FOR THE DURATION OF THE CONTRACT.
8. ANY SITE AMENITY, UTILITY, STREET APPURTENANCE, OR OTHER ITEM WHICH BECOMES DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED IN-KIND BY THE CONTRACTOR AS DETERMINED BY THE PROJECT MANAGER OR ARCHITECT/ENGINEER AND AT NO ADDITIONAL COST TO THE OWNER.

SURVEY NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BID. NO ALLOWANCE WILL BE MADE FOR ADDITIONAL COSTS DUE TO CONTRACTOR'S FAILURE TO VERIFY EXISTING CONDITIONS.
2. THE CONTRACTOR SHALL LOCATE, MARK, SAFEGUARD AND PRESERVE ALL SURVEY MARKERS AND RIGHT-OF-WAY MARKERS IN THE AREA OF CONSTRUCTION.
3. ANY IRON PINS, MONUMENTS OR OTHER ITEMS DEFINING PROPERTY LINES WHICH ARE DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE PROPERLY TIED AND ACCURATELY RESET BY A NYS LICENSED SURVEYOR UPON COMPLETION OF THE WORK.
4. HORIZONTAL DATUM BASED OFF NAD83.
5. VERTICAL BASED OFF OF NAVD88.

DEMOLITION NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BID. NO ALLOWANCE WILL BE MADE FOR ADDITIONAL COSTS DUE TO CONTRACTOR'S FAILURE TO VERIFY EXISTING CONDITIONS AND DIMENSIONS.
2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY DIG SAFE NEW YORK AT 811 TO REQUEST UTILITY STAKEOUT OF ALL PUBLIC UTILITIES.
3. WORK ASSOCIATED WITH THIS CONTRACT WILL OCCUR AT AN ACTIVE AND FUNCTIONAL FACILITY. CONTRACTOR SHALL COORDINATE WITH THE OWNER TO MINIMIZE DISRUPTION TO THE OPERATIONS OF THE FACILITY. CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE A SAFE WORK SITE AND TO PROTECT THE PUBLIC, VISITORS AND EMPLOYEES FROM HARM AS A RESULT OF HIS CONSTRUCTION ACTIVITIES.
4. THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING ABOVE GROUND AND BELOW GROUND UTILITIES, STRUCTURES, AND APPURTENANCES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES, STRUCTURES, AND APPURTENANCES IN THE PATH OF AND ADJACENT TO THE PROPOSED WORK.
5. SITE DRAINAGE, INCLUDING THE PROJECT SITE AND ADJACENT PRIVATE AND PUBLIC ROADWAYS, DRIVES, PARKING AREAS OR PROPERTIES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
6. CONTRACTOR SHALL PROTECT AND SUPPORT ALL EXISTING UTILITIES DESIGNATED TO REMAIN FOR THE DURATION OF THE CONTRACT.
7. THE CONTRACTOR SHALL NOTIFY THE LOCAL GOVERNMENT, LOCAL FIRE DEPARTMENT AND THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) AS NECESSARY AND SHALL OBTAIN ANY REQUIRED PERMITS PRIOR TO BEGINNING WORK. COPIES OF ANY REQUIRED PERMITS SHALL BE PROVIDED TO THE OWNER PRIOR TO BEGINNING THE WORK.
8. CONTRACTOR SHALL REMOVE FROM SITE, MATERIALS NOT INDICATED TO BE SALVAGED INCLUDING ALL DEBRIS. ALL REMOVED MATERIALS SHALL BECOME THE PROPERTY OF CONTRACTOR WHO SHALL LEGALLY DISPOSE OF SAME.
9. ALL TREES, SHRUBS AND PLANTS DESIGNATED TO REMAIN AND DISTURBED BY CONSTRUCTION OPERATIONS, SHALL BE REPLACED IN-KIND AS DIRECTED BY THE ARCHITECT/ENGINEER AND/OR OWNER'S DESIGNATED REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
10. THE CONTRACTOR SHALL MAINTAIN SAFE VEHICULAR AND PEDESTRIAN ACCESS TO THE EXISTING BUILDINGS FOR THE DURATION OF THE CONTRACT.
11. WHEN EXISTING CONSTRUCTION WHICH IS TO REMAIN IS DAMAGED DURING THE COURSE OF CONSTRUCTION AS A RESULT OF CONTRACTORS WORK, IT SHALL BE REPAIRED AND/OR REPLACED WITH SIMILAR OR LIKE MATERIALS AS MUCH AS POSSIBLE, AT NO COST TO THE OWNER. ALL REPAIRS AND/OR REPLACEMENTS WILL BE SUBJECT TO OWNERS APPROVAL.
12. COORDINATE LOCATION OF TEMPORARY CONSTRUCTION FENCE AND TEMPORARY STONE STAGING AREA WITH OWNER

SITE NOTES

1. WELL COMPACTED SUBGRADE SHALL BE UTILIZED UNDERNEATH CONSTRUCTION OF PAVEMENT AND CONCRETE BASES.
2. ALL STAKEOUT FOR THE PROPOSED SITE IMPROVEMENTS SHALL BE COMPLETED BY A NEW YORK STATE LICENSED LAND SURVEYOR.
3. IF ANY DISCREPANCIES ARE NOTED BETWEEN THESE CONSTRUCTION DOCUMENTS AND INFORMATION PROVIDED OR AN ERROR IS SUSPECT, IT SHALL BE IMMEDIATELY REPORTED TO THE CONSTRUCTION MANAGER AND LABELLA ASSOCIATES PROJECT MANAGER IN WRITING.
4. ANY PROOF-ROLLING OF EXPOSED SUBBASE BY A MINIMUM 10 TON SMOOTH DRUM ROLLER SHALL BE DONE UNDER THE GUIDANCE OF, AND OBSERVED BY, QUALIFIED ENGINEERING PERSONNEL PRIOR TO PLACEMENT OF SUBBASE MATERIAL. THE ROLLER SHOULD BE OPERATED IN THE STATIC MODE AND COMPLETE AT LEAST TWO (2) PASSES OVER THE EXPOSED SUBGRADES.

UTILITY NOTES

1. CONTRACTOR SHALL COORDINATE INSTALLATION OF WATER MAIN / WATER SERVICE WITH JEFFERSON COUNTY WATER AUTHORITY (JCWA) AND THE JEFFERSON COUNTY HEALTH DEPARTMENT (JCDOH). NO WORK SHALL BEGIN ON THE WATER MAIN / WATER SERVICE WITHOUT JCWA AND JCDOH SIGNATURES ON THE UTILITY PLAN.
2. CONTRACTOR SHALL COORDINATE INSTALLATION OF SANITARY MAIN / SANITARY SERVICE WITH JEFFERSON COUNTY PURE WATERS (JCPW). NO WORK SHALL BEGIN ON THE SANITARY MAIN / SANITARY SERVICE WITHOUT JCPW SIGNATURE ON THE UTILITY PLAN.

GRADING NOTES

1. THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF OSHA, AND ANY OTHER AGENCY HAVING JURISDICTION WITH REGARD TO SAFETY PRECAUTIONS WITH TRENCHING OPERATIONS. THE REQUIREMENTS SET FORTH HEREIN ARE INTENDED TO SUPPLEMENT REQUIREMENTS ESTABLISHED BY THESE AGENCIES. IN THE CASE OF A CONFLICT BETWEEN REQUIREMENTS OF OTHER JURISDICTIONAL AGENCIES AND THESE DOCUMENTS, THE MORE STRINGENT REQUIREMENT ON THE CONTRACTOR SHALL APPLY.
2. SHEETING, IF REQUIRED DURING CONSTRUCTION, IS CONSIDERED TO BE PART OF THIS CONTRACT AND SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
3. ALL TRENCHES THROUGH PAVEMENT SHALL BE SAW CUT PRIOR TO EXCAVATION AND AGAIN PRIOR TO PAVEMENT RESTORATION.
4. CONTRACTOR SHALL ADJUST THE RIMS OF ALL MANHOLES, CATCH BASINS, VALVE BOXES AND OTHER UTILITY SITE STRUCTURES TO MEET FINISHED GRADE IN AREAS REQUIRING REPAVING OR REGRADING AS PART OF THE WORK, INCLUDING THOSE THAT MAY NOT BE SHOWN ON THE PLANS.
5. VOIDS LEFT BY UTILITY OR STRUCTURE REMOVAL OR GRUBBING OPERATIONS SHALL BE BACKFILLED AND PROPERLY COMPACTED WITH STRUCTURAL FILL (NYSDOT ITEM 304.12) IN AREAS UNDER AND WITHIN 5 FEET HORIZONTALLY OF ALL STRUCTURES, BUILDINGS AND PAVEMENTS. IN GRASSED AREAS, VOIDS LEFT SHALL BE FILLED AND PROPERLY COMPACTED WITH SUITABLE ON-SITE OR IMPORTED EARTHEN BACKFILL. ALL DISTURBED AREAS SHALL BE RESTORED.
6. THE CONTRACTOR SHALL DEWATER ALL EXCAVATIONS TO PREVENT THE INTRODUCTION OF GROUNDWATER INTO THE TRENCHES/EXCAVATIONS. PROVIDE ALL EQUIPMENT NECESSARY TO MAINTAIN THE GROUNDWATER LEVEL AS NECESSARY.
7. THE CONTRACTOR SHALL PLACE AT MINIMUM 6 INCHES OF CLEANED SCREENED TOPSOIL IN ALL DISTURBED AREAS PRIOR TO SEEDING.

EROSION AND SEDIMENT CONTROL NOTES

1. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, AND LOCAL GOVERNING SOIL AND WATER CONSERVATION AGENCY RECOMMENDATIONS AND STANDARDS. CONTRACTOR SHALL SUBMIT PROPOSED EROSION CONTROL PLAN INCLUDING SEQUENCING OF WORK TO THE ENGINEER FOR REVIEW PRIOR TO START OF WORK.
2. UTILIZE CONSTRUCTION METHODS/TECHNIQUES, WHICH WILL LIMIT THE EXPOSED EARTHEN AREAS AND MINIMIZE THE EFFECT OF EARTH DISTURBANCE ACTIVITIES ON SOIL EROSION. THE AREA OF DISTURBANCE SHALL BE LIMITED TO A MAXIMUM OF 5 ACRES UNLESS OTHERWISE APPROVED BY THE ENGINEER.
3. ALL SEDIMENTATION BARRIERS AND OTHER TEMPORARY OR PERMANENT MEASURES SHALL BE IN PLACE PRIOR TO THE START OF CONSTRUCTION. PLANS SHOW THE SUGGESTED MINIMUM MEASURES REQUIRED.
4. REMOVAL OF ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE COMPLETED AT THE APPROVAL OF THE OWNER AND ENGINEER. THE COST OF REMOVING THESE MEASURES SHALL ALSO BE INCLUDED IN THE BID PRICE.
5. FOR THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL PROTECT ALL ON-SITE, ADJACENT AND/OR DOWNSTREAM STORM/SANITARY SEWERS, AND/OR OTHER WATER COURSES FROM CONTAMINATION BY WATER BORNE SILTS, SEDIMENTS, FUELS, SOLVENTS, LUBRICANTS OR OTHER POLLUTANTS ORIGINATING FROM ANY WORK DONE ON, OR IN SUPPORT OF THIS PROJECT.
6. DURING CONSTRUCTION NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE INTO STORM/SANITARY SEWERS, DITCHES OR OTHER WATERS OF NEW YORK STATE, NOR SHALL WASHINGS FROM CONCRETE TRUCKS, MIXERS OR OTHER DEVICES BE ALLOWED TO ENTER ANY STORM/SANITARY SEWERS, DITCHES, RIVERS, OR WATER COURSES.
7. ALL EXCAVATED OR IMPORTED EARTHEN STOCKPILES SHALL BE SUITABLY STABILIZED AND PROTECTED BY SILT FENCE SO THAT IT CANNOT REASONABLY ENTER ANY WATER BODY, OR STORM OR SANITARY SEWER.
8. ALL METHODS AND EQUIPMENT PROPOSED BY THE CONTRACTOR TO ACCOMPLISH THE WORK FOR EROSION AND POLLUTION CONTROL SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
9. THE CONTRACTOR SHALL BE REQUIRED TO TREAT TRAVELED AREAS TO CONTROL DUST. WATER SHALL BE APPLIED TO SUCH TRAVELED AREAS AS THE ARCHITECT/ENGINEER OR OWNER'S DESIGNATED REPRESENTATIVE MAY DESIGNATE. THE NUMBER OF APPLICATIONS AND THE AMOUNT OF WATER SHALL BE BASED UPON FIELD AND WEATHER CONDITIONS.
10. ALL AREAS OF SOIL DISTURBANCE RESULTING FROM THIS PROJECT WHICH WILL NOT BE SUBJECT TO FURTHER EARTHWORK OR CONSTRUCTION ACTIVITIES SHALL BE PERMANENTLY SEEDED TO ESTABLISH GRASS, AND MULCHED WITH HAY OR STRAW WITHIN ONE WEEK OF FINAL DISTURBANCE. MULCH SHALL BE MAINTAINED UNTIL A SUITABLE VEGETATIVE COVER IS ESTABLISHED.
11. CONTRACTOR STAGING AREAS AND CONSTRUCTION ENTRANCE LOCATIONS SHALL BE COORDINATED WITH THE OWNER PRIOR TO START OF CONSTRUCTION. STABILIZED CONSTRUCTION ENTRANCE(S), AS SHOWN ON THE PLANS SHALL BE PROVIDED. ALL DISTURBED AREAS SHALL BE RESTORED.
12. ALL CATCH BASINS/DRAINAGE INLETS SHALL HAVE STONED INLET PROTECTION AROUND THEM AND GEOTEXTILE FABRIC OVER THE GRATE TO PREVENT SEDIMENTATION FROM ENTERING THE STORM SYSTEM.
13. TILL ALL COMPACTED SOILS LOCATED IN LAWN AREAS TO RESTORE THE ORIGINAL PROPERTIES OF THE SOIL PRIOR TO SEEDING.

LANDSCAPE NOTES

1. ALL PLANTS SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS AS NOTED IN THE LATEST EDITION OF AMERICAN STANDARD FOR NURSERY STOCK BY AMERICAN ASSOCIATION OF NURSERYMEN, ANSI Z60.1. ALL PLANTS AND MATERIALS SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 611 OF THE NYSDOT STANDARD SPECIFICATIONS. ALL LAWNS, GROUND VEGETATION INCLUDING PREPARATION, ESTABLISHMENT AND MANAGEMENT MATERIALS AND METHODS SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 610 OF THE NYSDOT STANDARD SPECIFICATIONS. PRUNING AND REMOVING OF VEGETATION MATERIALS AND METHODS SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 610 OF THE NYSDOT STANDARD SPECIFICATIONS.

2. REPLACE, IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, ALL PLANTS THAT ARE MISSING, DEAD, OR DO NOT DEVELOP FROM PLANTING STOCK, OR AS DETERMINED BY THE CLIENT ARE IN UNHEALTHY OR UNSIGHTLY CONDITION, AND HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES OR OTHER CAUSES DUE TO THE CONTRACTORS NEGLIGENCE. CONTRACTOR SHALL BEAR THE COST OF COMPLETE REPLACEMENT(S). IN CASE OF ANY QUESTIONS REGARDING THE CONDITION AND SATISFACTORY ESTABLISHMENT OF A REJECTED PLANT, THE LANDSCAPE ARCHITECTS DECISION IS FINAL. PROVIDE A GUARANTEE FOR ALL REPLACEMENT PLANTS FOR AT LEAST ONE FULL GROWING SEASON.

3. REMOVE AND IMMEDIATELY REPLACE ALL PLANTS, AS DETERMINED BY THE CLIENT TO BE UNSATISFACTORY DURING THE INITIAL PLANTING INSTALLATION.

4. CONTRACTOR SHALL RETAIN FOR INSPECTION ALL RECEIPTS FOR PLANTING MATERIAL PLANTING STOCK IS TO BE MADE AVAILABLE IN ORIGINAL PACKAGING AND LABELING FOR INSPECTION BY THE CLIENT PRIOR TO INSTALLATION.

5. SHRUBS SHALL MEET THE REQUIREMENTS FOR HEIGHT INDICATED IN THE PLANT LIST. THE MEASUREMENTS FOR HEIGHT SHALL BE TAKEN FROM THE GROUND LEVEL TO THE AVERAGE HEIGHT OF THE TOP BRANCHES OF THE PLANT, AND NOT THE LONGEST BRANCH. SINGLE STEMMED OR THIN PLANTS WILL NOT BE ACCEPTED. SIDE BRANCHES SHALL BE GENEROUS, WELL TWIGGED, AND THE PLANT AS A WHOLE WELL SEATED IN THE GROUND. PLANTS SHALL BE IN A MOIST, VIGOROUS CONDITION, FREE FROM DEAD WOOD, BRUISES, OR OTHER ROOT OR BRANCH INJURIES.

6. PLANTED AREAS WILL BE INSPECTED AT COMPLETION OF INSTALLATION AND ACCEPTED SUBJECT TO COMPLIANCE WITH SPECIFIED MATERIALS AND INSTALLATION REQUIREMENTS. INSPECTION TO DETERMINE FINAL ACCEPTANCE OF PLANTED AREAS WILL BE MADE BY THE CLIENT UPON CONTRACTORS REQUEST. PROVIDE NOTIFICATION AT LEAST 10 WORKING DAYS BEFORE REQUESTED INSPECTION DATE. PLANTED AREAS WILL BE ACCEPTED PROVIDED ALL MATERIALS ARE ALIVE AND IN A HEALTHY, VIGOROUS CONDITION. UPON FINAL ACCEPTANCE, THE OWNER WILL ASSUME MAINTENANCE.

7. ONE YEAR GUARANTEE SHALL BE PROPERTY ON ALL NEW AND RELOCATED PLANT MATERIALS FROM DATE OF FINAL ACCEPTANCE TO THE OWNER.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN QUANTITY TAKEOFF.

9. THE CONTRACTOR SHALL PERFORM A ROUGH FIELD STAKE OUT OF ALL PLANT MATERIAL AND SHRUB BEDS. CONTACT THE LANDSCAPE ARCHITECT FOR INSPECTION AND APPROVAL. LOCATIONS SHOWN ON THE PLAN CONVEY DESIGN INTENT ONLY. ACTUAL LOCATIONS WILL BE AS DIRECTED BY THE LANDSCAPE ARCHITECT AT THE TIME OF INSTALLATION.

10. NAMES OF WOODY PLANT MATERIAL MUST COMPLY WITH "STANDARDIZED PLANT NAMES" AS ADOPTED BY THE LATEST EDITION OF THE AMERICAN JOINT COMMITTEE OF HORTICULTURAL NOMENCLATURE. PROVIDE STOCK TRUE TO BOTANICAL NAME AND LEGIBLY TAGGED.

11. THE CONTRACTOR IS HEREBY NOTIFIED THAT UNDERGROUND UTILITIES EXIST AND HE SHOULD OBTAIN CURRENT UTILITY RECORD MAPS AND NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK.

12. SHOULD LOCATION OF TREES BE WITHIN 5' OF UNDERGROUND UTILITIES, RELOCATE SAID TREES TO MIN. OF 5' FROM ROOT BALL TO UTILITIES.

13. SHOULD LOCATIONS OF TREES BE WITHIN 20' OF OVERHEAD WIRES, RELOCATE SAID TREES TO MIN. OF 20' TO WIRES.

14. STAKE AND WRAP TREES IMMEDIATELY AFTER PLANTING. STAKES AND WRAPPING ARE TO BE REMOVED BY THE CONTRACTOR AT THE END OF THE GUARANTEE PERIOD.

15. MULCH ALL BEDS WITH 3 INCHES FINELY GROUND BARK MULCH- COLOR, BLACK.

16. PLANTING BACK FILL MIXTURE: 4 PARTS TOP SOIL; 1 PART APPROVED ORGANIC MATERIAL; 1/2 PART WELL ROTTED MANURE; 10 LBS. 10-10-10 PLANTING FERTILIZER THOROUGHLY MIXED PER CUBIC YARD.

17. TOPSOIL SHALL BE FURNISHED FROM THE STOCKPILED ON-SITE MATERIAL. IF AN INSUFFICIENT QUANTITY EXISTS, FURNISH FROM OFF-SITE SOURCES IN QUANTITIES SUFFICIENT TO COMPLETE THE REQUIREMENTS AS SPECIFIED. TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE SOIL, CHARACTERISTIC OF PRODUCTIVE SOIL IN THE VICINITY, REASONABLE FREE FROM STONES, CLAY LUMPS, ROOTS AND OTHER FOREIGN MATTER WITH AN ACIDITY BETWEEN 6.0 AND 6.8 PH. PROPOSED TOPSOIL MATERIAL FROM OFF-SITE SOURCES SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT. SUBMIT A 1 GALLON SAMPLE WITH LABORATORY RESULTS (SIEVE, PH, ORGANIC) FOR APPROVAL.

18. A MINIMUM OF 18" OF PREPARED TOPSOIL SHALL BE PROVIDED IN ALL PROPOSED SHRUB BEDS. ALL EXISTING SOIL AND OTHER MATERIAL WITHIN THE SHRUB BED AREA IS TO BE REMOVED COMPLETELY FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.

19. ANTIDESICANT: PROTECTIVE FILM EMULSION, PROVIDING A PROTECTIVE FILM OVER PLANT SURFACES, BUT PERMEABLE TO PERMIT TRANSPIRATION. MIXED AND APPLIED IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS. APPLY TO ALL BROADLEAF EVERGREEN SHRUBS PER MANUFACTURER'S RECOMMENDATIONS.

20. LANDSCAPE MATERIALS SHALL BE INSTALLED BY LOCAL COMPANIES FAMILIAR WITH THE CONDITIONS IN THIS AREA THAT EMPLOY NYS CERTIFIED NURSERY PROFESSIONALS.

21. STACK PLANTS AS INDICATED OR AS APPROVED IN THE FIELD. IF OBSTRUCTIONS ARE ENCOUNTERED THAT ARE NOT SHOWN ON THE DRAWINGS, DO NOT PROCEED PLANTING OPERATIONS UNTIL ALTERNATIVE PLANT LOCATIONS HAVE BEEN SELECTED.

22. MAINTAIN PLANTS UNTIL COMPLETION AND FINAL ACCEPTANCE OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PRUNING, CULTIVATING, EDGING, REMULCHING, FERTILIZING, WEEDING, WATERING AS REQUIRED FOR HEALTHY GROWTH, AND APPLICATION OF APPROPRIATE INSECTICIDES AND FUNGICIDES NECESSARY TO MAINTAIN PLANTS FREE OF INSECT AND DISEASE. RESET SETTLED PLANTS TO PROPER GRADE AND POSITION. RESTORE PLANTING SAUCER AND REMOVE DEAD MATERIAL. TIGHTEN AND REPAIR GUIDE WIRES AND DEFICIENCIES WITHIN THE FIRST 24 HOURS OF INITIAL PLANTING, AND NOT LESS THAN TWICE PER WEEK UNTIL FINAL ACCEPTANCE.

23. LAWN SEED MIXTURE- APPLY TO ALL DISTURBED AREAS NOT PAVED, PLANTED, DESIGNATED TO REMAIN NATURAL OR OTHERWISE SEEDED. MIX SHALL CONSIST OF THE FOLLOWING:

	% WEIGHT	% PURITY	% GERMINATION
KEYSTONE PERENNIAL RYE GRASS	25	85	85
CHARISMATIC PERENNIAL RYE GRASS	25	85	85
CINDY LOU CREEPING RED FESCUE	20	85	80
COMMON KENTUCKY BLUEGRASS	30	97	80

SEEDING RATE: 200 LBS. PER ACRE
FERTILIZER: 18:24:3 GRANULAR RATE: 1,000 LBS. PER ACRE
MULCH ALL SEEDED AREAS WITH APPROVED STRAW AT A RATE OF 4,000 LBS. PER ACRE.

LEGEND

EXISTING	PROPOSED	DESCRIPTION	EXISTING	PROPOSED	DESCRIPTION
		PROJECT BENCHMARK / CONTROL POINTS			END SECTION
		WETLAND			CATCH BASIN
		WETLAND BUFFER			DRAIN BASIN
		BORING LOCATIONS			MANHOLE (STORM SEWER)
		SAWCUT			MANHOLE (SANITARY SEWER)
		GUIDE RAIL			CLEAN OUT
		TREE/VEGETATION LIMIT			DOWN SPOUT
BLDG	BLDG	BUILDING/STRUCTURE			HYDRANT
		PROPERTY LINE			VALVE
		SETBACK LINE			SAMPLING TAP
		EASEMENTS			FLOW ARROW
		RIGHT-OF-WAY			TELEPHONE LINE
		RETAINING WALL			OVERHEAD ELECTRIC
		FLAG POLE			UNDERGROUND ELECTRIC
		SIGN			GAS LINE
		DECIDUOUS TREE			SANITARY LINE
		CONIFEROUS TREE			STORM LINE
		OUTLET PROTECTION			STORM UNDERDRAIN PIPE
		BIORETENTION			WATER LINE
		LIGHT POLE	-510-	510	MAJOR CONTOUR
		UTILITY POLE	-509-	509	MINOR CONTOUR
					℄ OF DRAINAGE SWALE
					EROSION FENCE
					SILT SOCK INLET PROTECTION
					SILT FENCE INLET PROTECTION
					CHECK DAM
					STABILIZED CONSTRUCTION ENTRANCE

DRAWING INDEX

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EXP: ##/##/20##

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
160 MAIN AVE
WATERTOWN, NY 13601

NO:	DATE:	DESCRIPTION:
Revisions		

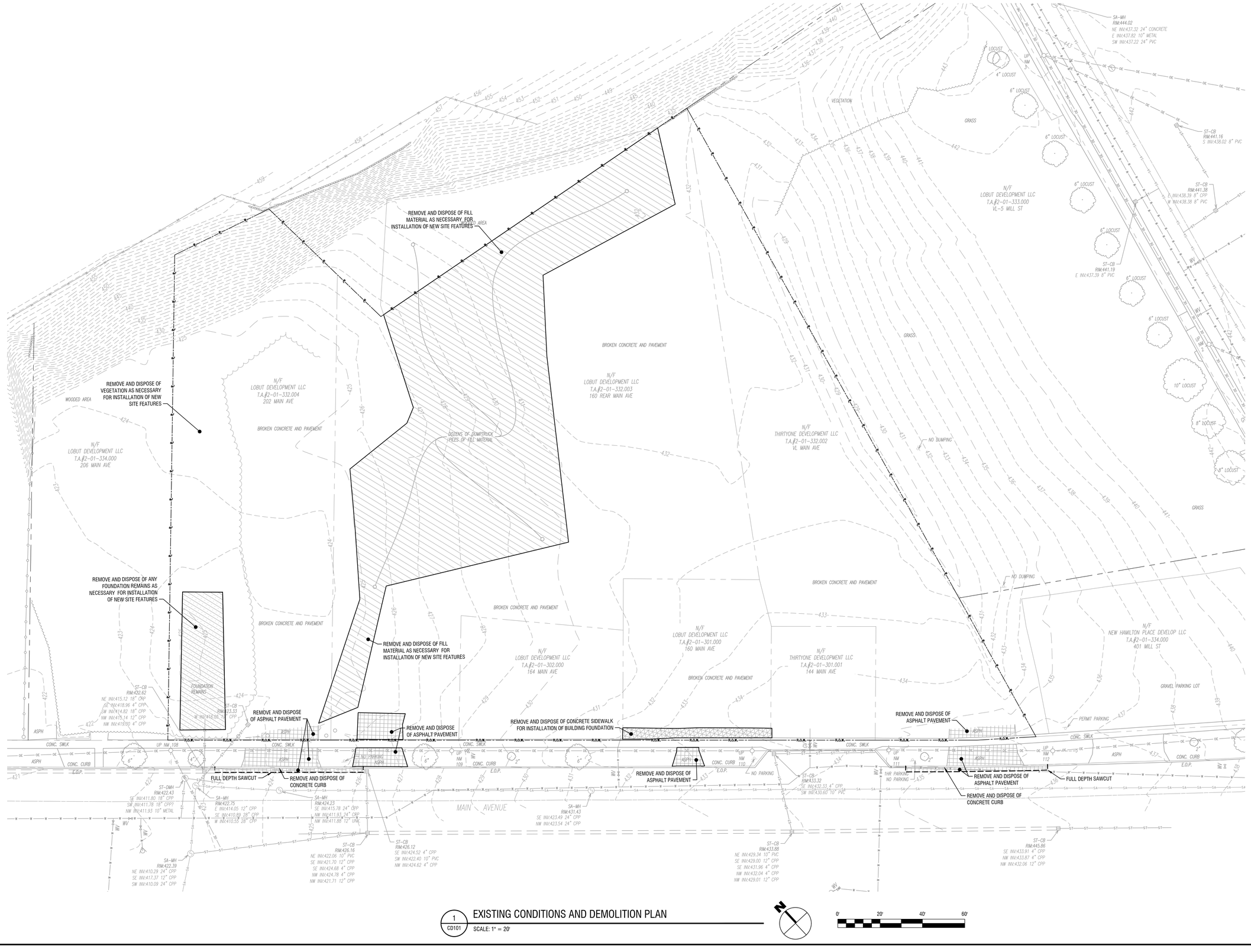
PROJECT NUMBER: 2232540
DRAWN BY: SRV/SCB
REVIEWED BY: DPB
ISSUED FOR: SITE PLAN APPROVAL
DATE: JULY 2023
DRAWING NAME:

GENERAL NOTES, LEGEND AND DRAWING INDEX

DRAWING NUMBER:

C001

VERSION 23.1
7/18/2023 4:10 PM



1 CD101 EXISTING CONDITIONS AND DEMOLITION PLAN

SCALE: 1" = 20'

0' 20' 40' 60'

VERSION 23.1
7/18/2023 3:13 PM

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Revisions		

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REVIEWED BY: DPB

ISSUED FOR: SITE PLAN APPROVAL

DATE: JULY 2023

DRAWING NAME:

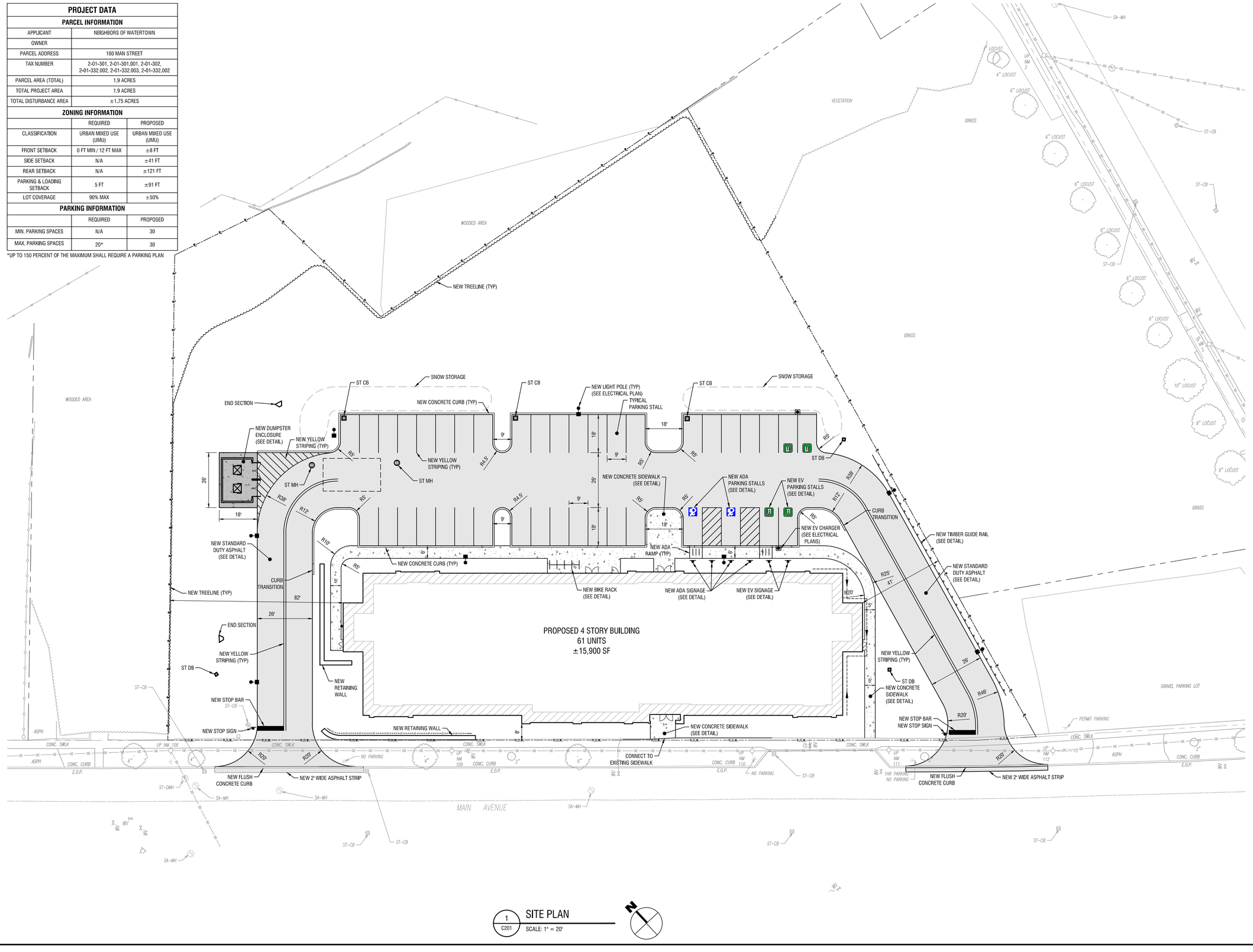
EXISTING CONDITIONS AND DEMOLITION PLAN

DRAWING NUMBER:

CD101

PROJECT DATA		
PARCEL INFORMATION		
APPLICANT	NEIGHBORS OF WATERTOWN	
OWNER		
PARCEL ADDRESS	160 MAN STREET	
TAX NUMBER	2-01-301, 2-01-301.001, 2-01-302, 2-01-332.002, 2-01-332.003, 2-01-332.002	
PARCEL AREA (TOTAL)	1.9 ACRES	
TOTAL PROJECT AREA	1.9 ACRES	
TOTAL DISTURBANCE AREA	±1.75 ACRES	
ZONING INFORMATION		
	REQUIRED	PROPOSED
CLASSIFICATION	URBAN MIXED USE (UMU)	URBAN MIXED USE (UMU)
FRONT SETBACK	0 FT MIN / 12 FT MAX	±8 FT
SIDE SETBACK	N/A	±41 FT
REAR SETBACK	N/A	±121 FT
PARKING & LOADING SETBACK	5 FT	±91 FT
LOT COVERAGE	90% MAX	±50%
PARKING INFORMATION		
	REQUIRED	PROPOSED
MIN. PARKING SPACES	N/A	30
MAX. PARKING SPACES	20*	30

*UP TO 150 PERCENT OF THE MAXIMUM SHALL REQUIRE A PARKING PLAN



1 / C201 SITE PLAN
SCALE: 1" = 20'

VERSION 23.1
7/18/2023 4:03 PM

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EXP: ##/##/20##

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PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
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Revisions		

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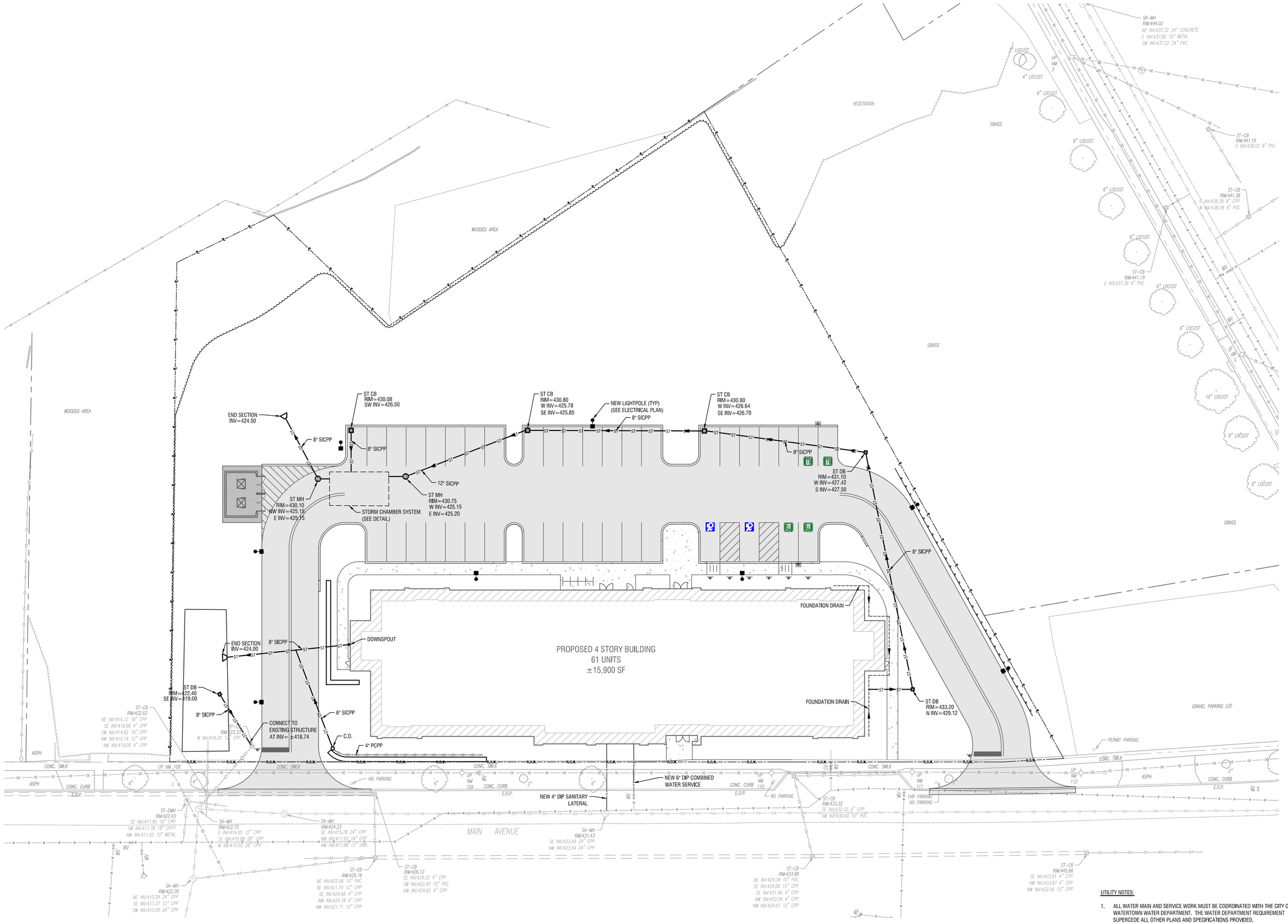
REVIEWED BY: DPB
ISSUED FOR: SITE PLAN APPROVAL
DATE: JULY 2023
DRAWING NAME:

SITE PLAN

DRAWING NUMBER:

C201



1 C301 UTILITY PLAN

SCALE: 1" = 20'

0' 20' 40' 60'

UTILITY NOTES:

1. ALL WATER MAIN AND SERVICE WORK MUST BE COORDINATED WITH THE CITY OF WATERTOWN WATER DEPARTMENT. THE WATER DEPARTMENT REQUIREMENT SUPERCEDE ALL OTHER PLANS AND SPECIFICATIONS PROVIDED.

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DRAWN BY: SRV/SCB

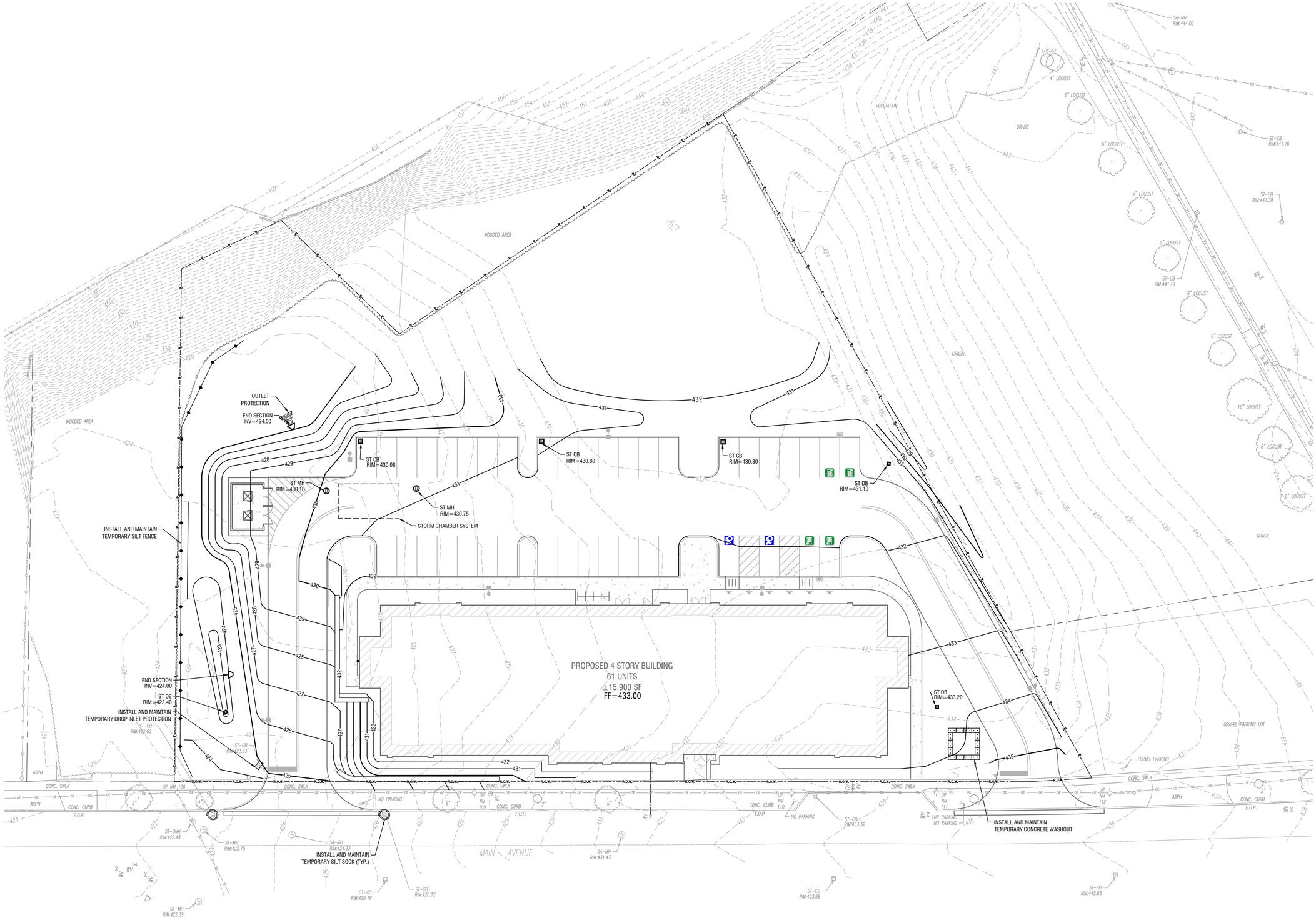
REVIEWED BY: DPB

ISSUED FOR: SITE PLAN APPROVAL

DATE: JULY 2023

DRAWING NAME: UTILITY PLAN

DRAWING NUMBER: C301



1 C401 GRADING AND EROSION CONTROL PLAN

SCALE: 1" = 20'

VERSION 23.1
7/18/2023 3:14 PM

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Rochester, NY 14614
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NOT FOR CONSTRUCTION

EXP: ##/##/20## EXP: ##/##/20##

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
160 MAIN AVE
WATERTOWN, NY 13601

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2232540

DRAWN BY: SRV/SCB

REVIEWED BY: DPB

ISSUED FOR: SITE PLAN APPROVAL

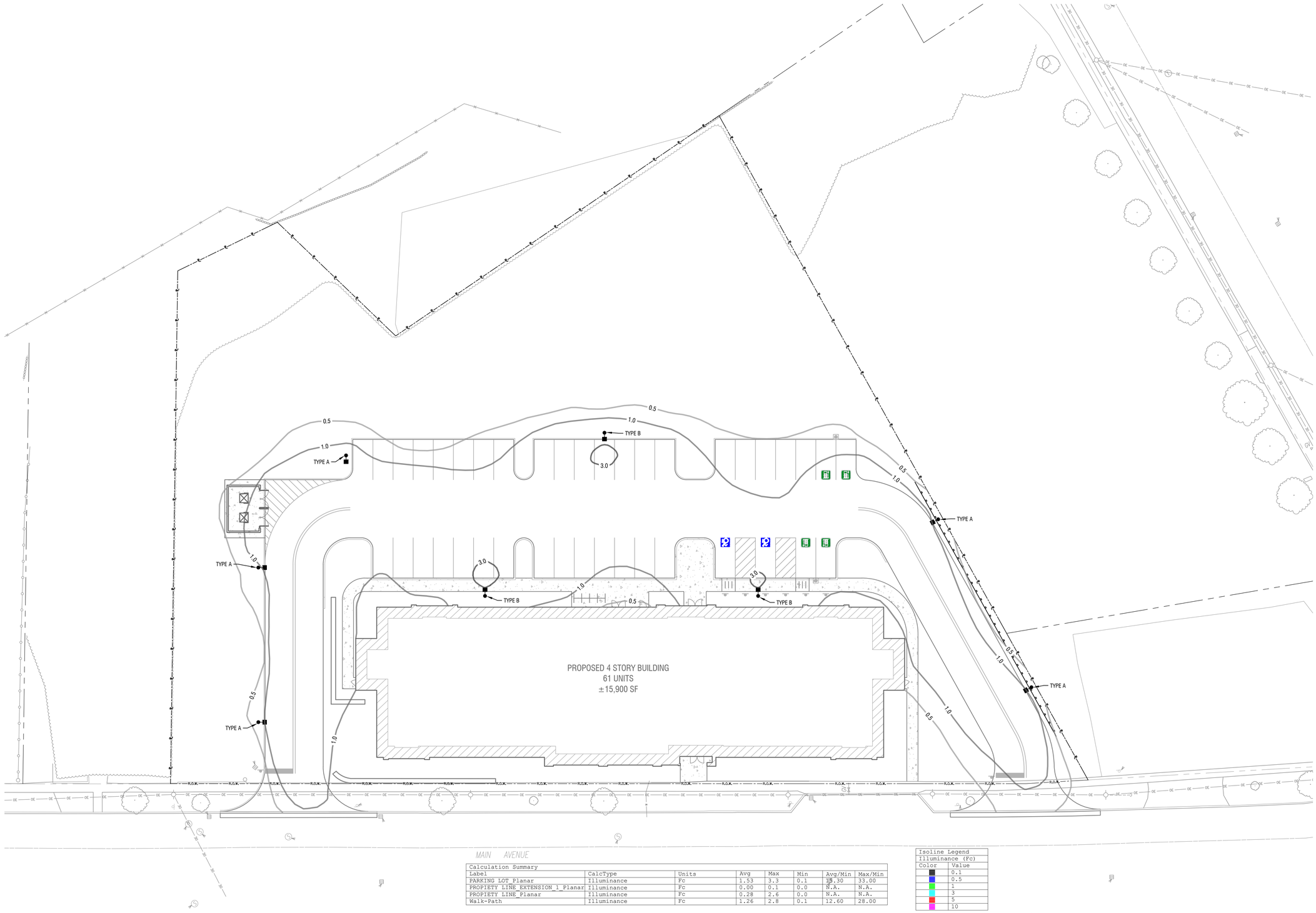
DATE: JULY 2023

DRAWING NAME:

GRADING AND EROSION CONTROL PLAN

DRAWING NUMBER:

C401



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PARKING LOT_Planar	Illuminance	Fc	1.53	3.3	0.1	15.30	33.00
PROPIETY LINE_EXTENSION_1_Planar	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.
PROPIETY LINE_Planar	Illuminance	Fc	0.28	2.6	0.0	N.A.	N.A.
Walk-Path	Illuminance	Fc	1.26	2.8	0.1	12.60	28.00

Isoline Legend	
Illuminance (Fc)	
Color	Value
	0.1
	0.5
	1
	3
	5
	10

Luminaire Schedule								
Symbol	Qty	Arrangement	Description	Tag	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	Mounting Height
	3	Single	RSX1 LED P2 40K R4	B	0.900	9972	72.95	218.85	25
	5	Single	RSX1 LED P2 40K R3 HS	A	0.900	6908	72.95	364.75	25

1 / E501 LIGHTING PLAN
SCALE: 1" = 20'

N

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CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
160 MAIN AVE
WATERTOWN, NY 13601

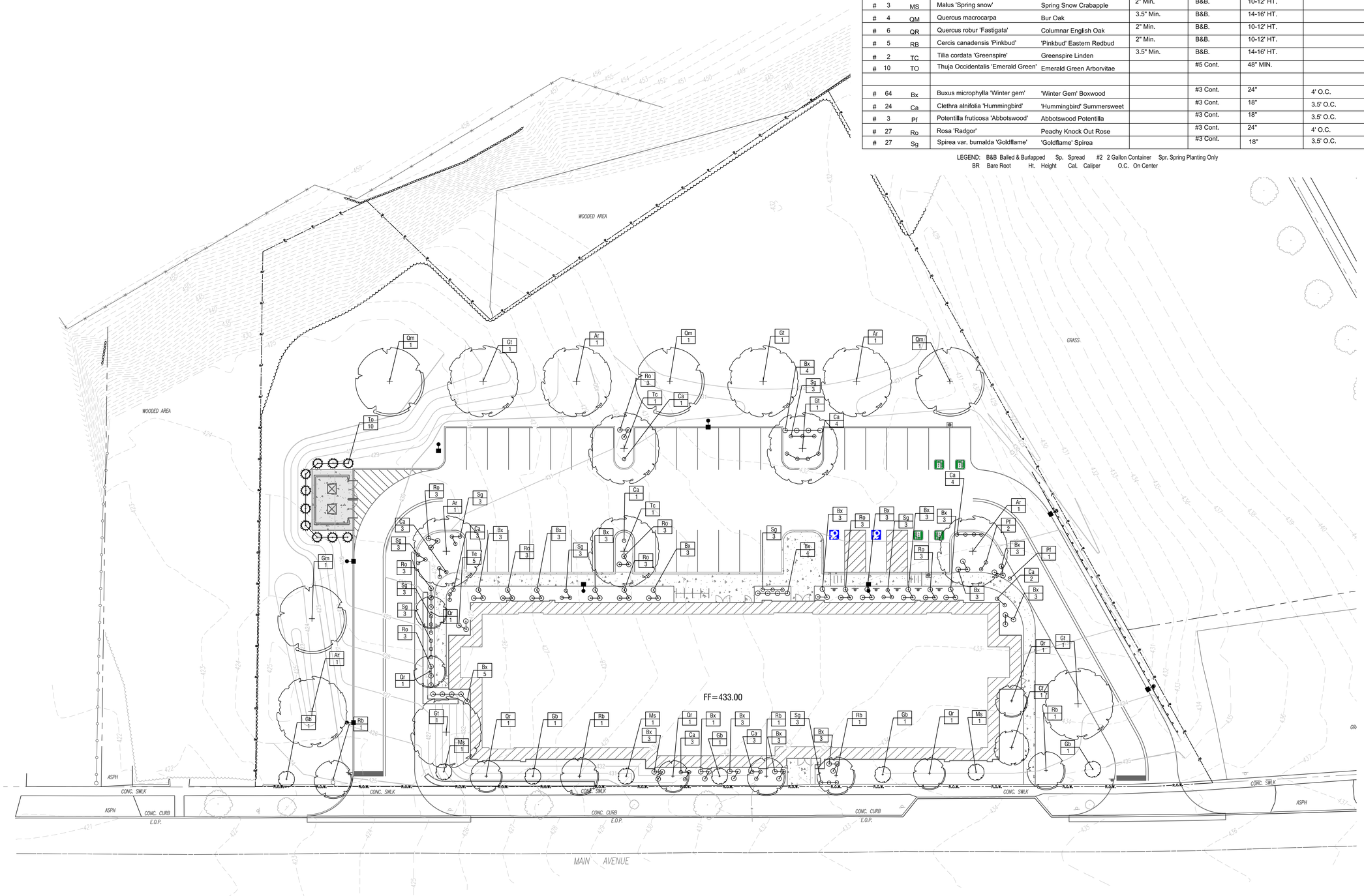
NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2232540
DRAWN BY: SRV/SCB
REVIEWED BY: DPB
ISSUED FOR: SITE PLAN APPROVAL
DATE: JULY 2023
DRAWING NAME: LIGHTING PLAN
DRAWING NUMBER: E501

PLANT LIST

QUANT.	KEY	LATIN NAME	COMMON NAME	DBH.	ROOTS	HT. OR SP.	REMARKS
# 5	AR	Acer rubrum 'Red sunset'	'Red Sunset' Red Maple	3.5" Min.	B&B	14-16' HT.	
# 1	CF	Cornus florida 'Cherokee Princess'	Cherokee Princess Dogwood	2" Min.	B&B	10-12' HT.	
# 5	GB	Ginkgo Biloba 'Sky tower'	Skytower Ginkgo	2" Min.	B&B	10-12' HT.	
# 5	GT	Gleditsia tricanthos 'Skyline'	'Skyline' Honey Locust	3.5" Min.	B&B	14-16' HT.	
# 3	MS	Malus 'Spring snow'	Spring Snow Crabapple	2" Min.	B&B.	10-12' HT.	
# 4	QM	Quercus macrocarpa	Bur Oak	3.5" Min.	B&B.	14-16' HT.	
# 6	QR	Quercus robur 'Fastigata'	Columnar English Oak	2" Min.	B&B.	10-12' HT.	
# 5	RB	Cercis canadensis 'Pinkbud'	'Pinkbud' Eastern Redbud	2" Min.	B&B.	10-12' HT.	
# 2	TC	Tilia cordata 'Greenspire'	Greenspire Linden	3.5" Min.	B&B.	14-16' HT.	
# 10	TO	Thuja Occidentalis 'Emerald Green'	Emerald Green Arborvitae		#5 Cont.	48" MIN.	
# 64	Bx	Buxus microphylla 'Winter gem'	'Winter Gem' Boxwood		#3 Cont.	24"	4' O.C.
# 24	Ca	Clethra alnifolia 'Hummingbird'	'Hummingbird' Summersweet		#3 Cont.	18"	3.5' O.C.
# 3	Pf	Potentilla fruticosa 'Abbotswood'	Abbotswood Potentilla		#3 Cont.	18"	3.5' O.C.
# 27	Ro	Rosa 'Radgor'	Peachy Knock Out Rose		#3 Cont.	24"	4' O.C.
# 27	Sg	Spirea var. bumalda 'Goldflame'	'Goldflame' Spirea		#3 Cont.	18"	3.5' O.C.

LEGEND: B&B Balled & Burlapped Sp. Spread #2 2 Gallon Container Spr. Spring Planting Only
BR Bare Root Ht. Height Cal. Caliper O.C. On Center



1 L101 LANDSCAPING PLAN
SCALE: 1" = 20'

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7/18/2023 3:54 PM

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CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
160 MAIN AVE
WATERTOWN, NY 13601

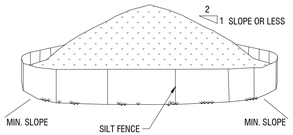
NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2232540
DRAWN BY: SRV/SCB
REVIEWED BY: DPB
ISSUED FOR: SITE PLAN APPROVAL
DATE: JULY 2023
DRAWING NAME:

LANDSCAPING PLAN

DRAWING NUMBER:

L101

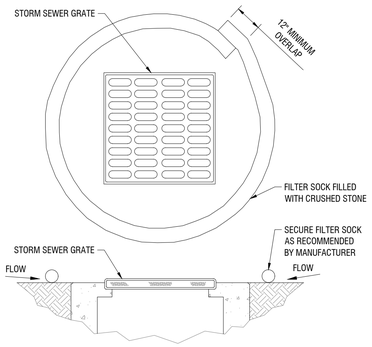


NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1V:2H.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SPECIFICATIONS AND DETAIL FOR INSTALLATION OF SILT FENCE.

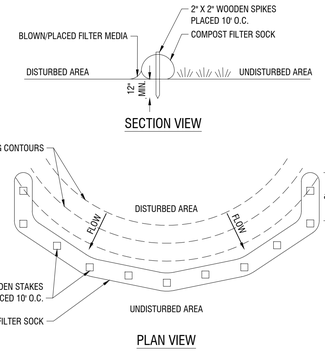
1 / C501 TEMPORARY SOIL STOCKPILE

N.T.S.



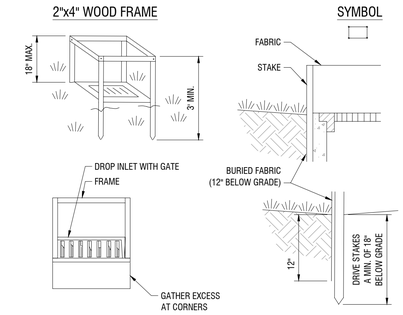
2 / C501 INLET PROTECTION IN PAVEMENT

N.T.S.



3 / C501 COMPOST FILTER SOCK

NYS DEC DETAIL: COMPOST FILTER SOCK



CONSTRUCTION SPECIFICATIONS:

1. FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM OF LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1 ACRE

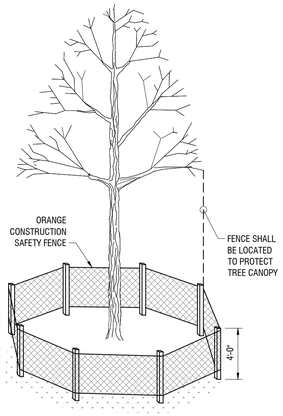
4 / C501 FILTER FABRIC DROP INLET PROTECTION

N.Y.S. DEC DETAIL: FILTER DROP INLET PROTECTION

NOTES:

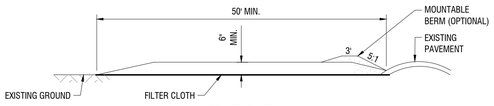
1. ALL TREES DESIGNATED FOR PROTECTION ON THE EXISTING SITE/DEMOLITION PLAN(S) SHALL RECEIVE THIS TREATMENT.
2. DO NOT LEAVE CONSTRUCTION EQUIPMENT RUNNING (IDLING) UNDER TREE CANOPY.
3. MAINTAIN 1' FENCE CLEARANCE TO OUTSIDE CURB FACE AND 6" TO 12" FENCE CLEARANCE TO SIDEWALK.
4. MINIMUM DISTANCE (SEE TABLE) OR GREATER AS REQUIRED TO PROTECT TREE CANOPY.
5. DO NOT STORE MATERIALS WITHIN 10' RADIALLY FROM TREE.

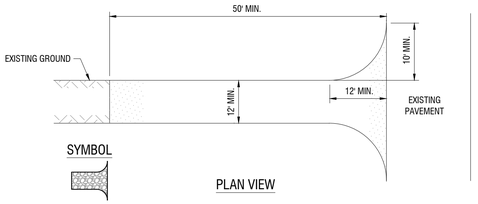
TREE DIAMETER (DBH)	DISTANCE OF FENCING FROM FACE OF TREE TRUNK (SEE NOTE 4)
LESS THAN 10"	6'
10" - 14"	10'
15" - 19"	12'
20" OR MORE	15'



5 / C501 TREE PROTECTION

N.T.S.



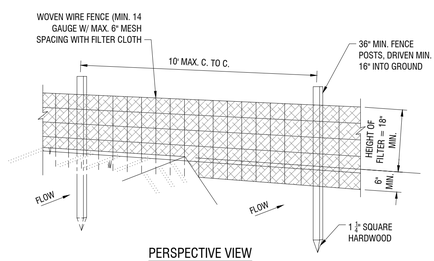


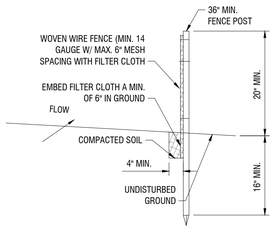
CONSTRUCTION SPECIFICATIONS:

1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS OF WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT.

6 / C501 STABILIZED CONSTRUCTION ENTRANCE

N.YS DEC DETAIL: STABILIZED CONSTRUCTION ACCESS





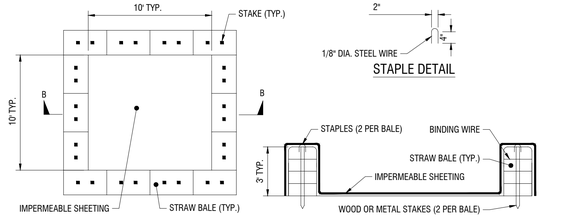
NOTES:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABLINKA 140N, OR APPROVED EQUAL.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SYMBOL

7 / C5012 SILT FENCE

NYS DEC DETAIL: SILT FENCE



NOTE:

1. CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT DEPTH

CONSTRUCTION SPECIFICATIONS

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 100 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPAIRE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

8 / C501 CONCRETE WASHOUT AREA WITH STRAW BALES

N.T.S.

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CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
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112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
160 MAIN AVE
WATERTOWN, NY 13601

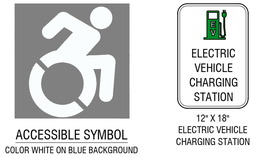
NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2232540
DRAWN BY: SRV/SCB
REVIEWED BY: DPB
ISSUED FOR: SITE PLAN APPROVAL
DATE: JULY 2023
DRAWING NAME:

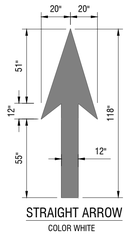
CONSTRUCTION DETAILS

DRAWING NUMBER:

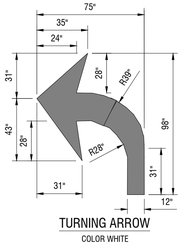
C501



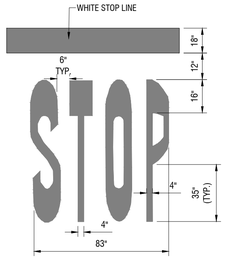
12" X 18"
ELECTRIC VEHICLE CHARGING STATION



STRAIGHT ARROW
COLOR WHITE



TURNING ARROW
COLOR WHITE



STOP BAR NOTES:
UNLESS OTHERWISE SHOWN:
LETTER 98" H x 16" W, 8" SPACING
(USE EQUAL SPACING BETWEEN LETTERS AND CENTER ENTIRE SYMBOL IN LANE)
ALL SYMBOLS SHALL BE WHITE

ELECTRIC CHARGING SYMBOL
4'x4', COLOR WHITE ON GREEN BACKGROUND

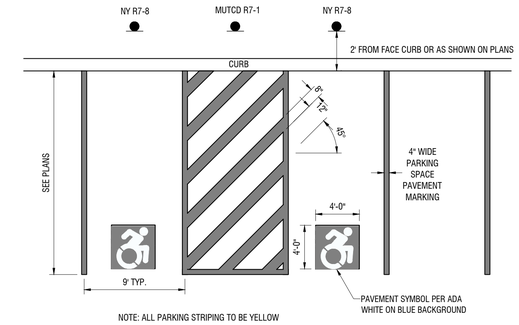
12" X 18"
NO PARKING
MUTCD R7-1
FEDERAL DESIGNATION

12" X 18"
RESERVED
NY R7-8
FEDERAL DESIGNATION

12" X 6"
VAN ACCESSIBLE
MUTCD R7-8a
FEDERAL DESIGNATION

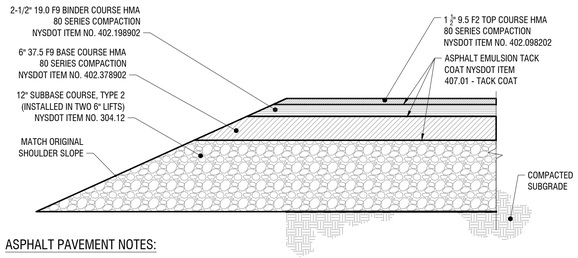
PAVEMENT LETTERING
COLOR WHITE

1 PAVEMENT MARKINGS AND SIGNAGE
C502 — N.T.S.



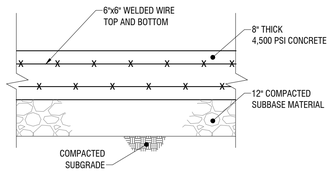
NOTE: ALL PARKING STRIPING TO BE YELLOW

2 ADA PARKING SPACE STRIPING
C502 — N.T.S.



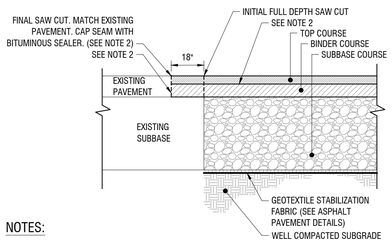
ASPHALT PAVEMENT NOTES:

1. HMA ITEMS ARE BASED ON PG 64-22 BINDER, ESALs LESS THAN 30,000,000. TACK COAT IS REQUIRED BETWEEN ALL LIFTS OF ASPHALT. USE OF POLYPHOSPHORIC ACID (PPA) TO MODIFY THE PG BINDER PROPERTIES IS PROHIBITED. THIS PROHIBITION ALSO APPLIES TO THE USE OF PPA AS A CROSS-LINKING AGENT FOR POLYMER MODIFICATION.
2. BUTT JOINTS, CREATED BY A FULL-DEPTH SAWCUT, SHALL BE USED BETWEEN NEW AND EXISTING PAVEMENTS. THE ASPHALT TOP COURSE SHALL BE LAID SUCH THAT IT UNIFORMLY OVERLAPS THE ADJACENT COLD MAT BY 2"-3". THE THICKNESS OF THE OVERLAP MATERIAL SHALL BE 1/4 THE COMPACTED THICKNESS OF THE COURSE, SO AS TO RESULT IN A SMOOTH AND WELL-COMPACTED JOINT AFTER ROLLING. BROADCASTING OF THE OVERLAP MATERIAL ONTO THE LANE IS NOT ALLOWED. IF THE OVERLAP IS EXCESSIVE, THE EXCESS MATERIAL SHALL BE TRIMMED OFF SO THAT THE MATERIAL ALONG THE JOINT IS UNIFORM. THE COARSE PARTICLES OF AGGREGATE IN THE OVERLAP MATERIAL SHALL BE REMOVED AND WASTED IF DEEMED NECESSARY BY THE INSPECTOR.
3. DESIGN PGB CONTENT SELECTION: THE PRODUCER SELECTS THE DESIGN PGB CONTENT THAT RESULTS IN A COMPACTED DENSITY OF 96.5% Gmm AT THE DESIGN NUMBER OF GYRATIONS (Ndesign). UNDER NO CIRCUMSTANCES SHALL THE PERFORMANCE GRADED BINDER CONTENT IN THE HMA MIXTURE BE LESS THAN 5.8% FOR A 9.5 DESIGN, 5.2% FOR A 12.5 DESIGN, 4.5% FOR A 19.0 DESIGN, 4.2% FOR A 25.0 DESIGN, OR 3.7% FOR A 37.5 DESIGN. ALL VOLUMETRIC AND MECHANICAL PROPERTIES ARE CHECKED AT THIS PGB CONTENT TO ENSURE THAT ALL REQUIREMENTS ARE MET.
4. PERFORM ALL WARRANTY WORK IN ACCORDANCE WITH MATERIALS PROCEDURE (MP) 402-01, WARRANTY REQUIREMENTS FOR HOT MIX ASPHALT (HMA) TOP COURSE.
5. AS PER STANDARD SPECIFICATION SECTION 401-4.01 CERTIFIED PRODUCTION, PRODUCTION LESS THAN 500 TONS, AND HIGHWAY PERMIT PRODUCTION, PRODUCTION MEETING THE SPECIFICATION REQUIREMENTS WILL BE ASSIGNED A QAF OF 1.00. PRODUCTION FAILING TO MEET THE SPECIFICATION REQUIREMENTS WILL BE SUBJECT TO EVALUATION ACCORDING TO SECTION 401-4.03, EVALUATION OF SUBLOTS REPRESENTED BY 0.85 QAF.



3 CONCRETE PAD
C502 — N.T.S.

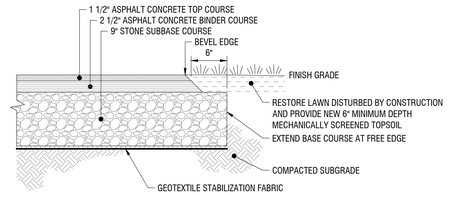
4 PAVEMENT SECTION WITHIN R.O.W.
C502 — N.T.S.



NOTES:

1. VERTICALLY SAW CUT ALL ASPHALT FULL DEPTH.
2. BLOW CLEAN AND APPLY TACK COAT 0.050 GAL/SY AT ALL ASPHALT TO ASPHALT SURFACES.
3. REFER TO STANDARD DUTY PAVEMENT SECTION DETAIL FOR COURSE THICKNESS.

5 STANDARD DUTY PAVEMENT JOINT
C502 — N.T.S.



NOTES:

1. PROVIDE ADDITIONAL SUBBASE MATERIAL WHERE FILL IS REQUIRED TO OBTAIN PROPER SUBGRADE ELEVATION, OR TO REPLACE UNSUITABLE SUBGRADE MATERIAL.

6 STANDARD DUTY ASPHALT PAVEMENT SECTION
C502 — N.T.S.

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CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
160 MAIN AVE
WATERTOWN, NY 13601

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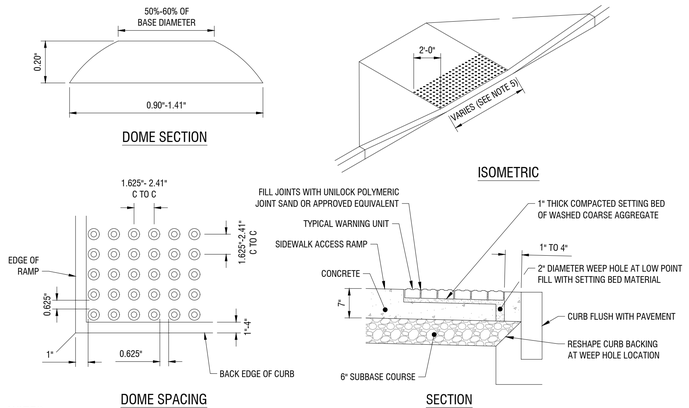
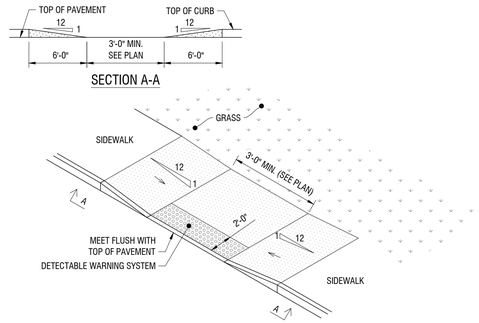


NOTES:

1. QUANTITY OF TRUNCATED DOMES SHOWN IS FOR ILLUSTRATIVE PURPOSES ONLY AND TO DEPICT REQUIRED SQUARE GRID PATTERN.
2. TRUNCATED DOMES ARE TO BE ALIGNED ON THE SQUARE GRID PATTERN IN THE PREDOMINANT DIRECTION OF TRAVEL.
3. ENTIRE DETECTABLE WARNING SYSTEM FIELD, INCLUDING TRUNCATED DOMES, IS TO BE DARK GRAY IN COLOR, N7 PER MUNSELL BOOK NOTATION, OR APPROVED EQUIVALENT.
4. OUTER EDGE OF THE DETECTABLE WARNING SYSTEM FIELD IS TO BE LOCATED SO THAT THE EDGE OF THE WARNING FIELD NEAREST TO THE STREET IS 1 TO 4 INCHES BEHIND THE BACK EDGE OF THE CURB SECTION.
5. DETECTABLE WARNING SYSTEM IS TO EXTEND ACROSS THE FULL WIDTH OF A SIDEWALK ACCESS RAMP, BUT NOT UP THE SIDE FLARES.

1 BRICK DETECTABLE WARNING SYSTEM AT CURB

C503 — N.T.S.

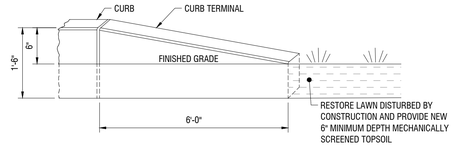


NOTES:

1. 1:12 IS MAXIMUM SLOPE OF ACCESS RAMP.
2. SURFACE OF ACCESS RAMP IS TO BE STABLE, FIRM AND SLIP-RESISTANT. TEXTURE SURFACE WITH COARSE BROOM RUNNING TRANSVERSE TO SLOPE OF ACCESS RAMP.
3. ENTIRE AREA OF ACCESS RAMP AND LANDING PAD IS TO BE 7 INCH THICK CONCRETE.

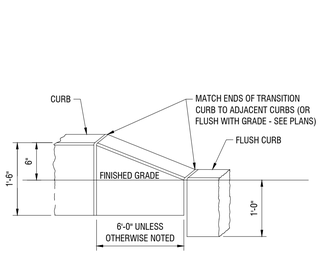
2 SIDEWALK RAMP TYPE C

C503 — N.T.S.



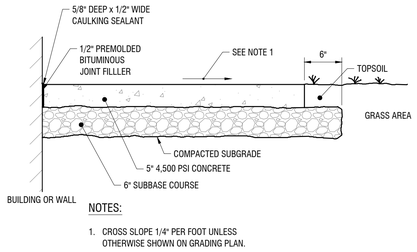
3 CURB TERMINAL

C503 — N.T.S.



4 CURB TRANSITION

C503 — N.T.S.

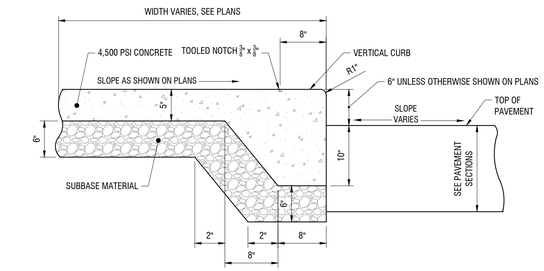


NOTES:

1. CROSS SLOPE 1/4" PER FOOT UNLESS OTHERWISE SHOWN ON GRADING PLAN.

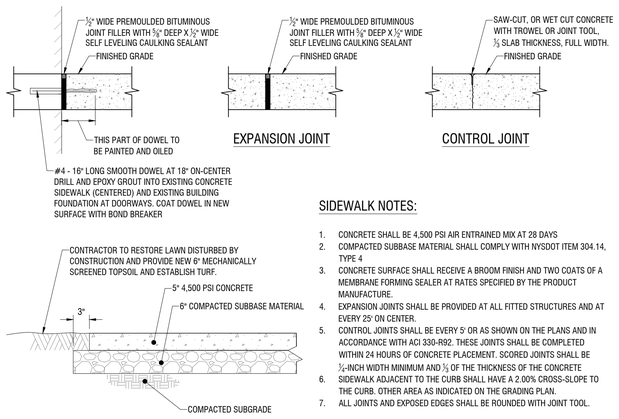
5 CONCRETE SIDEWALK SECTION AT BUILDING

C503 — N.T.S.



6 CONCRETE SIDEWALK AND INTEGRAL VERTICAL CURB SECTION

C503 — N.T.S.

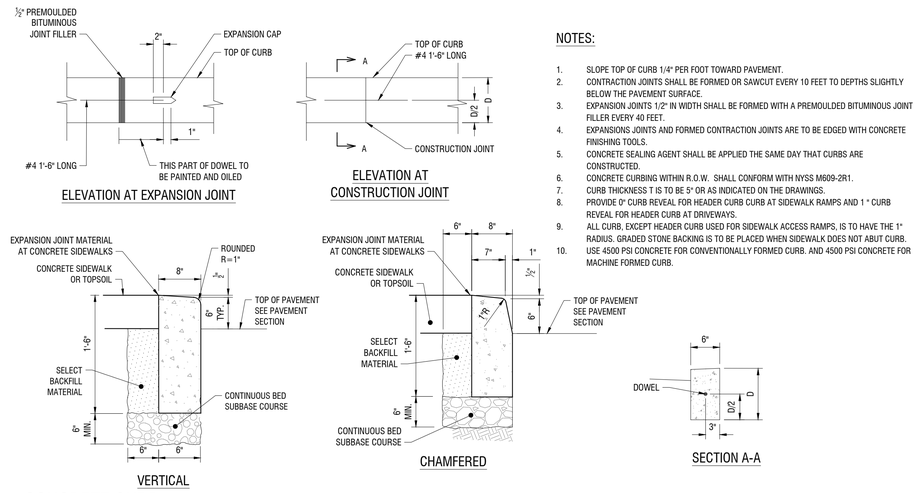


SIDEWALK NOTES:

1. CONCRETE SHALL BE 4,500 PSI AIR ENTRAINED MIX AT 28 DAYS
2. COMPACTED SUBBASE MATERIAL SHALL COMPLY WITH NYSDOT ITEM 304.14, TYPE 4
3. CONCRETE SURFACE SHALL RECEIVE A BROOM FINISH AND TWO COATS OF A MEMBRANE FORMING SEALER AT RATES SPECIFIED BY THE PRODUCT MANUFACTURE.
4. EXPANSION JOINTS SHALL BE PROVIDED AT ALL FITTED STRUCTURES AND AT EVERY 25' ON CENTER.
5. CONTROL JOINTS SHALL BE EVERY 5' OR AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH ACI 330-R92. THESE JOINTS SHALL BE COMPLETED WITHIN 24 HOURS OF CONCRETE PLACEMENT. SCORED JOINTS SHALL BE ¼-INCH WIDTH MINIMUM AND ¼ OF THE THICKNESS OF THE CONCRETE
6. SIDEWALK ADJACENT TO THE CURB SHALL HAVE A 2.00% CROSS-SLOPE TO THE CURB. OTHER AREA AS INDICATED ON THE GRADING PLAN.
7. ALL JOINTS AND EXPOSED EDGES SHALL BE ROUNDED WITH JOINT TOOL.

7 CONCRETE SIDEWALK

C503 — N.T.S.



NOTES:

1. SLOPE TOP OF CURB 1/4" PER FOOT TOWARD PAVEMENT.
2. CONTRACTION JOINTS SHALL BE FORMED OR SAWCUT EVERY 10 FEET TO DEPTHS SLIGHTLY BELOW THE PAVEMENT SURFACE.
3. EXPANSION JOINTS 1/2" IN WIDTH SHALL BE FORMED WITH A PREMOULDED BITUMINOUS JOINT FILLER EVERY 40 FEET.
4. EXPANSIONS JOINTS AND FORMED CONTRACTION JOINTS ARE TO BE EDGED WITH CONCRETE FINISHING TOOLS.
5. CONCRETE SEALING AGENT SHALL BE APPLIED THE SAME DAY THAT CURBS ARE CONSTRUCTED.
6. CONCRETE CURBING WITHIN R.O.W. SHALL CONFORM WITH NYSS M609-2R1.
7. CURB THICKNESS T IS TO BE 5" OR AS INDICATED ON THE DRAWINGS.
8. PROVIDE 0" CURB REVEAL FOR HEADER CURB CURB AT SIDEWALK RAMPS AND 1 " CURB REVEAL FOR HEADER CURB AT DRIVEWAYS.
9. ALL CURB, EXCEPT HEADER CURB USED FOR SIDEWALK ACCESS RAMPS, IS TO HAVE THE 1" RADIUS. GRADED STONE BACKING IS TO BE PLACED WHEN SIDEWALK DOES NOT ABUT CURB.
10. USE 4500 PSI CONCRETE FOR CONVENTIONALLY FORMED CURB. AND 4500 PSI CONCRETE FOR MACHINE FORMED CURB.

8 CONCRETE CURB

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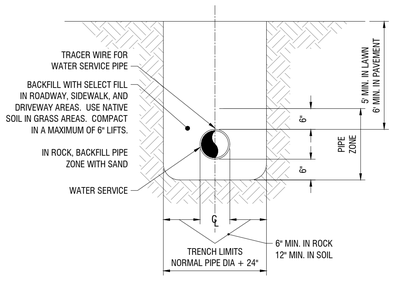
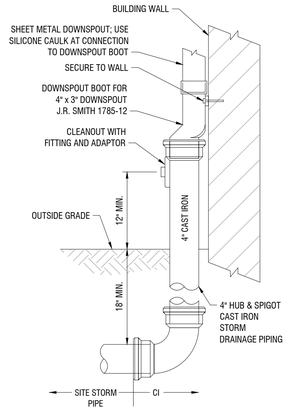


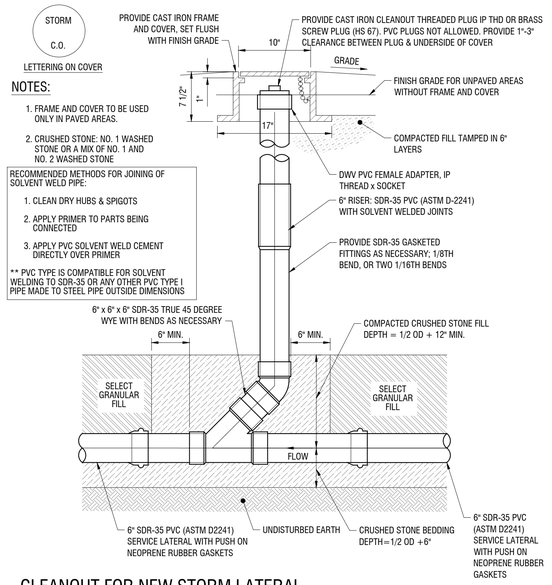
1 C504 WATER SERVICE TRENCH

N.T.S.



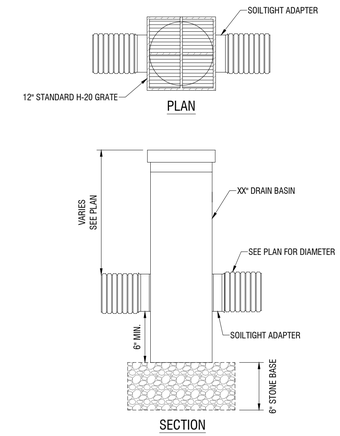
2 C504 DOWNSPOUT

N.T.S.



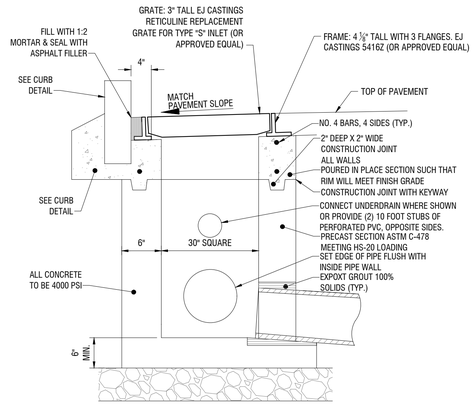
3 C504 CLEANOUT FOR NEW STORM LATERAL

N.T.S.



4 C504 DRAIN BASIN

N.T.S.

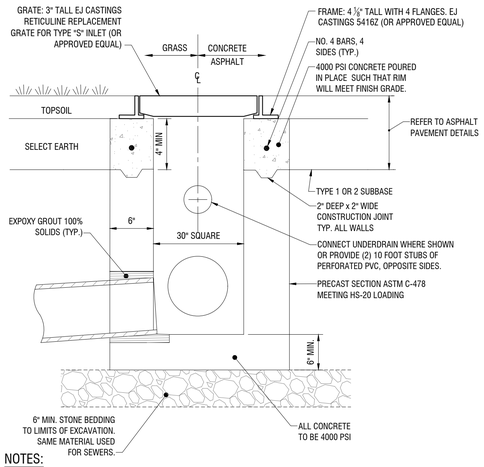


NOTES:

1. THE ENTIRE EXTERIOR & INTERIOR SURFACES OF THE CATCH BASIN SHALL BE PAINTED WITH TWO COATS OF BITUMASTIC COATING.
2. CATCH BASIN SHALL NOT BE CONNECTED TO ANY SANITARY SEWER.
3. PROVIDE FRAMES AND GRATES CONFORMING TO NYSDOT STANDARD SHEETS M655-10R3, M655-6.
4. FRAMES TO HAVE APPROPRIATE STRAP ANCHORS.

5 C504 CATCH BASIN AGAINST CURB

N.T.S.



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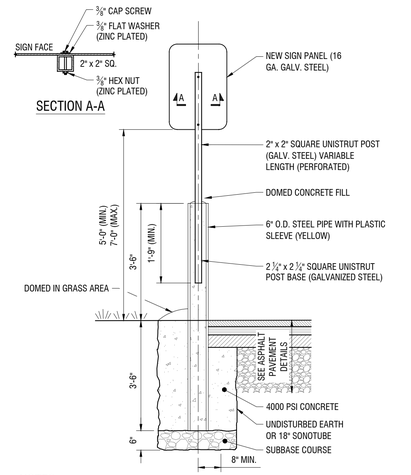
3. PROVIDE FRAMES AND GRATES CONFORMING TO NYSDOT STANDARD SHEETS M655-10R3, M655-6.
4. FRAMES TO HAVE APPROPRIATE STRAP ANCHORS.

6 C504 CATCH BASIN

N.T.S.

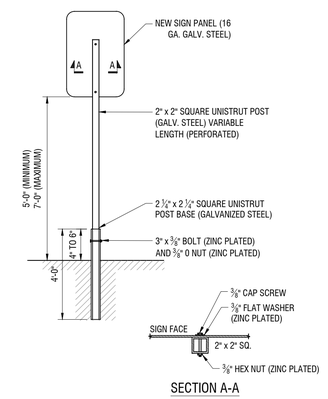


NOTES:

1. FINAL LOCATION OF BOLLARDS SHALL BE APPROVED BY THE OWNER OR ARCHITECT/ENGINEER.

7 C504 BOLLARD MOUNTED SIGN

N.T.S.



NOTES:

1. MAINTAIN TWO FEET OF CLEARANCE FROM FACE OF CURB TO ANY PART OF SIGN, AS APPLICABLE.
2. SEE PLANS FOR SIGN AND POST LOCATIONS.

8 C504 POST MOUNT SIGN

N.T.S.

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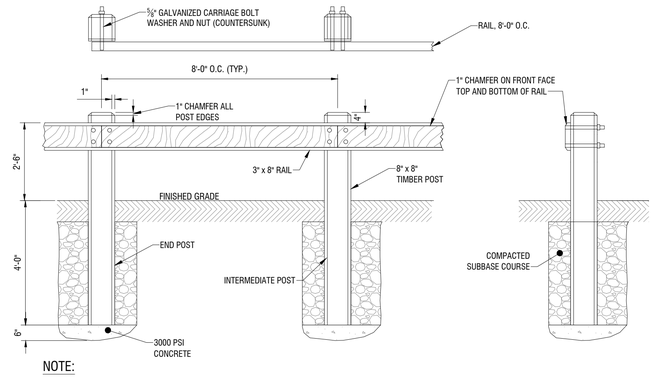
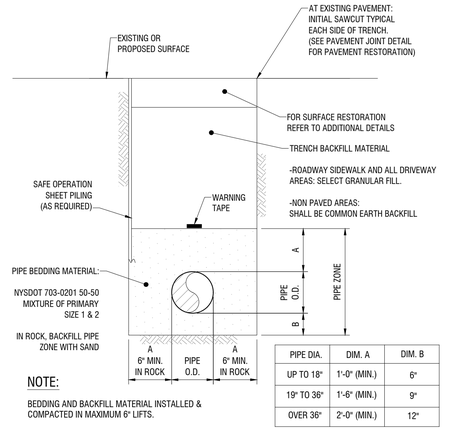


NOTE:

1. GUIDE RAIL POSTS & RAIL TO BE SOLID #2 OR BETTER WESTERN RED CEDAR WITH ROUGH SAWN TEXTURE. STAIN TO BE CLEAR NATURAL PRESERVATIVE BY WOODLIFE OR APPROVED EQUAL

1 C505 TIMBER GUIDE RAIL

N.T.S.



PIPE DIA.	DIM. A	DIM. B
UP TO 18"	1'-0" (MIN.)	6"
19" TO 36"	1'-6" (MIN.)	9"
OVER 36"	2'-0" (MIN.)	12"

NOTE:

BEDDING AND BACKFILL MATERIAL INSTALLED & COMPACTED IN MAXIMUM 6" LIFTS.

2 C505 STORM/SANITARY SEWER TRENCH AND PIPE BEDDING

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VERSION 23.1
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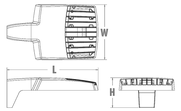
RSX1 LED
Area Luminaire

Catalog Number	RSX1-LED-P2-40K-R3-HS
Notes	
Type	A

Fill the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA (ft²@0°):	0.57 ft² (0.05 m²)
Length:	21.8" (55.4 cm) (SPA mount)
Width:	13.3" (33.8 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm
Weight: (SPA mount):	22.0 lbs (10.0 kg)



Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

RSX1 LED	P2	40K	R3	MVOLT	
Series	**Performance Package**	**Color Temperature**	**Distribution**	**Voltage**	**Mounting**
RSX1 LED	P1	30K 3000K	R2 Type 2 Wide	MVOLT (120V-277V) [1]	SPA Square pole mounting (3.0" min. 50 pole for 1 at 90°, 3.5" min. 50 pole for 2, 3, 4 at 90°)
	P2	40K 4000K	R3 Type 3 Wide	HVOLT (347V-480V) [1]	RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°)
	P3	50K 5000K	R3S Type 3 Short	XVOLT (277V-480V) [1] (use specific voltage for options as noted)	MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon)
	P4		R4 Type 4 Wide	120 [1] 277 [1]	IS Adjustable slipfitter (fits 2-3/8" OD tenon) [4]
			R4S Type 4 Short	208 [1] 347 [1]	WBA Wall bracket [1]
			R5 Type 5 Wide [1]	240 [1] 480 [1]	WBASC Wall bracket with surface conduit box
			R5S Type 5 Short [1]		AASP Adjustable tilt arm square pole mounting [4]
			AFR Automotive Front Row		AARP Adjustable tilt arm round pole mounting [4]
			AFRR90 Automotive Front Row Right Rotated		AAWB Adjustable tilt arm with wall bracket [4]
			AFRL90 Automotive Front Row Left Rotated		AAWSC Adjustable tilt arm wall bracket and surface conduit box [4]

HS

Options		Finish	
Shipped Installed		DDBXD	Dark Bronze
HS House-side-shield [7]		DBLXD	Black
PE Photocontrol, button style [8]		DNATXD	Natural Aluminum
PER7 Seven-wire twist-lock receptacle only (no controls) [9,10,11]		DWHXD	White
SF Single fuse (120, 277, 347) [1]		DDBTXD	Textured Dark Bronze
DF Double fuse (208, 240, 480) [1]		DBLBXD	Textured Black
SPD20KV 20KV Surge pack (10KV standard)		DNATXD	Textured Natural Aluminum
FAO Field adjustable output [3]		DWHGXD	Textured White
DMG 0-10V dimming extend out back of housing for external control (control ordered separate) [5]			
Shipped Installed			
***Standalone and Networked Sensors/Controls (factory default settings, see table page 9)**			
NLTAIR2 PIRHN nLight AIR generation 2, with Networked, Bi-Level motion/ambient sensor [6,12,13,14]			
BAA Buy American(t) Act Compliant			
CCE Coastal Construction [15]			
*Note: NLTAIR2 PIRHN with nLight Air can be used as a standalone or networked solution. Sensor coverage pattern is affected when luminaire is tilted.			
Shipped Separately (requires some field assembly)			
EGS External glare shield [7]			
EGFV External glare full visor (360° around light aperture) [7]			
BS Bird spikes [16]			

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with ISSNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts (W)	Distribution Type	30K (3000K, 70 CRI)				40K (4000K, 70 CRI)				50K (5000K, 70 CRI)			
			Lumens	B	U	G	Lumens	B	U	G	Lumens	B	U	G
P1	51W	R2	6,482	3	0	1	7,121	3	0	1	7,121	1	0	1
		R3	6,459	1	0	2	7,096	1	0	2	7,096	1	0	2
		R3S	6,431	1	0	1	7,286	1	0	2	7,286	1	0	2
		R4	6,543	1	0	2	7,189	1	0	2	7,189	1	0	2
		R4S	6,313	1	0	1	6,936	1	0	1	6,936	1	0	1
		R5	6,431	3	0	2	7,286	3	0	2	7,286	3	0	2
		R5S	6,807	3	0	1	7,479	3	0	1	7,479	3	0	1
		AFR	6,473	1	0	1	7,112	1	0	1	7,112	1	0	1
		AFRR90	6,535	2	0	2	7,179	2	0	2	7,179	2	0	2
		AFRL90	6,562	2	0	1	7,210	2	0	2	7,210	2	0	2
P2	72W	R2	8,991	2	0	1	9,878	2	0	1	9,878	2	0	1
		R3	8,959	2	0	2	9,843	2	0	2	9,843	2	0	2
		R3S	9,198	2	0	2	10,106	2	0	2	10,106	2	0	2
		R4	9,077	2	0	2	9,972	2	0	2	9,972	2	0	2
		R4S	8,757	1	0	2	9,622	2	0	2	9,622	2	0	2
		R5	9,198	4	0	2	10,106	4	0	2	10,106	4	0	2
		R5S	9,443	3	0	1	10,374	3	0	1	10,374	3	0	1
		AFR	8,979	2	0	1	9,865	2	0	1	9,865	2	0	1
		AFRR90	9,064	3	0	2	9,959	3	0	2	9,959	3	0	2
		AFRL90	9,102	3	0	2	10,001	3	0	2	10,001	3	0	2
P3	109W	R2	12,808	2	0	1	14,072	2	0	2	14,072	2	0	2
		R3	12,763	2	0	2	14,023	2	0	2	14,023	2	0	2
		R3S	13,104	2	0	2	14,397	2	0	2	14,397	2	0	2
		R4	12,930	2	0	2	14,206	2	0	2	14,206	2	0	2
		R4S	12,475	2	0	2	13,707	2	0	2	13,707	2	0	2
		R5	13,104	4	0	2	14,397	4	0	2	14,397	4	0	2
		R5S	13,452	3	0	2	14,779	3	0	2	14,779	3	0	2
		AFR	12,791	2	0	1	14,053	2	0	2	14,053	2	0	2
		AFRR90	12,913	3	0	3	14,187	3	0	3	14,187	3	0	3
		AFRL90	12,967	3	0	2	14,247	3	0	3	14,247	3	0	3
P4	133W	R2	14,943	2	0	2	16,417	2	0	2	16,417	2	0	2
		R3	14,890	2	0	3	16,360	2	0	3	16,360	2	0	3
		R3S	15,287	2	0	2	16,796	2	0	2	16,796	2	0	2
		R4	15,085	2	0	3	16,574	2	0	3	16,574	2	0	3
		R4S	14,554	2	0	2	15,991	2	0	2	15,991	2	0	2
		R5	15,287	4	0	2	16,796	4	0	2	16,796	4	0	2
		R5S	15,693	4	0	2	17,242	4	0	2	17,242	4	0	2
		AFR	14,923	2	0	2	16,395	2	0	2	16,395	2	0	2
		AFRR90	15,065	3	0	3	16,551	3	0	3	16,551	3	0	3
		AFRL90	15,128	3	0	3	16,621	3	0	3	16,621	3	0	3

Ordering Information

Accessories

Ordered and shipped separately.

RSX1HS	RSX1 House side shield (includes 1 shield)
RSX1HSFRR10	RSX1 House side shield for AFR mounted optics (includes 1 shield)
RSX1EGS (FINISH) [1]	External glare field (specify finish)
RSX1EGFV (FINISH) [1]	External glare full visor (specify finish)
RSXRPA (FINISH) [2]	RSX Universal round pole adapter plate (specify finish)
RSXWBA (FINISH) [2]	RSX WBA wall bracket (specify finish) [2]
RSXSCB (FINISH) [2]	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DLL127F1.5 JU	Photocell - SSL twist-lock (120-277V) [17]
DLL347F1.5 CUL JU	Photocell - SSL twist-lock (347V) [17]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [17]
DSHORT SBK U	Shorting cap [18]

NOTES

1. Any Type 5 distribution, is not available with WBA.
2. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
3. HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
4. XVOLT driver not available with P1 or P2. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE.
5. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
6. Maximum tilt is 90° above horizontal.
7. It may be ordered as an accessory.
8. Requires MVOLT or 347V.
9. Two or more of the following options cannot be combined including PE, DMG, PER7, FAO and NLTAIR2 PIRHN. (Exception: PE and FAO can be combined; also PE and DMG can be combined.)
10. Compatible with standard twist-lock photocells for dusk to dawn operation or advanced control nodes that provide 0-10V dimming signals. Wire 4/Wire 5 wired to dimming leads on driver. Wire6/Wire7 capped inside luminaire. Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
11. For units with option PER7, the mounting must be restricted to +/- 45° from horizontal slip per ANSI C136.10-2010.
12. Must be ordered with PIRHN.
13. Requires MVOLT or HVOLT.
14. Must be ordered with NLTAIR2. For additional information on PIRHN visit here.
15. CCE option not available with WBA, WBASC, AASP, AARP, AAWB, AAWBSC, EGS, EGFV and BS.
16. Must be ordered with fixture for factory pre-drilling.
17. Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

External Shields

House Side Shield

External Glare Shield

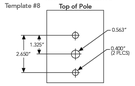
External 360 Full Visor

Pole/Mounting Informatiion

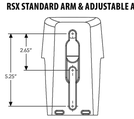
Accessories including bullhorns, cross arms and other adpaters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit Accessories.

HANDHOLE ORIENTATION

RSX POLE DRILLING



RSX STANDARD ARM & ADJUSTABLE ARM



Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2 - 3/8"	RPA, AARP	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 320	AS3-5 390	AS3-5 490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
#8	**Drill Nomenclature**	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

RSX1 - Luminaire EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

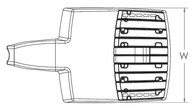
Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	**Tilt**									
SPA - Square Pole Adaptor		0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
RPA - Round Pole Adaptor	0 °	0.62	1.08	1.15	1.62	1.46	2.13	1.36	1.8	2.36
MA - Mast Arm Adaptor		0.49	0.95	0.89	1.36	1.2	1.87	1.23	1.54	2.1
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0 °	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
	10°	0.68	1.34	1.33	2	1.74	2.64	1.35	2.03	2.71
	20°	0.87	1.71	1.73	2.56	2.26	3.42	1.75	2.62	3.49
	30°	1.24	2.19	2.3	3.21	2.87	4.36	2.49	3.73	4.97
	40°	1.81	2.68	2.98	3.85	3.68	5.30	3.62	5.43	7.24
	45°	2.11	2.92	3.44	4.2	4.08	5.77	4.22	6.33	8.44
	50°	2.31	3.17	3.72	4.52	4.44	6.26	4.62	6.94	9.25
	60°	2.71	3.66	4.38	5.21	5.15	7.24	5.43	8.14	10.86
	70°	2.78	3.98	4.54	5.67	5.47	7.91	5.52	8.27	11.03
	80°	2.76	4.18	4.62	5.97	5.76	8.31	5.51	8.27	11.03
	90°	2.73	4.25	4.64	6.11	5.91	8.47	5.45	8.18	10.97

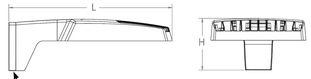
Dimensions & Weights

Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	22 lbs
RPA	24 lbs
MA	22 lbs
WBA	25 lbs
WBASC	28 lbs
IS	25 lbs
AASP	25 lbs
AARP	27 lbs
AAWB	28 lbs
AWSC	31 lbs

RSX1 with Round Pole Adapter (RPA)

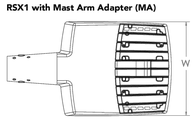


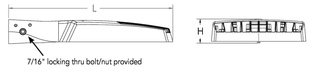


Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

Length: 22.8" (57.9 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.4 cm) Arm

RSX1 with Mast Arm Adapter (MA)

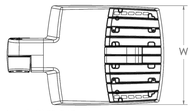


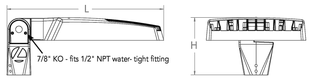


7/16" locking thru bolt/nut provided

Length: 23.2" (59.1 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
3.5" (8.9 cm) Arm

RSX1 with Adjustable Slipfitter (IS)





7/8" KO - fits 1/2" NPT water- tight fitting

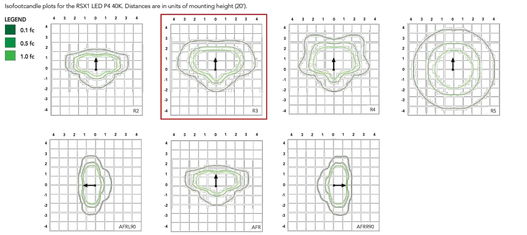
Length: 20.7" (52.7 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.6" (19.3 cm) Arm

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').

LEGEND
0.1 fc
0.5 fc
1.0 fc



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

Performance Package	System Watts (W)	Current (A) 120V	208V	240V	277V	347V	480V
P1	51W	0.42	0.25	0.21	0.19	0.14	0.11
P2	72W	0.60	0.35	0.30	0.26	0.21	0.15
P3	109W	0.91	0.52	0.45	0.39	0.31	0.23
P4	133W	1.11	0.64	0.55	0.48	0.38	0.27

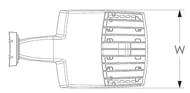
Projected LED Lumen Maintenance

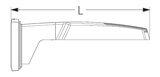
Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

Dimensions

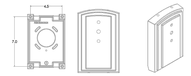
RSX1 with Wall Bracket (WBA)



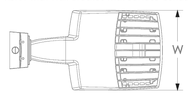


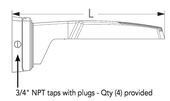
Length: 23.6" (59.9 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
8.9" (22.6 cm) Arm

Wall Bracket (WBA) Mounting Detail



RSX1 with Wall Bracket with Surface Conduit Box (WBASC)

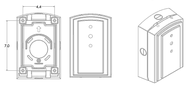




3/4" NPT taps with plugs - Qty (4) provided

Length: 25.3" (64.3 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm

Surface Conduit Box (SCB) Mounting Detail



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NOT FOR CONSTRUCTION
EXP: ##/##/20##
EXP: ##/##/20##

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
160 MAIN AVE
WATERTOWN, NY 13601

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2232540
DRAWN BY: SRV/SCB
REVIEWED BY: DPB
ISSUED FOR: SITE PLAN APPROVAL
DATE: JULY 2023
DRAWING NAME:

CONSTRUCTION DETAILS

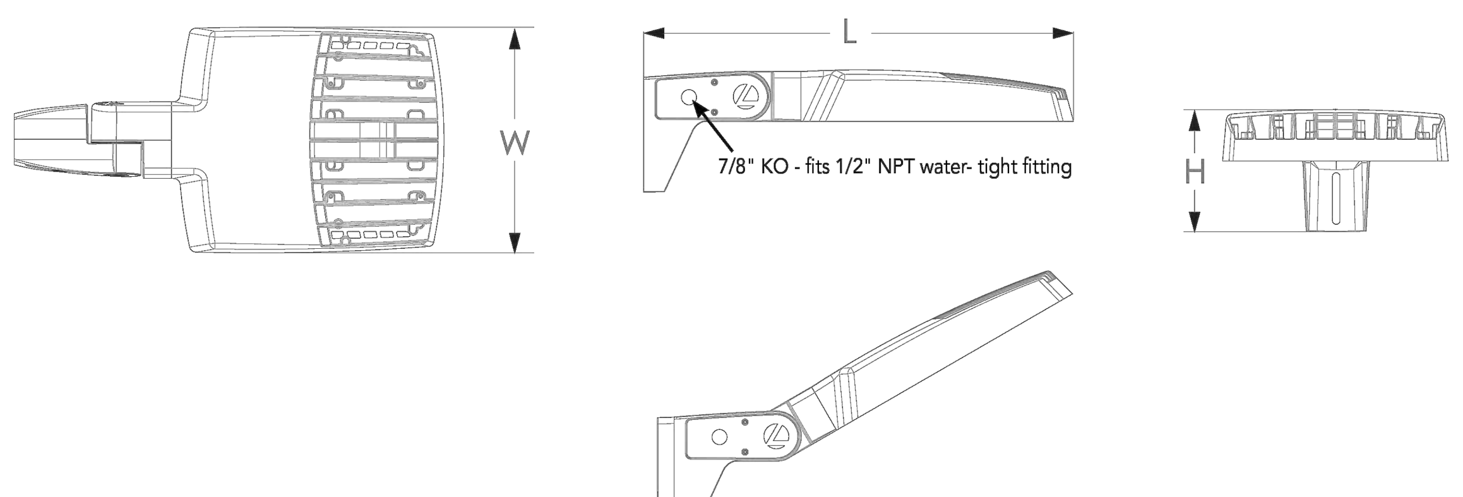
DRAWING NUMBER:

C506

VERSION 23.1
7/18/2023 3:14 PM

Dimensions

RSX1 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)

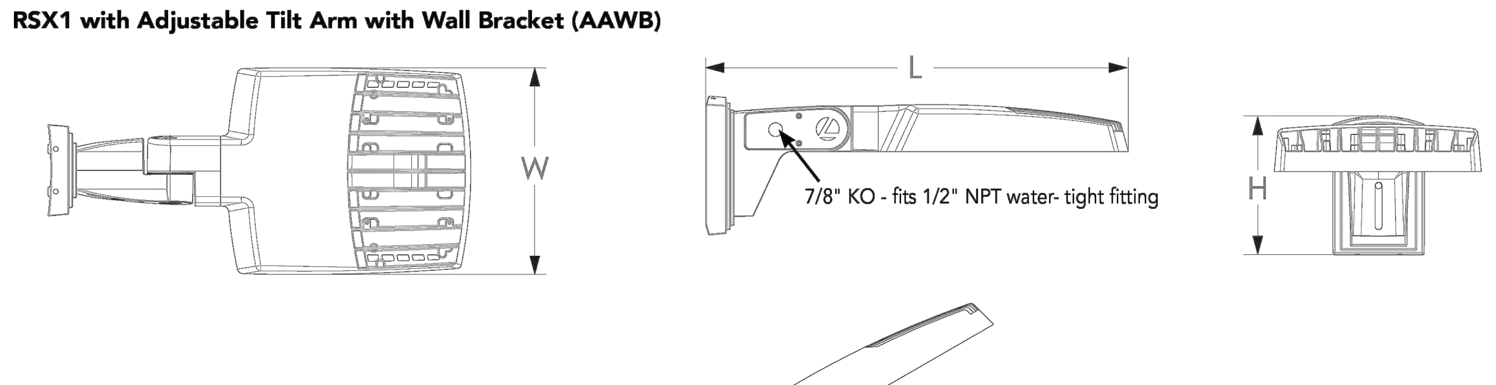


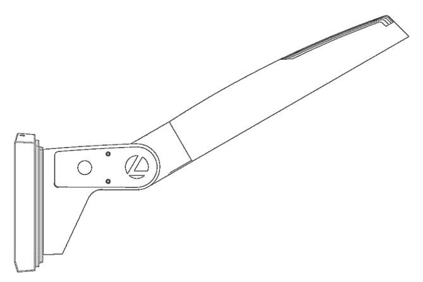
Length: 25.3" (65.3 cm) **AASP**
26.3" (66.8 cm) **AARP**
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.2 cm) Arm

NOTE:
RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

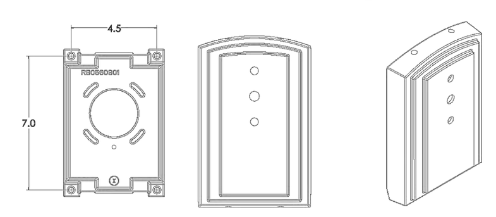
Notes
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.
AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

RSX1 with Adjustable Tilt Arm with Wall Bracket (AAWB)





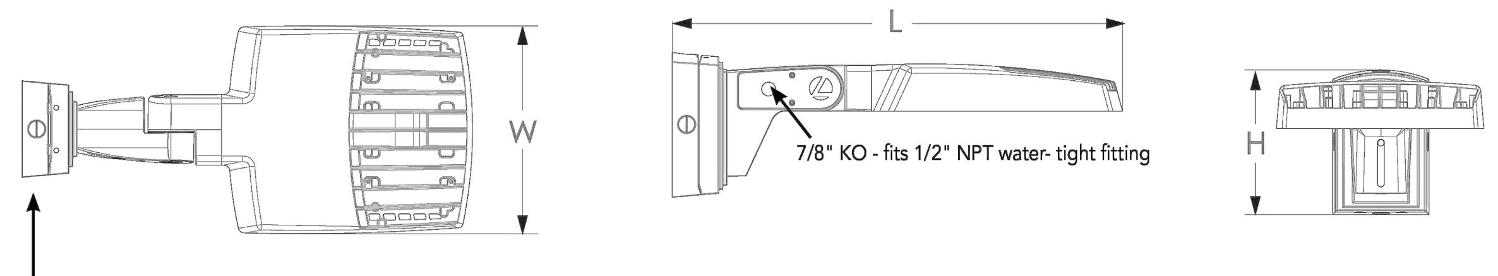
Wall Bracket (WBA) Mounting Detail



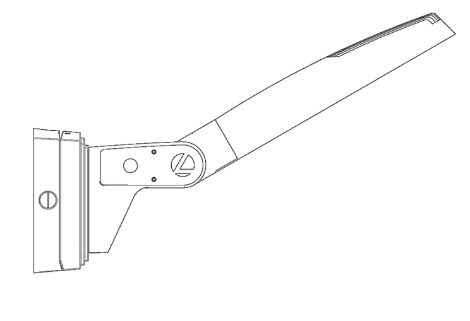
Length: 27.1" (68.8 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
8.9" (22.6 cm) Arm

Dimensions

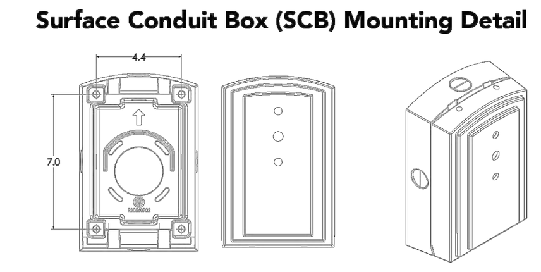
RSX1 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



3/4" NPT taps with plugs - Qty (4) provided

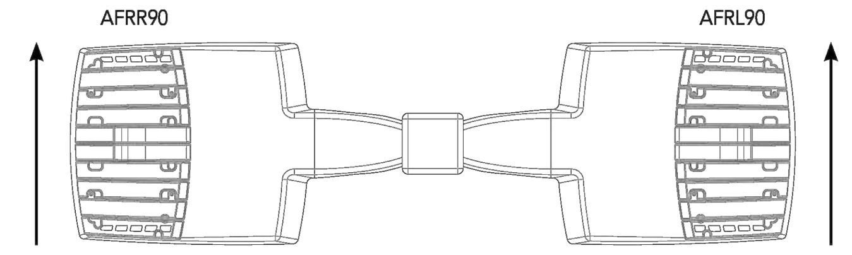


Surface Conduit Box (SCB) Mounting Detail



Length: 28.8" (73.2 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm

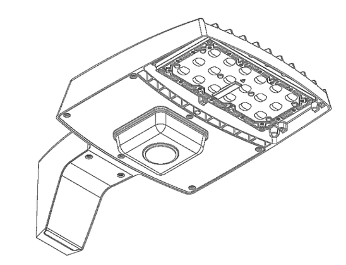
Automotive Front Row - Rotated Optics (AFRL90/R90)

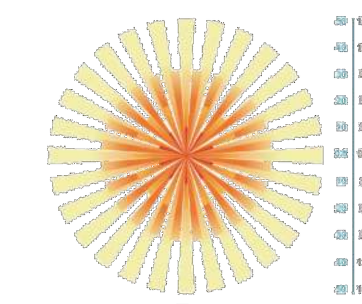


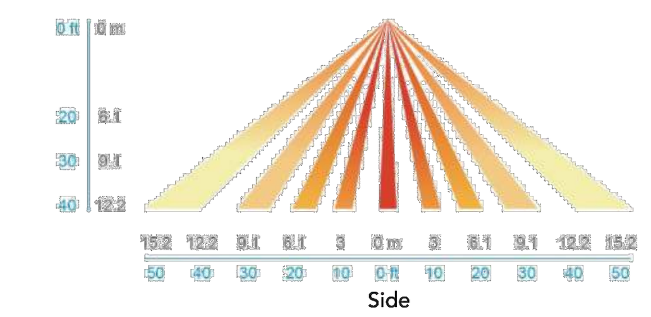
(Example: 2@180 - arrows indicate direction of light exiting the luminaire)

nLight Control - Sensor Coverage and Settings

nLight Sensor Coverage Pattern
NLTAIR2 PIRHN







Motion Sensor Default Settings - Option PIRHN						
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes

*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clairity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is titled.

FEATURES & SPECIFICATIONS

INTENDED USE
The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX1 delivers 7,000 to 17,000 lumens and is ideal for replacing 70W to 400W HID pole-mounted luminaires in parking lots and other area lighting applications.

CONSTRUCTION
The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. All mountings are rated for minimum 1.5 G vibration load per ANSI C136.31. 3G Mountings: Include SPA, RPA, MA, IS, AASP, and AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warrantied not to crack or peel.

COASTAL CONSTRUCTION (CCE)
ptional corrosion resistant construction is engineered with added corrosion rotection in materials and/or pre-treatment of base material under superŸurable paint. Provides additional corrosion protection for applications nearÜoastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with cribe rating of 10. Additional lead-times apply.

OPTICS
Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row), and AFR rotated AFRR90 and ARFL90.

ELECTRICAL
Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Fixtures ship standard with 0-10v dimming driver. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS
The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

nLIGHT AIR CONTROLS
The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION
Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

LISTINGS
CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only. U.S. Patent No. D882, 146S

BUY AMERICAN ACT
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

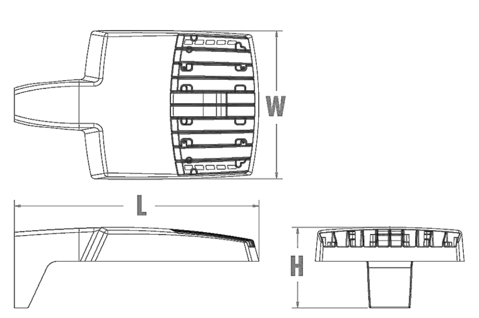
RSX1 LED
Area Luminaire

Catalog Number	RSX1-LED-P2-40K-R4-HS
Notes	
Type	B

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA (ft²@0°):	0.57 ft² (0.05 m²)
Length:	21.8" (55.4 cm) (SPA mount)
Width:	13.3" (33.8 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm
Weight: (SPA mount):	22.0 lbs (10.0 kg)



Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

RSX1 LED	P2	40K	R4	MVOLT	
Series	**Performance Package**	**Color Temperature**	**Distribution**	**Voltage**	**Mounting**
RSX1 LED	P1 P2 P3 P4	30K 3000K 40K 4000K 50K 5000K	R2 Type 2 Wide R3 Type 3 Wide R3S Type 3 Short R4 Type 4 Wide R4S Type 4 Short R5 Type 5 Wide [1] R5S Type 5 Short [1] AFR Automotive Front Row AFRR90 Automotive Front Row Right Rotated AFRL90 Automotive Front Row Left Rotated	MVOLT (120V-277V) [2] HVOLT (347V-480V) [3] XVOLT (277V-480V) [4] (use specific voltage for options as noted) 120 [3] 277 [5] 208 [3] 347 [5] 240 [3] 480 [5]	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°) RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°) MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon) IS Adjustable slipfitter (fits 2-3/8" OD tenon) [6] WBA Wall bracket [1] WBASC Wall bracket with surface conduit box AASP Adjustable tilt arm square pole mounting [6] AARP Adjustable tilt arm round pole mounting [6] AAWB Adjustable tilt arm with wall bracket [6] AAWSC Adjustable tilt arm wall bracket and surface conduit box [6]

HS		
Options		**Finish**
Shipped Installed HS House-side shield [7] PE Photocontrol, button style [8,9] PER7 Seven-wire twist-lock receptacle only (no controls) [9,10,11] SF Single fuse (120, 277, 347) [5] DF Double fuse (208, 240, 480) [5] SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output [9] DMG 0-10V dimming extend out back of housing for external control (control ordered separate) [9]	**Shipped Installed** ***Standalone and Networked Sensors/Controls (factory default settings, see table page 9)** NLTAIR2 PIRHN nLight AIR generation 2, with Networked, Bi-Level motion/ambient sensor [9,12,13,14] BAA Buy America(n) Act Compliant CCE Coastal Construction [15] *Note: NLTAIR2 PIRHN with nLight Air can be used as a standalone or networked solution. Sensor coverage pattern is affected when luminaire is tilted. **Shipped Separately (requires some field assembly)** EGS External glare shield [7] EGFV External glare full visor (360° around light aperture) [7] BS Bird spikes [16]	DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLBXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White

Ordering Information

Accessories
Ordered and shipped separately.

RSX1HS	RSX1 House side shield (includes 1 shield)
RSX1HSAFRR U	RSX1 House side shield for AFR rotated optics (includes 1 shield)
RSX1EGS (FINISH) U	External glares hield (specify finish)
RSX1EGFV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish) [1]
RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) [17]
DLL347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) [17]
DLL480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) [17]
DSHORT SBK U	Shorting cap [18]

NOTES
1 Any Type 5 distribution, is not available with WBA.
2 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
3 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
4 XVOLT driver not available with P1 or P2. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE.
5 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
6 Maximum tilt is 90° above horizontal.
7 It may be ordered as an accessory.
8 Requires MVOLT or 347V.
9 Two or more of the following options cannot be combined including PE, DMG, PER7, FAO and NLTAIR2 PIRHN. (Exception: PE and FAO can be combined; also PE and DMG can be combined.)
10 Compatible with standard twist-lock photocells for dusk to dawn operation or advanced control nodes that provide 0-10V dimming signals. Wire 4/Wire 5 wired to dimming leads on driver. Wire6/Wire7 capped inside luminaire. Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
11 For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
12 Must be ordered with PIRHN.
13 Requires MVOLT or HVOLT.
14 Must be ordered with NLTAIR2. For additional information on PIRHN visit here.
15 CCE option not available with WBA, WBASC, AASP, AARP, AAWB, AAWBSC, EGS, EGFV and BS.
16 Must be ordered with fixture for factory pre-drilling.
17 Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

External Shields

House Side Shield

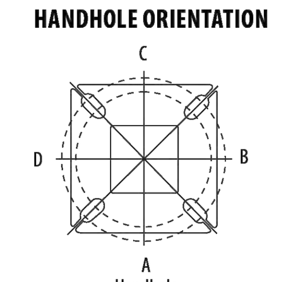
External Glare Shield

External 360 Full Visor

Pole/Mounting Informatiion

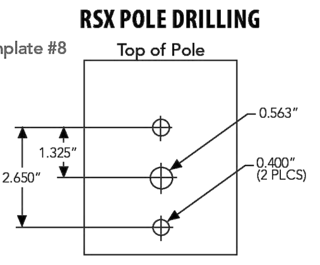
Accessories including bullhorns, cross arms and other adpaters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit Accessories.

HANDHOLE ORIENTATION

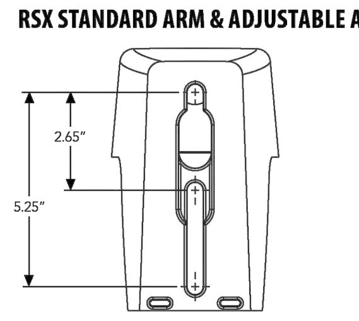


RSX POLE DRILLING

Template #8



RSX STANDARD ARM & ADJUSTABLE ARM



Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	RPA, AARP	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 320	AS3-5 390	AS3-5 490
2-7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
#8	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

RSX1 - Luminaire EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

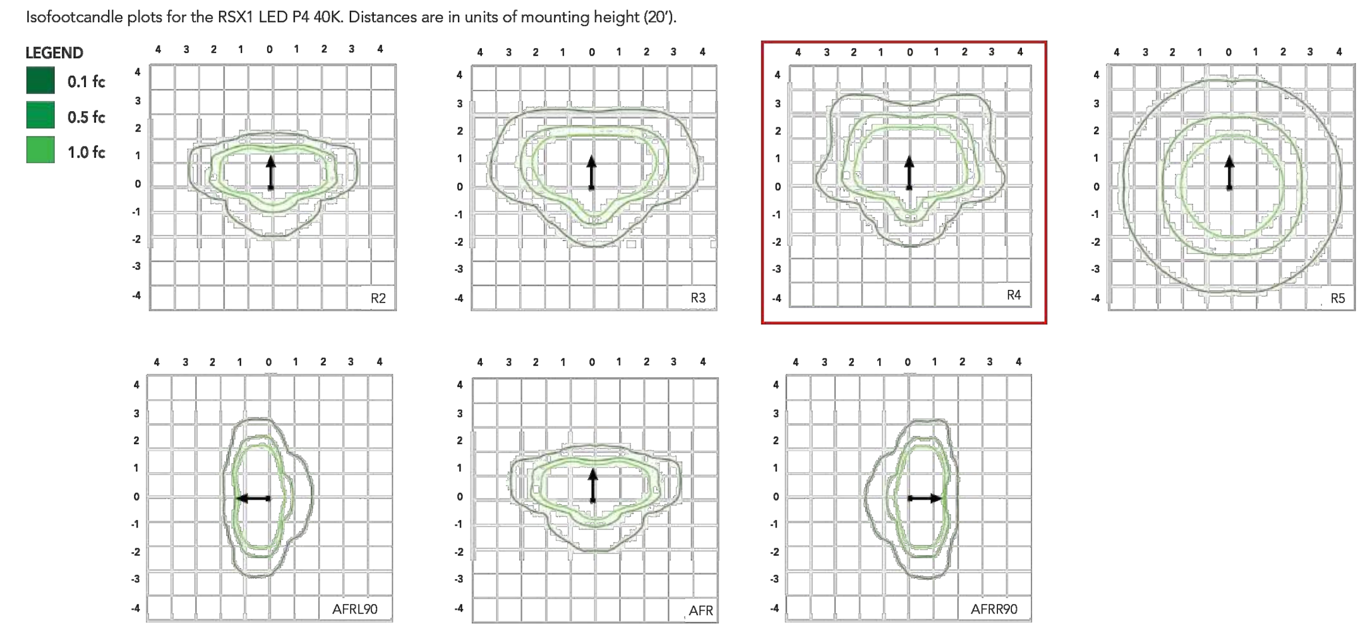
Mounting Type	Tilt	Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
SPA - Square Pole Adaptor	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
RPA - Round Pole Adaptor	0°	0.62	1.08	1.15	1.62	1.46	2.13	1.36	1.8	2.36
MA - Mast Arm Adaptor	0°	0.49	0.95	0.89	1.36	1.2	1.87	1.23	1.54	2.1
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
	10°	0.68	1.34	1.33	2	1.74	2.64	1.35	2.03	2.71
	20°	0.87	1.71	1.73	2.56	2.26	3.42	1.75	2.62	3.49
	30°	1.24	2.19	2.3	3.21	2.87	4.36	2.49	3.73	4.97
	40°	1.81	2.68	2.98	3.85	3.68	5.30	3.62	5.43	7.24
	45°	2.11	2.92	3.44	4.2	4.08	5.77	4.22	6.33	8.44
	50°	2.31	3.17	3.72	4.52	4.44	6.26	4.62	6.94	9.25
	60°	2.71	3.66	4.38	5.21	5.15	7.24	5.43	8.14	10.86
	70°	2.78	3.98	4.54	5.67	5.47	7.91	5.52	8.27	11.03
	80°	2.76	4.18	4.62	5.97	5.76	8.31	5.51	8.27	11.03
	90°	2.73	4.25	4.64	6.11	5.91	8.47	5.45	8.18	10.97

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').

LEGEND
0.1 fc
0.5 fc
1.0 fc



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

		Current (A)					
Performance Package	System Watts (W)	120V	208V	240V	277V	347V	480V
P1	51W	0.42	0.25	0.21	0.19	0.14	0.11
P2	72W	0.60	0.35	0.30	0.26	0.21	0.15
P3	109W	0.91	0.52	0.45	0.39	0.31	0.23
P4	133W	1.11	0.64	0.55	0.48	0.38	0.27

Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

LaBella
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Rochester, NY 14614
585-454-6110
labellapc.com

EXP: ##/##/20## EXP: ##/##/20##

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
160 MAIN AVE
WATERTOWN, NY 13601

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2232540
DRAWN BY: SRV/SCB
REVIEWED BY: DPB
ISSUED FOR: SITE PLAN APPROVAL
DATE: JULY 2023
DRAWING NAME:

CONSTRUCTION DETAILS

DRAWING NUMBER:

C507

VERSION 23.1
7/18/2023 3:14 PM

Performance Data

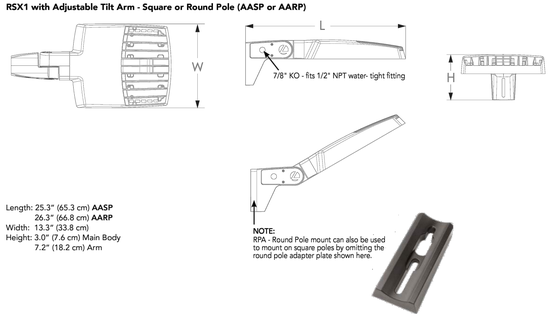
Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)				40K (4000K, 70 CRI)				50K (5000K, 70 CRI)			
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	51W	R2	6,482	1	0	1	126	7,121	1	0	1	139	7,121	1	0	1	139
		R3	6,459	1	0	2	127	7,096	1	0	2	139	7,096	1	0	2	139
		R3S	6,631	1	0	1	129	7,286	1	0	2	142	7,286	1	0	2	142
		R4	6,543	1	0	2	128	7,189	1	0	2	141	7,189	1	0	2	141
		R4S	6,313	1	0	1	124	6,936	1	0	1	136	6,936	1	0	1	136
		R5	6,631	3	0	2	130	7,286	3	0	2	143	7,286	3	0	2	143
		R5S	6,807	3	0	1	133	7,479	3	0	1	147	7,479	3	0	1	147
		AFR	6,473	1	0	1	127	7,112	1	0	1	139	7,112	1	0	1	139
		AFR90	6,535	2	0	2	127	7,179	2	0	2	140	7,179	2	0	2	140
		AFRL90	6,562	2	0	1	128	7,210	2	0	2	140	7,210	2	0	2	140
P2	72W	R2	8,991	2	0	1	123	9,878	2	0	1	135	9,878	2	0	1	135
		R3	8,959	2	0	2	124	9,843	2	0	2	137	9,843	2	0	2	137
		R3S	9,198	2	0	2	126	10,106	2	0	2	139	10,106	2	0	2	139
		R4	9,077	2	0	2	126	9,972	2	0	2	139	9,972	2	0	2	139
		R4S	8,757	1	0	2	122	9,622	2	0	2	134	9,622	2	0	2	134
		R5	9,198	4	0	2	128	10,106	4	0	2	140	10,106	4	0	2	140
		R5S	9,443	3	0	1	131	10,374	3	0	1	144	10,374	3	0	1	144
		AFR	8,979	2	0	1	125	9,865	2	0	1	137	9,865	2	0	1	137
		AFR90	9,064	3	0	2	124	9,959	3	0	2	137	9,959	3	0	2	137
		AFRL90	9,102	3	0	2	125	10,001	3	0	2	137	10,001	3	0	2	137
P3	109W	R2	12,808	2	0	1	117	14,072	2	0	2	129	14,072	2	0	2	129
		R3	12,763	2	0	2	117	14,023	2	0	2	129	14,023	2	0	2	129
		R3S	13,104	2	0	2	120	14,397	2	0	2	132	14,397	2	0	2	132
		R4	12,930	2	0	2	119	14,266	2	0	2	130	14,266	2	0	2	130
		R4S	12,475	2	0	2	114	13,707	2	0	2	126	13,707	2	0	2	126
		R5	13,104	4	0	2	120	14,397	4	0	2	132	14,397	4	0	2	132
		R5S	13,452	3	0	2	123	14,779	3	0	2	136	14,779	3	0	2	136
		AFR	12,791	2	0	1	117	14,053	2	0	2	129	14,053	2	0	2	129
		AFR90	12,913	3	0	3	118	14,187	3	0	3	130	14,187	3	0	3	130
		AFRL90	12,967	3	0	2	118	14,247	3	0	3	130	14,247	3	0	3	130
P4	133W	R2	14,943	2	0	2	112	16,417	2	0	2	123	16,417	2	0	2	123
		R3	14,890	2	0	3	112	16,360	2	0	3	123	16,360	2	0	3	123
		R3S	15,287	2	0	2	115	16,796	2	0	2	126	16,796	2	0	2	126
		R4	15,085	2	0	3	113	16,574	2	0	3	125	16,574	2	0	3	125
		R4S	14,554	2	0	2	109	15,991	2	0	2	120	15,991	2	0	2	120
		R5	15,287	4	0	2	115	16,796	4	0	2	126	16,796	4	0	2	126
		R5S	15,693	4	0	2	118	17,242	4	0	2	130	17,242	4	0	2	130
		AFR	14,923	2	0	2	112	16,395	2	0	2	123	16,395	2	0	2	123
		AFR90	15,065	3	0	3	113	16,551	3	0	3	124	16,551	3	0	3	124
		AFRL90	15,128	3	0	3	114	16,621	3	0	3	125	16,621	3	0	3	125

Dimensions

RSX1 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)

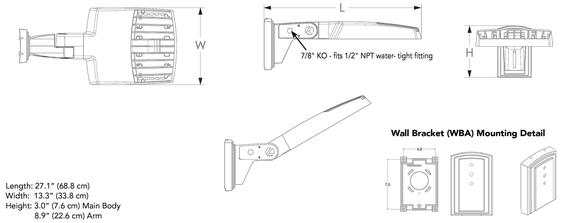


Length: 25.3" (65.3 cm) **AASP**
25.3" (66.8 cm) **AARP**
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.2 cm) Arm

NOTE:
RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

Notes
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.
AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

RSX1 with Adjustable Tilt Arm with Wall Bracket (AAWB)



Length: 27.1" (68.8 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
8.9" (22.6 cm) Arm

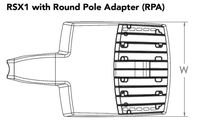
Wall Bracket (WBA) Mounting Detail

Dimensions & Weights

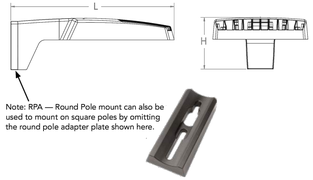
Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	22 lbs
RPA	24 lbs
MA	22 lbs
WBA	25 lbs
WBASC	28 lbs
IS	25 lbs
AASP	25 lbs
AARP	27 lbs
AAWB	28 lbs
AAWSC	31 lbs

RSX1 with Round Pole Adapter (RPA)

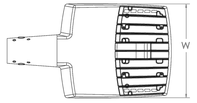


Length: 22.8" (57.9 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.4 cm) Arm



Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

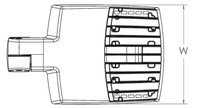
RSX1 with Mast Arm Adapter (MA)



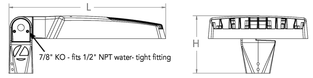
Length: 23.2" (59.1 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
3.5" (8.9 cm) Arm

7/16" locking thru bolt/nut provided

RSX1 with Adjustable Slipfitter (IS)



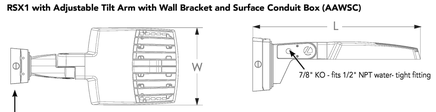
Length: 20.7" (52.7 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
7.6" (19.3 cm) Arm



7/8" KO - fits 1/2" NPT water- tight fitting

Dimensions

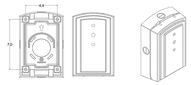
RSX1 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



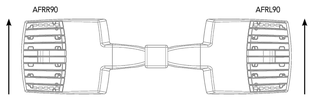
3/4" NPT taps with plugs - Qty (4) provided

Length: 28.8" (73.2 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm

Surface Conduit Box (SCB) Mounting Detail



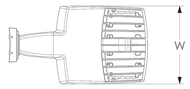
Automotive Front Row - Rotated Optics (AFRR90/R90)

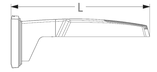


(Example: 20180 - arrows indicate direction of light exiting the luminaire)

Dimensions

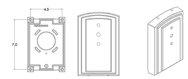
RSX1 with Wall Bracket (WBA)



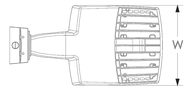


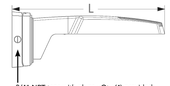
Length: 23.6" (59.9 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
8.9" (22.6 cm) Arm

Wall Bracket (WBA) Mounting Detail



RSX1 with Wall Bracket with Surface Conduit Box (WBASC)

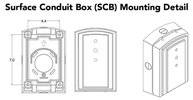




3/4" NPT taps with plugs - Qty (4) provided

Length: 25.3" (64.3 cm)
Width: 13.3" (33.8 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm

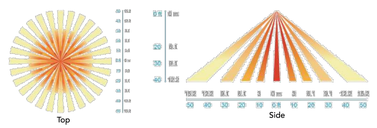
Surface Conduit Box (SCB) Mounting Detail



nLight Control - Sensor Coverage and Settings

nLight Sensor Coverage Pattern
NLTAIR2 PIRHN

Top



Side

Motion Sensor Default Settings - Option PIRHN							
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
NLTAIR2 PIRHN	Approx. 10% Output	100% Output	Enabled @ 1.5FC	7.5 minuters	3 seconds	5 minutes

*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clarity Pro App.
Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is tilted.

FEATURES & SPECIFICATIONS

INTENDED USE
The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX1 delivers 7,000 to 17,000 lumens and is ideal for replacing 70W to 400W HID pole-mounted luminaires in parking lots and other area lighting applications.

CONSTRUCTION
The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. All mountings are rated for minimum 1.5 G vibration load per ANSI C136.31. 3G Mountings: Include SPA, RPA, MA, IS, AASP, and AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warrantied not to crack or peel.

COASTAL CONSTRUCTION (CCE)
pforal corrosion resistant construction is engineered with added corrosion rotection in materials and/or pre-treatment of base material under superTurable paint. Provides additional corrosion protection for applications near Coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with cribe rating of 10. Additional lead-times apply.

OPTICS
Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row), and AFR rotated AFRR90 and AAFL90.

ELECTRICAL
Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Fixtures ship standard with 0-10v dimming driver. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS
The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

nLIGHT AIR CONTROLS
The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION
Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

LISTINGS
CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL, to confirm which versions are qualified.
International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only. U.S. Patent No. D882, 166S

BUY AMERICAN ACT
Product with the BAA option is assembled in the USA and meets the Buy American's government procurement requirements under FAR, DFARS and DOT regulations.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

VERSION 23.1
7/18/2023 3:14 PM

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Rochester, NY 14614
585-454-6110

labellapc.com

NOT FOR CONSTRUCTION
EXP: ##/##/20##
EXP: ##/##/20##

NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
160 MAIN AVE
WATERTOWN, NY 13601

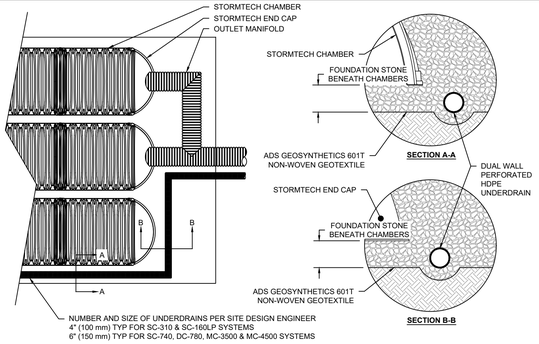
NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2232540
DRAWN BY: SRV/SCB
REVIEWED BY: DPB
ISSUED FOR: SITE PLAN APPROVAL
DATE: JULY 2023
DRAWING NAME:

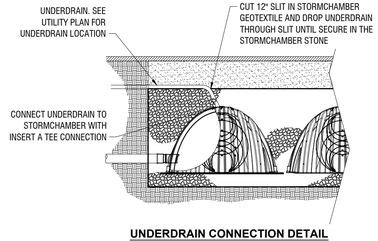
CONSTRUCTION DETAILS

DRAWING NUMBER:

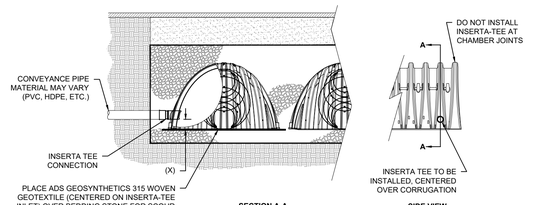
C508



UNDERDRAIN DETAIL
NTS



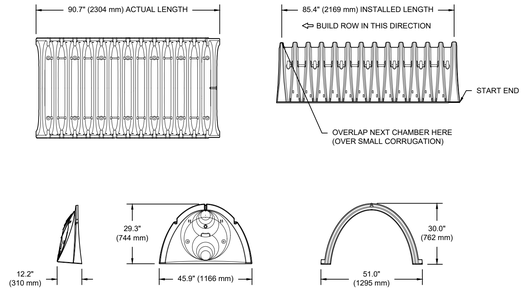
UNDERDRAIN CONNECTION DETAIL



NOTE:
PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.

CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON		

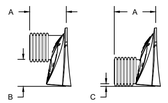
INSERT A TEE DETAIL
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

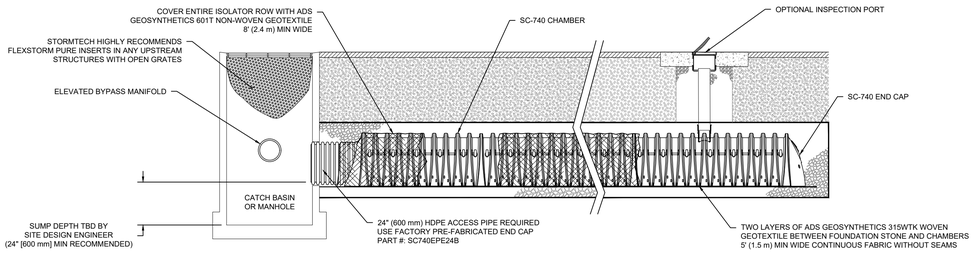
PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC			---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

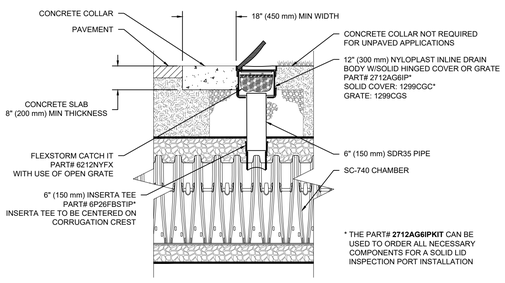
* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

SC-310 TECHNICAL SPECIFICATION
NTS



SC-740 ISOLATOR ROW DETAIL
NTS



SC-740 6" INSPECTION PORT DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

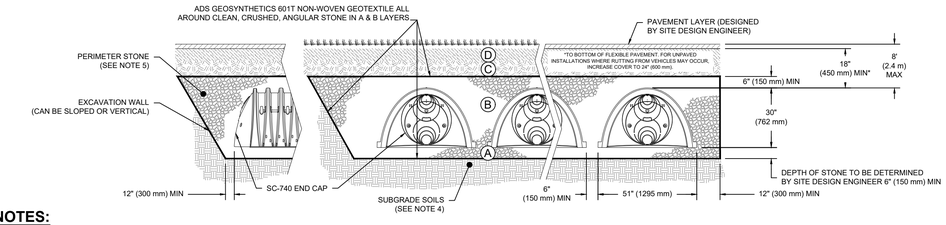
NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



NOTES:

1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
6. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
7. STORMWATER CHAMBERS SHALL REMAIN "OFFLINE" UNTIL THE SITE HAS ACHIEVED FINAL STABILIZATION TO PREVENT CONTAMINATION OF THE ISOLATOR ROW WITH SEDIMENT.

1 C509 SC-740 STORM CHAMBER SYSTEM (OR APPROVED EQUAL)
N.T.S.

VERSION 23.1
7/18/2023 3:14 PM

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300 State Street, Suite 201
Rochester, NY 14614
585-454-6110
labellapc.com

NOT FOR CONSTRUCTION
EXP: ##/###/20##
EXP: ##/###/20##

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
160 MAIN AVE
WATERTOWN, NY 13601

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2232540
DRAWN BY: SRV/SCB
REVIEWED BY: DPB
ISSUED FOR: SITE PLAN APPROVAL
DATE: JULY 2023
DRAWING NAME:

CONSTRUCTION DETAILS

DRAWING NUMBER:

C509

7/17/2023 12:18:31 PM

BUILDING DATA - AREAS

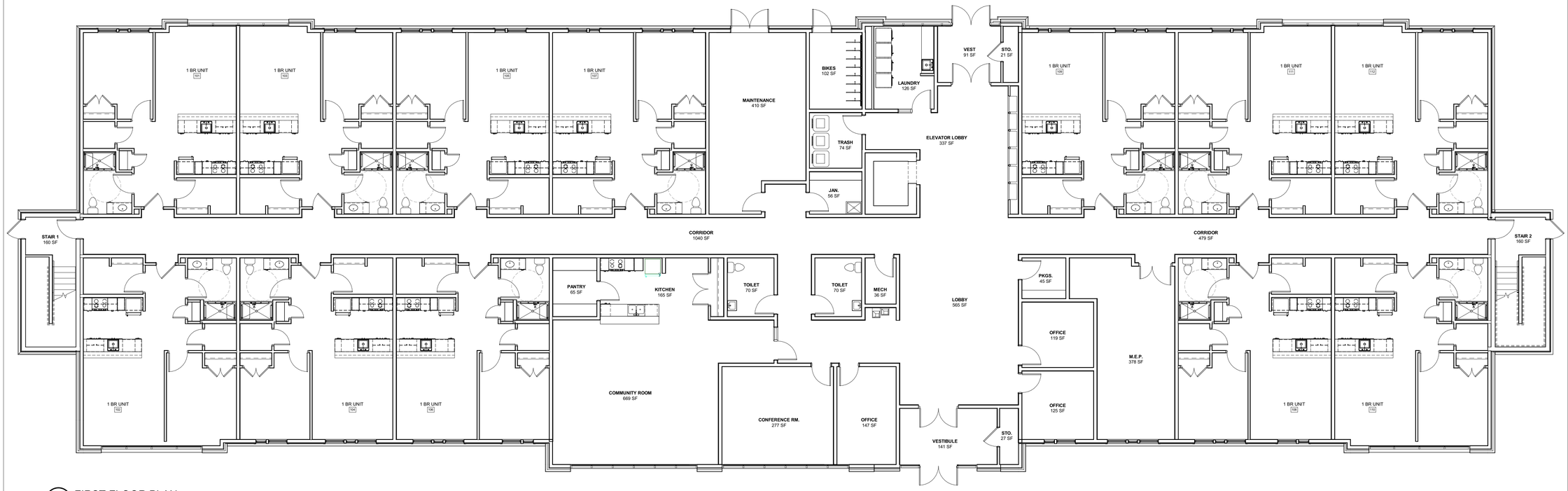
LEVEL	HCR DEFINED*	BUILDING CODE DEFINED**	GROSS BUILT***
FIRST	15,381 SF	15,381 SF	15,712 SF
SECOND	15,377 SF	14,748 SF	15,062 SF
THIRD	15,381 SF	15,381 SF	15,712 SF
FOURTH	15,265 SF	15,381 SF	15,595 SF
TOTALS	**61,404 SF**	**60,775 SF**	**62,081 SF**

* EXCLUDING FRAMING THICKNESS OF EXTERIOR WALLS, BUT INCLUDING LEVEL 2 AREA ABOVE (ATRIUM) SPACES.

** EXCLUDING FRAMING THICKNESS OF EXTERIOR WALLS AND LEVEL 2 AREA ABOVE (ATRIUM) SPACES.

*** INCLUDING FRAMING THICKNESS OF EXTERIOR WALLS, BUT EXCLUDING LEVEL 2 AREA ABOVE (ATRIUM) SPACES.

2 SECOND FLOOR PLAN
1/8" = 1'-0"



1 FIRST FLOOR PLAN
1/8" = 1'-0"

FILE PATH: Autodesk Docs://23062.00 Neighbors of Watertown Affordable Apts/23062.00 NoW Affordable Apartments.rvt

SWBR

387 East Main Street Rochester NY 14604
585 232 8300 | rochester@swbr.com

SWBR NYS Certificate of Authorization #: 235221

Drawn By:	NPD
Checked By:	JV
Project Manager:	JV

Revisions

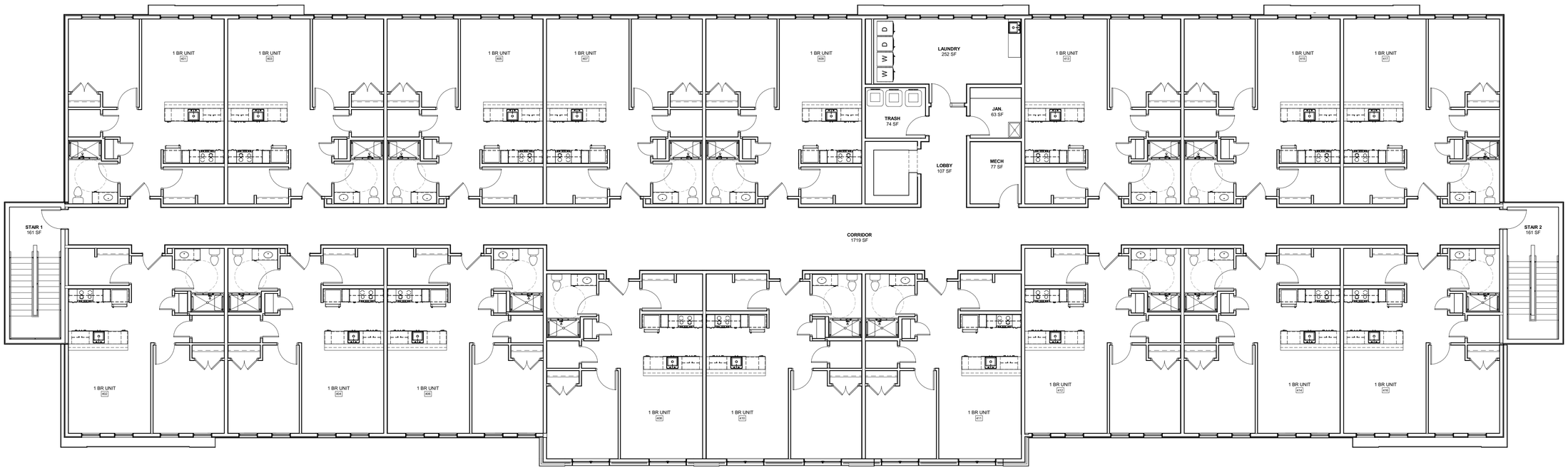
Neighbors of Watertown Affordable Housing
SWBR Project Number 23062.00

Neighbors of Watertown Inc.
112 Franklin Street Watertown, NY 13601

A-101

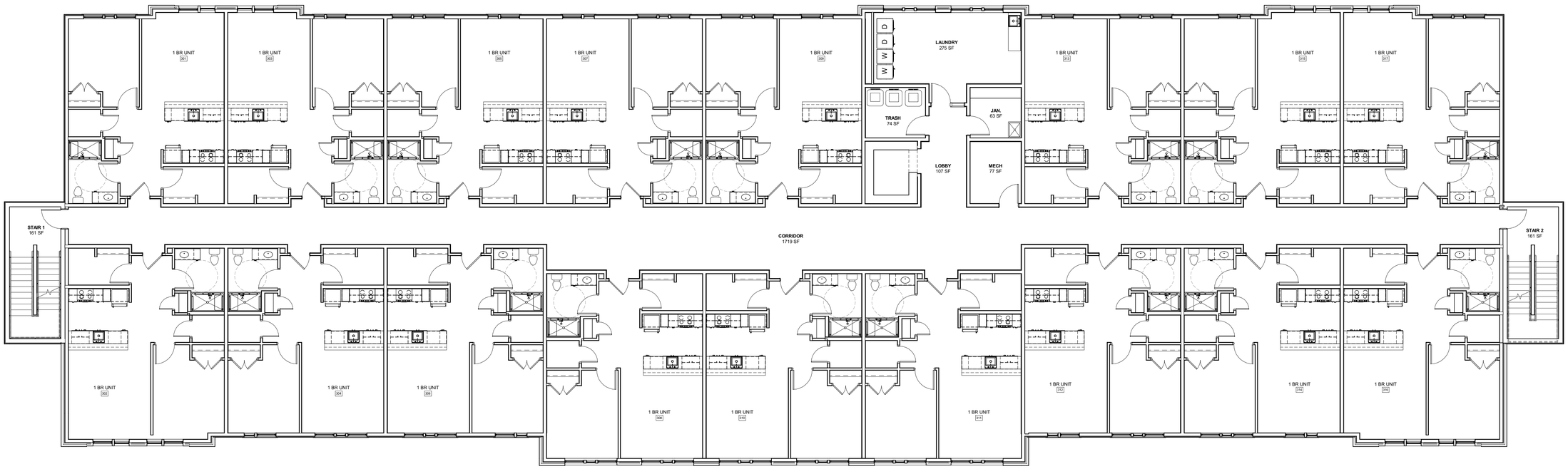
FIRST & SECOND FLOOR PLANS

Issue Date
Schematic Design



2 FOURTH FLOOR PLAN

1/8" = 1'-0"



1 THIRD FLOOR PLAN

1/8" = 1'-0"

SWBR

387 East Main Street Rochester NY 14604
585 232 8300 | rochester@swbr.com

SWBR NYS Certificate of
Authorization #: 235221

Drawn By:	NPD
Checked By:	JV
Project Manager:	JV

Revisions

Neighbors of Watertown Affordable Housing
SWBR Project Number 23062.00

Neighbors of Watertown Inc.
112 Franklin Street Watertown, NY 13601

A-102

SECOND & THIRD FLOOR PLANS

Issue Date
Schematic Design

ELEVATION KEY NOTES

SHOWN AS: (X)

NO.	DESCRIPTION
1	PREFINISHED FIBER CEMENT LAP SIDING
2	PREFINISHED FIBER CEMENT LINEAL TRIM, COLOR - WHITE
3	BOARD & BATTEN SIDING, COLOR - TBD
4	FACE BRICK VENEER
5	DECORATIVE STONE MASONRY
6	SINGLE-HUNG VINYL WINDOW
7	DOUBLE SINGLE-HUNG VINYL WINDOW W/ INTEGRATED FIXED VINYL WINDOW
8	CORNICE TRIM
9	TYPICAL BRICK SOLDIER ROW
10	TYPICAL CAST STONE WINDOW SILL
11	FLAT ROOF CANOPY OVERHANG
12	ALUMINUM STOREFRONT SYSTEM

2 BACK ELEVATION
1/8" = 1'-0"

1 STREET ELEVATION
1/8" = 1'-0"

SWBR

387 East Main Street Rochester NY 14604
585 232 8300 | rochester@swbr.com

SWBR NYS Certificate of Authorization #: 235221

Drawn By: NPD
Checked By: JV
Project Manager: JV

Revisions

Neighbors of Watertown Affordable Housing
SWBR Project Number 23062.00

Neighbors of Watertown Inc.
112 Franklin Street Watertown, NY 13601

A-201

EXTERIOR ELEVATION AND DETAILS

Issue Date
Schematic Design

Prepared For:
Neighbors of Watertown
112 Franklin Street
Watertown, NY 13601

Submitted by:
LaBella Associates
300 State Street
Suite 201
Rochester, NY 14614
(585) 454-6110

LaBella
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Mill and Main Apartments Engineering Report

JULY 2023
PROJECT NO. 2232540

TABLE OF CONTENTS

SECTION 1: PROJECT DESCRIPTION

Neighbors of Watertown Inc. is looking to construct a new 61-unit multi-family, 4-story affordable housing building with associated parking lot, sidewalks, landscaping and stormwater management facilities.

Neighbors of Watertown is requesting site plan approval from the City of Watertown Planning Board to develop an affordable housing project on an approximately 1.9-acre project site which spans across 6 parcels (Tax Parcels 2-01-332.004, 2-01-332.003, 2-01-332.002, 2-01-301.001, 2-01-301.00, 2-01-302.000), located on Main Avenue, just south of Mill Street in the City of Watertown, Jefferson County, New York. The project will be consolidating 6 parcels into one parcel. The proposed project will comprise of a 61-unit, 4-story multifamily apartment building with 40 parking spots and associated site improvements. The proposed project site is in the City's Urban Mixed Use (UMU) District, which permits apartment buildings pursuant to site plan review.

The new building will be located at 160 Main Ave, along the street frontage with associated parking lot behind the building, sidewalks, landscaping and stormwater management facilities.

SECTION 2: SANITARY SUMMARY

2.1 Existing Sanitary Sewer

Existing sanitary sewer mains run through the center of both Main Ave and Mill Street. After reviewing record mapping, survey data, and GIS information, it has been determined that the sanitary sewer on Main Ave flows from east to west along the street frontage. West (downstream) of the project area, the sanitary sewer and storm systems combine and flow southwest under Main Ave.

There are several existing sewer laterals that appear to have connected to the former buildings on the parcels included in the project area.

An analysis of the available capacity of the proposed sewer connection will be completed upon receipt of existing sewer data from the City of Watertown/Sewer Department.

3.2 Proposed Sanitary Sewer

Following review of the existing sewer system, it was determined that the proposed building would connect to an existing sanitary sewer manhole in Main Ave, near the new mechanical room.

SECTION 3: WATER DEMAND SUMMARY

3.1 Existing Water

The project site is serviced by two water mains, one running under Main Ave and one running under Mill Street. Both watermains sit within the street right-of-way.

An analysis of the available flow testing data of the existing water system will be completed upon receipt of existing data from the City of Watertown Water Department.

Flow testing data for the nearest hydrant will be added to the chart below.

Table 1: Flow Testing Data

Nearest Hydrant	
Flow (gpm)	TBD
Static Pressure (psi)	TBD

3.2 Proposed Service

The new building is proposed to be serviced by a 6" combined service that will utilize an existing water lateral off the watermain within the running under Main Ave, as shown on drawing sheet C301. The contractor will evaluate the condition of the existing valve prior to demolition and construction.

Water demand for the building is listed below.

Table 2: Water Demand

Design Calculations	
Flow (gpm)	TBD
Static Pressure (psi)	TBD

The building loads are still be being determined by the M.E.P. Engineer and will be provided to the City upon completion of calculations.

SECTION 4: STORMWATER SUMMARY AND CALCULATIONS

4.1 Existing Conditions

The existing project area is predominantly covered by spoil piles, gravel, foundation remains and shrub/grub growth. The site has been used a dumping area for gravel, stone and asphalt millings. Currently half of the project area drains to the northwest

corner via sheet flow before continuing to flow off the property to the northwest. The other portion of the site sheet flows across the gravel to a catch basin at the southwest corner of the site, which then flows in the City of Watertown storm system on Main Ave.

4.2 Proposed Design

The proposed site has been designed and developed in accordance with the "New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity". Design considerations were made to maintain existing drainage patterns and decrease rates of stormwater runoff.

The proposed project is classified as a redevelopment project, which results in a significant reduction of impervious cover on the site. Section 9.2.1.B.I of the Stormwater Design Manual, states that if the redevelopment activities result in a reduction of existing impervious cover by a minimum of 25% of the total disturbed, impervious area, than the stormwater criteria for water quality has been achieved.

In order to reduce post-construction flow rates to levels below that of the pre-construction rates, a storm chamber system will be installed under the new parking lot.

For calculations and a full design report, refer to the SWPPP included in the site plan application package.

SECTION 5: TRAFFIC IMPACT SUMMARY

5.1 Traffic Demand Management Plan (TDMP)

The proposed project is located on parcels zoned Urban Mixed Use (UMU), which by code allows for a maximum of 20 parking spaces. The proposed parking lot layout has 40 spaces, including 2 ADA spaces (200% of the maximum).

For designs requesting to increase parking spaces between 150% and up to 200% of the maximum requires a Transportation Demand Management Plan (TDMP).

For the full traffic report, refer to the TDMP included in the site plan application package.

SECTION 6: EXTERIOR LIGHTING SUMMARY

6.1 Lighting Design

The proposed site lighting design was laid out in accordance with Section 310-84 Lighting of the City of Watertown code. Light spillage across all property lines is less than 0.5 footcandles. Dark sky compliant fixtures are proposed throughout the site.

Refer to Sheet E101 Lighting Plan for photometric calculations and lists of proposed fixtures included in the site plan application package.

SECTION 7: LANDSCAPING SUMMARY

7.1 Landscaping Design

The proposed landscaping design was laid out in accordance with Section 310-83 Landscape and Buffer Requirements of the City of Watertown code.

Refer to Sheet L101 for full landscaping design layout and plant schedules included in the site plan application package.

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

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

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

Part 1 – Project and Sponsor Information

Name of Action or Project:

Neighbors of Watertown Mill and Main Street Apartments

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

160 Main Avenue, Watertown, NY 13601 (SBLs: 2-01-301, 2-01-301.001,2-01-302, 2-01-332.002, 2-01-332.003, 2-01-332.002). See attached map.

Brief Description of Proposed Action:

Neighbors of Watertown Inc. (NOW) is looking to construct a new 61-unit multi-family, 4-story affordable housing building with associated parking lot, sidewalks, landscaping and stormwater management facilities. NOW is requesting HCR 9% funding and seeking site plan approval from the City of Watertown Planning Board to develop an affordable housing project on an approximately 1.9-acre site which spans across 6 parcels (Tax Parcels 2-01-332.004, 2-01-332.003, 2-01-332.002, 2-01-301.001, 2-01-301.00, 2-01-302.000), located on Main Avenue, just south of Mill Street in the City of Watertown, Jefferson County, New York. The project will be consolidating 6 parcels into one parcel. The proposed project will comprise of a 61-unit, 4-story multifamily apartment building with 40 parking spots and associated site improvements. The proposed project site is in the City's Urban Mixed Use (UMU) District, which permits apartment buildings pursuant to site plan review.

The new building will be located at 160 Main Ave, along the street frontage with associated parking lot behind the building, sidewalks, landscaping and stormwater management facilities.

Name of Applicant or Sponsor:	Telephone: (315)782-8497
Reginald J Schweitzer Jr., Executive Director, Neighbors of Watertown, Inc.	E-Mail: Reg@neighborsofwatertown.com

Address:

112 Franklin Street

City/PO:	State:	Zip Code:
Watertown	NY	13601

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: HCR- Funding, SHPO-Consultation, DEC-SWPPP and NYNHP Consultation, City of Watertown PB-Site Plan, ZBA - 2 Area Variances	☐	☑

3. a. Total acreage of the site of the proposed action? +/- 1.9 acres
   b. Total acreage to be physically disturbed? +/-1.75 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? +/-3.4 acres

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

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

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

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

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

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

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

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

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

	NO	YES
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☐	☑
The project received a SHPO no effect letter dated 6/27/2023. See attached.		
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	☐	☑

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☑	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____		
The project site is located approximately 530 feet north of Black River. Per the NYSDEC ERM, the project area does not contain any wetlands or waterbodies.		

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

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

☐ Wetland ☑ Urban ☑ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Indiana Bat, Northern Long-Bat.It is anticipated that the project will remove less than +/-0.2 acres of trees, brush, and site overgrowth.	☐	☑
16. Is the project site located in the 100-year flood plan?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☐	☑
If Yes, a. Will storm water discharges flow to adjacent properties?	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☑
If Yes, briefly describe: Stormwater Discharge will be directed to on-site stormwater management facilities and then conveyed to the City of Watertown's public storm system. Stormwater design will meet all NYS DEC requirements.		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: 623006-Abe Cooper Surplus Company, is a State Superfund Site and V00473-NM - Anthony St. - Watertown MGP is a voluntary clean up program site. These sites are located south of Black River (0.2 miles away from the project site).	☐	☑

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

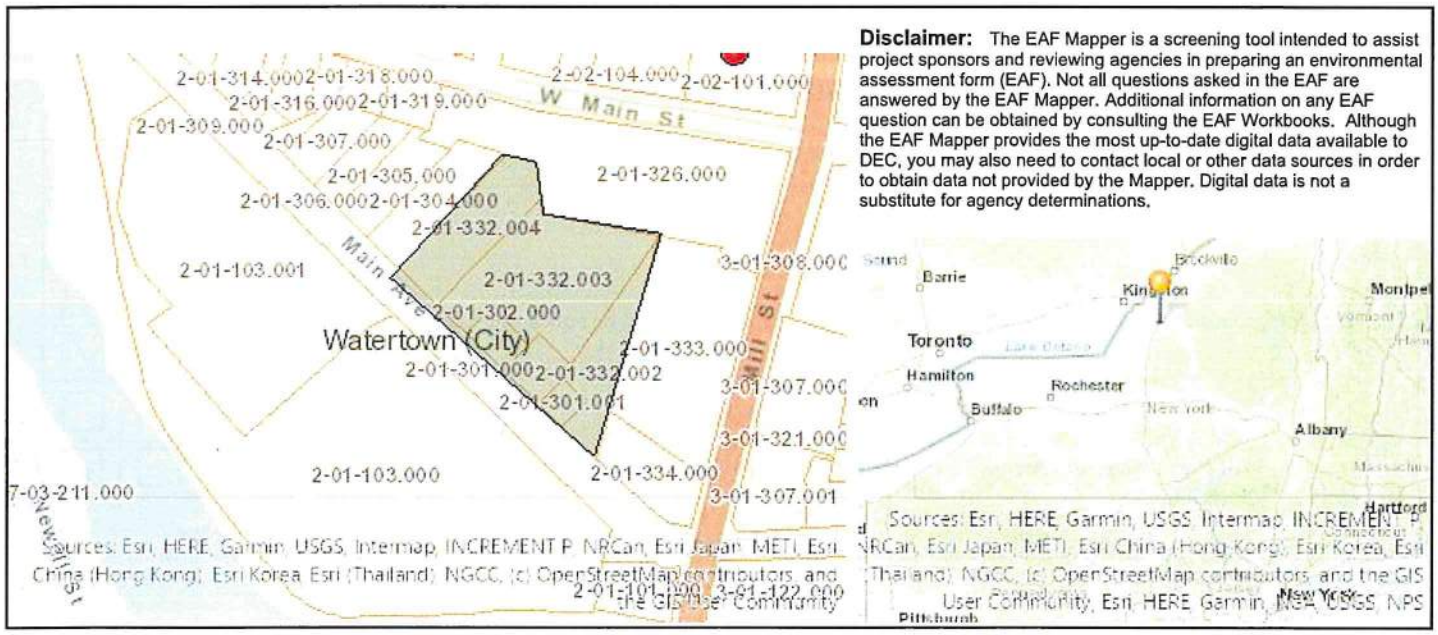
Applicant/sponsor/name: Reginald J Schweitzer Jr.,Neighbors of Watertown, Inc. Date: 7/18/2023

Signature: _____ Title: Executive Director

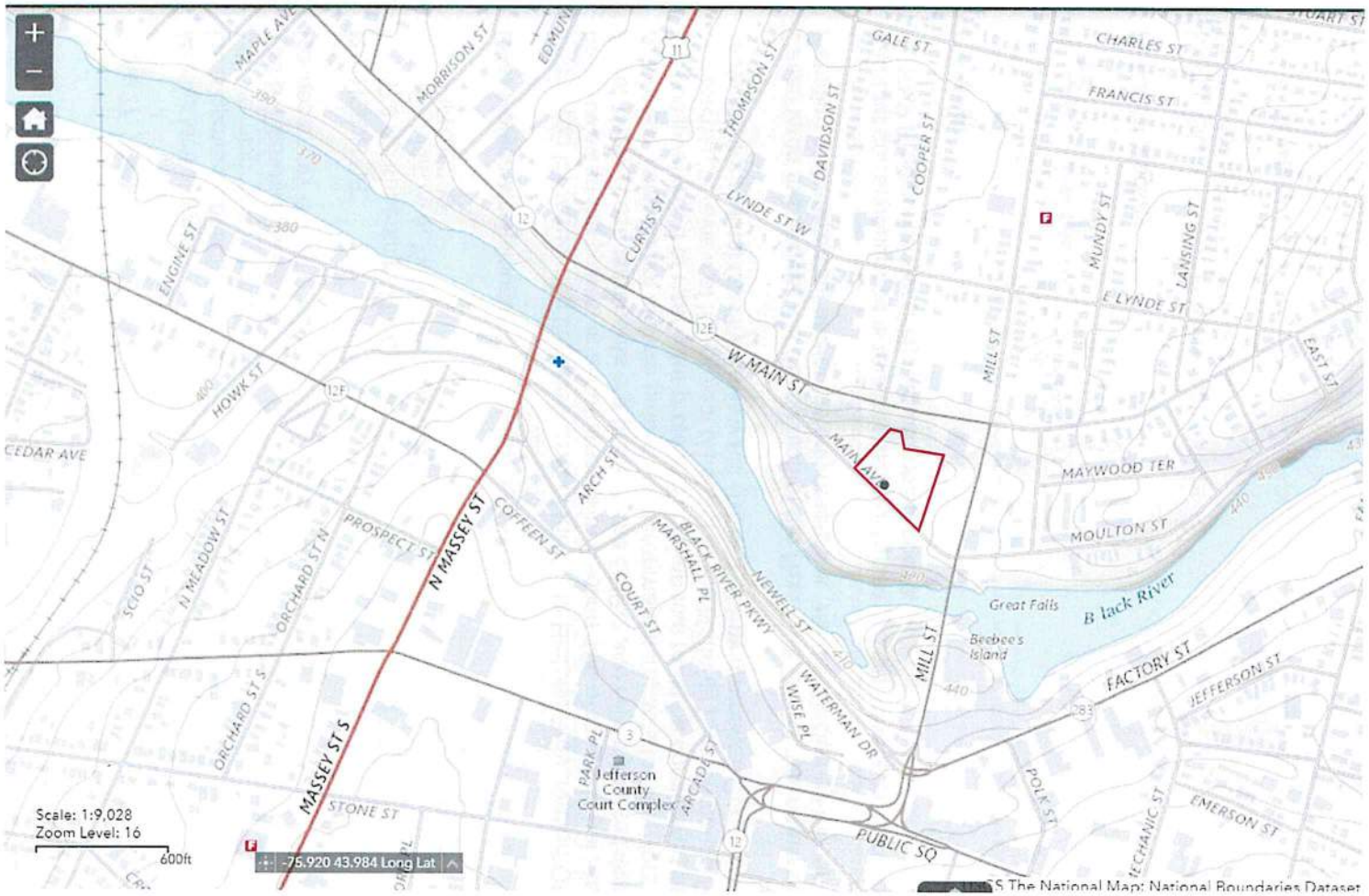
PRINT FORM

EAF Mapper Summary Report

Monday, July 17, 2023 12:28 PM



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	Yes
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Indiana Bat, Northern Long-eared Bat
Part 1 / Question 16 [100 Year Flood Plain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
Part 1 / Question 20 [Remediation Site]	Yes



NOT TO SCALE	Mill and Main Street Apartments USGS Topographic Map City of Watertown, Jefferson County, NY Project No: 2232540	LaBella Powered by partnership.

N

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

June 27, 2023

Monica McCullough
Development Consultant
MM Development Advisors, Inc.
133 S. Fitzhugh Street
Rochester, NY 14620

Re: HCR/HTFC
The Apartments at Mill & Main
160 Main Ave, Watertown, NY 13601
23PR05200

Dear Monica McCullough:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Roger Daniel Mackay

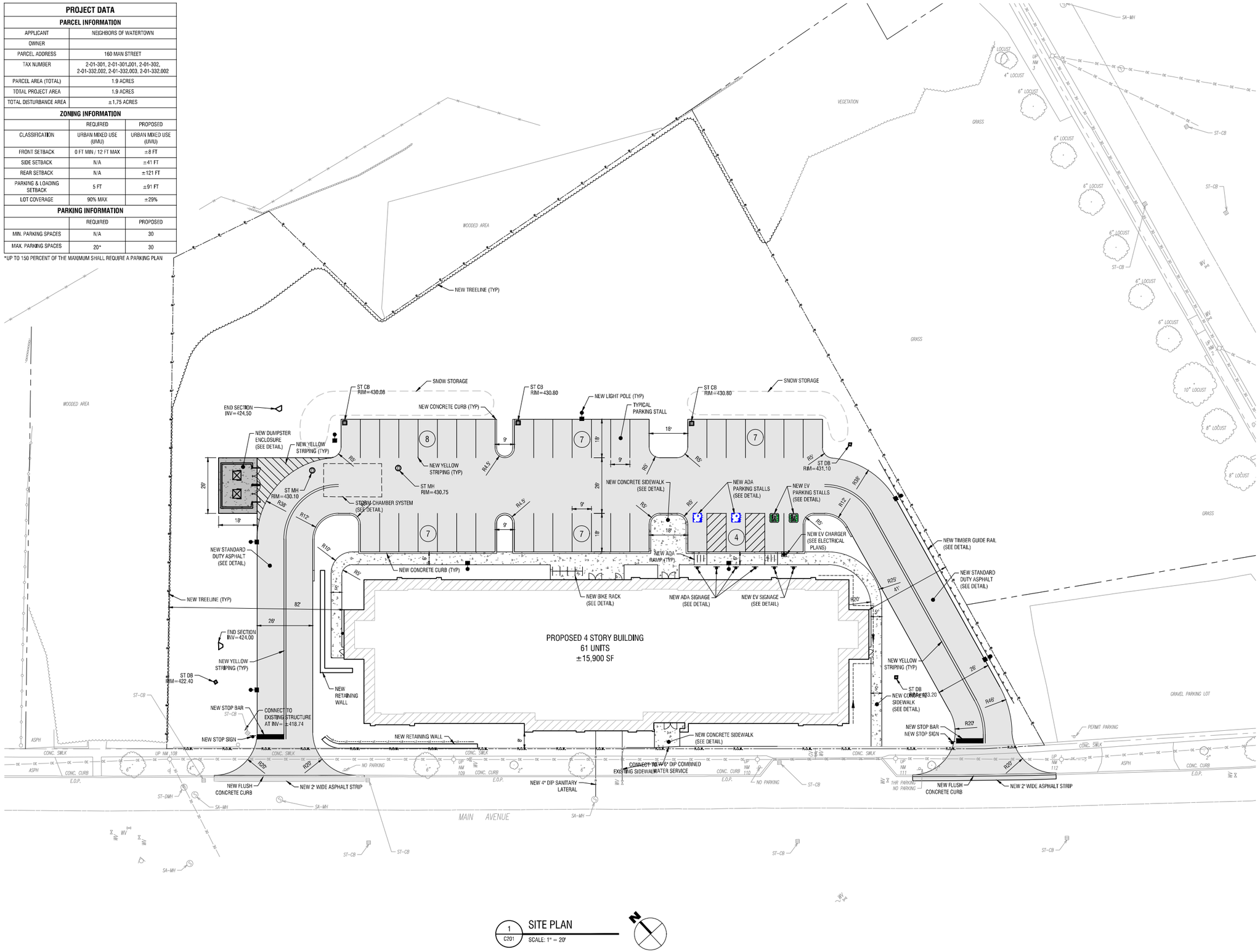
R. Daniel Mackay

Deputy State Historic Preservation Officer
Division for Historic Preservation

rev: C. Towers

PROJECT DATA		
PARCEL INFORMATION		
APPLICANT	NEIGHBORS OF WATERTOWN	
OWNER		
PARCEL ADDRESS	160 MAN STREET	
TAX NUMBER	2-01-301, 2-01-301.001, 2-01-302, 2-01-332.002, 2-01-332.002, 2-01-332.003, 2-01-332.002	
PARCEL AREA (TOTAL)	1.9 ACRES	
TOTAL PROJECT AREA	1.9 ACRES	
TOTAL DISTURBANCE AREA	±1.75 ACRES	
ZONING INFORMATION		
	REQUIRED	PROPOSED
CLASSIFICATION	URBAN MIXED USE (UMU)	URBAN MIXED USE (UMU)
FRONT SETBACK	0 FT MIN / 12 FT MAX	±8 FT
SIDE SETBACK	N/A	±41 FT
REAR SETBACK	N/A	±121 FT
PARKING & LOADING SETBACK	5 FT	±91 FT
LOT COVERAGE	90% MAX	±29%
PARKING INFORMATION		
	REQUIRED	PROPOSED
MIN. PARKING SPACES	N/A	30
MAX. PARKING SPACES	20*	30

*UP TO 150 PERCENT OF THE MAXIMUM SHALL REQUIRE A PARKING PLAN



1 C201 SITE PLAN
SCALE: 1" = 20'

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NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
160 MAIN AVE
WATERTOWN, NY 13601

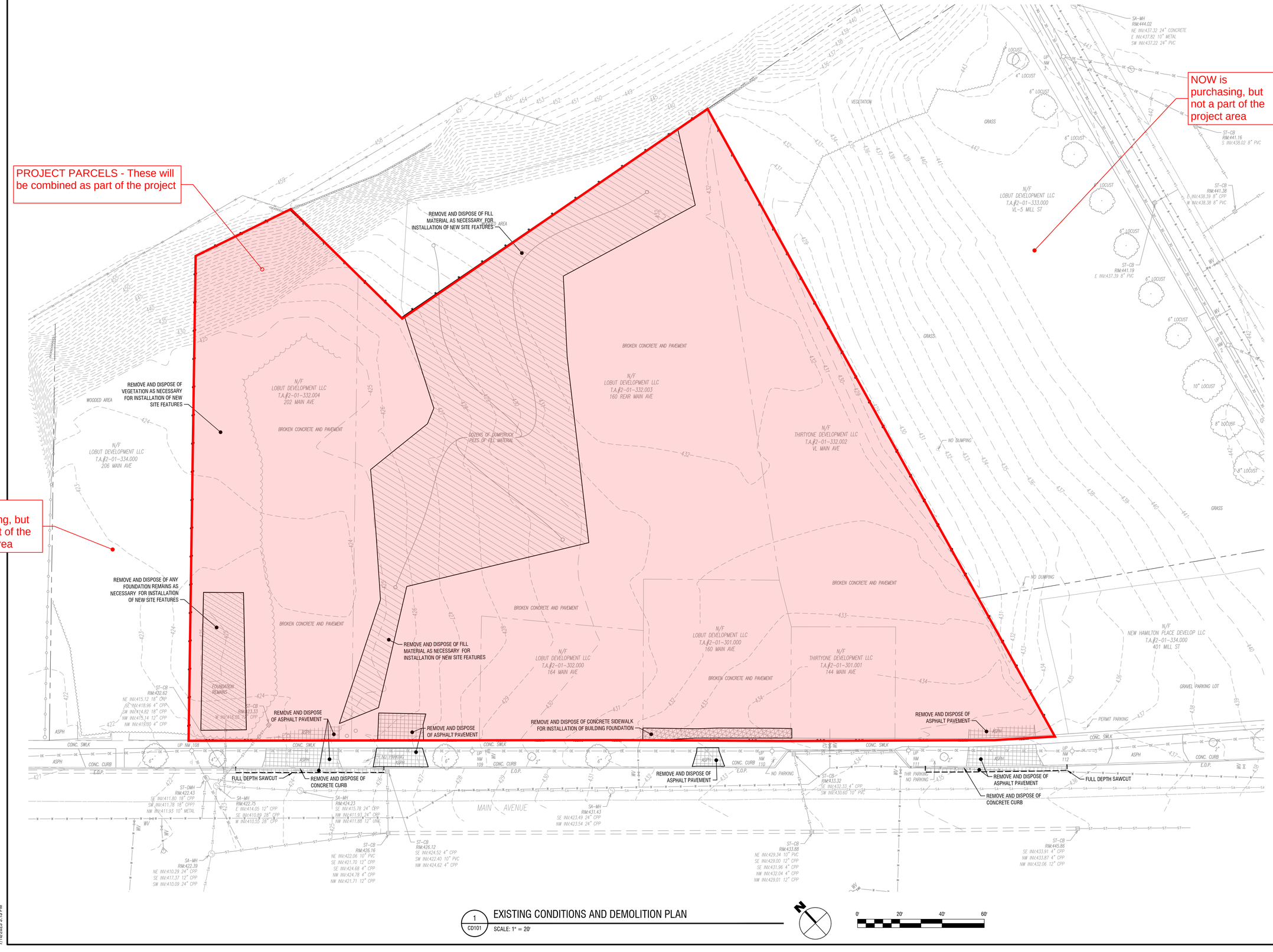
NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2232540
DRAWN BY: SRV/SCB
REVIEWED BY: DPB
ISSUED FOR: SITE PLAN APPROVAL
DATE: JULY 2023
DRAWING NAME:

SITE PLAN

DRAWING NUMBER:

C201



1 CD101 EXISTING CONDITIONS AND DEMOLITION PLAN

SCALE: 1" = 20'

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7/18/2023 3:13 PM

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EXP: ##/###/20##

EXP: ##/###/20##

CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

NEIGHBORS OF WATERTOWN INC.
112 FRANKLIN STREET,
WATERTOWN, NY 13601

MILL AND MAIN APARTMENTS
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ISSUED FOR: SITE PLAN APPROVAL

DATE: JULY 2023

DRAWING NAME:

EXISTING CONDITIONS AND DEMOLITION PLAN

DRAWING NUMBER:

CD101

July 17, 2023

Reginald J. Schweitzer, Jr.
Executive Director
Neighbors of Watertown, Inc.
112 Franklin Street
Watertown, NY 13601

RE: Watertown Transportation Demand Management Plan
Mill and Main Apartments
LaBella Project No. 2232540

Dear Mr. Schweitzer:

LaBella Associates (LaBella) has completed a Transportation Demand Management Plan (TDMP) for the proposed *Mill and Main Apartments* on Main Avenue in Watertown, NY. The purpose of the TDMP is to estimate the project's travel and parking needs and to identify strategies that could be incorporated to reduce the travel and parking demand.

A. Background

The project includes the construction of a 4-story building that will include 61 one-bedroom/studio affordable housing units. The site will have access from two full-movement driveways on Main Avenue at the locations of the existing curb curbs. The site is currently vacant but has been used in the past for commercial and residential purposes.

B. Travel Demand

Trip generation determines the quantity of traffic expected to travel to and from a given site. The Institute of Transportation Engineers (ITE) *Trip Generation, 11th Edition*, is the industry standard for determining trip generation for proposed land uses based on studies of similar existing developments located across the country. Land Use Code (LUC) 223, Affordable Housing, was used to estimate the number of vehicle trips generated for the proposed project. The peak hour trip generation estimates are summarized in Table 1.

Table 1 – Trip Generation Summary

Land Use	AM Peak Hour			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
Affordable Housing (61 units)	10	25	35	22	15	37

As seen in Table 1, the proposed project will generate 35 vehicle trips in the morning peak hour and 37 vehicle trips in the afternoon peak hour. This magnitude of site generated trips is less than the NYSDOT and ITE trip threshold of 100 vehicle trips on a single intersection approach for determining the need for off-site intersection analysis. These thresholds were developed as a tool to identify locations where the magnitude of new trips has the potential to impact operations at off-site intersections, and to screen out locations that do not meet the threshold and are therefore unlikely to require mitigation. Based on the trip generation and review of the industry guidelines, detailed intersection analysis is not needed, and the site generated traffic will be accommodated by the existing roadway network.

C. Parking Assessment

Various restrictions regulate on-street parking along Main Avenue. On the north side in front of the site, an existing parking pull-off area for two vehicles is restricted to 1-hour parking between 7:00 a.m. to 8:00 p.m. The rest of the site frontage is restricted by No Parking between 7:00 a.m. to 8:00 p.m. On the south side, parking is restricted along the entire site frontage to 1-hour parking between 9:00 a.m. to 8:00 p.m.

The proposed project will include 40 on-site parking spaces. The parking demand for the proposed project was calculated using the data in ITE's *Parking Generation Manual, 5th Edition*. If sufficient data exists, parking estimates are typically provided with an average parking rate and an 85th percentile parking rate. The 85th percentile rate is defined as the point at which 85% of the data values fall at or below. It is important to note that neither the average rate nor the 85th percentile rate represents a parking standard. Parking demand based on the number of bedrooms and the number of proposed units was generated for Land Use Code (LUC) 223, Affordable Housing. As a residential use, the peak parking demand occurs overnight. As such, the weekday overnight parking demand estimates for the proposed project are shown in Table 2. To do a conservative analysis, an average parking demand was calculated for the Average and 85th percentile conditions.

Table 2 – Proposed Project Weekday Parking Demand

Land Use	Parking Demand	
	Average	85th %-tile
Affordable Housing (61 Units)	60	81
Affordable Housing (61 Bedrooms)	33	50
Average Parking Demand	**47**	**66**

As seen in Table 2, the peak parking demand for the proposed project is 47 spaces based on the Average rate and 66 spaces based on the 85th percentile rate. The project will consist of 40 spaces, which is 7 spaces less than the Average demand and 26 spaces less than the 85th percentile demand.

Based on the City of Watertown Zoning, the maximum number of parking spaces allowed for this Urban Mixed- Use zone is 20. This is less than the average parking demands of 47 and 66 spaces based on ITE data. The project is providing 40 parking spaces which is 200% of the maximum parking allowed. Because of this, a Transportation Demand Management Plan (TDMP) is required and is presented in Section D.

D. Transportation Demand Management Plan

This TDMP presents strategies to reduce the proposed project's travel and parking demand. TDMP strategies include the use of public transit, bicycling, walking, work-from-home, and others, as a means to reduce the number of vehicle trips and hence the parking demand. The proposed project will be served by the following transportation accommodations:

1. Public Transit Facilities

Fixed route and paratransit services in Watertown are provided by CitiBus. Buses depart the transfer station on Arcade Street every 40 minutes Monday through Friday from 7:00 a.m. to 5:40 p.m. Saturday service runs from 9:40 a.m. to 5:00 p.m. There is no service on Sundays. Primary stops are

made at locations noted on the route's schedule with secondary stops being made along the route as necessary.

The proposed project is located within 300 feet of two bus routes: A-1 State Street – East Main Street route, and C-1 Northside Loop route. The project is also located within ½-mile of the transfer station on Arcade Street where all routes converge.

2. Bicycle and Pedestrian Facilities

As per the City Code requirements, a minimum of 4 bicycle parking spaces will be provided. These bicycle parking spaces will be placed in a well-lit location and will be conveniently accessible at the rear entrance and will be protected from vehicular traffic.

Along the site frontage sidewalks are provided on both sides of Main Avenue and lead to the city's urban pedestrian network. The proposed project will provide an ADA accessible sidewalk along the frontage and will build an accessible sidewalk to the rear of the building from the street.

E. Summary

The proposed affordable housing project will include 61 one-bedroom dwelling units. The project's travel demand is 35 and 37 total trips for the weekday AM and PM peak hours, respectively. This is a minimal number of new trips and well below the 100-trip threshold guidance from NYSDOT and ITE for when detailed intersection analysis should be completed.

The proposed project will provide 40 parking spaces which is more than the required maximum as per the City's code; however, it is less than the Average and 85th percentile demands of 47 and 66 parking spaces as per ITE's *Parking Generation Manual*. In addition, the project will include 4 bicycle parking spaces meeting the City's code.

Transit and pedestrian facilities currently exist in the vicinity of the project site. In addition, the proposed project will include bicycle parking spaces as another means to reduce travel and parking demands.

If you have any questions, please contact me at tjohnson@labellapc.com or (518) 266-7369.

Respectfully submitted,

LaBella Associates

Thomas R. Johnson, P.E., PTOE
Senior Transportation Engineer

Stormwater Pollution Prevention Plan

Prepared for:
Neighbors of Watertown, Inc.
112 Franklin St,
Watertown, NY 13601

Submitted by:
LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614
(585) 454-6110

LaBella
Powered by partnership.

Mill and Main Apartments

City of Watertown, Jefferson County, New York

DATE: JULY 2023
LAST REVISED: JULY 2023
PROJECT NO. 2232540

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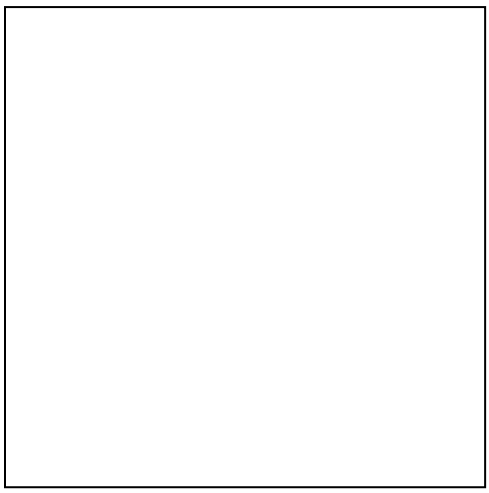
PREPARER OF THE SWPPP

"I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-20-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Name and Title[1]: Robert Steehler, P.E.

Date: July 18, 2023



[1] This is a signature of a New York State licensed Professional Engineer employed by LaBella Associates that is duly authorized to sign and seal Stormwater Pollution Prevention Plans (SWPPPs), NOIs, and NOTs prepared under their direct supervision. Refer to Appendix B for the SWPPP Preparer Certification Form, and Appendix I for the LaBella Certifying Professionals Letter.

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1.0 EXECUTIVE SUMMARY

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared for major activities associated with construction of 61-units of affordable housing and related site work in the City of Watertown. This SWPPP includes the elements necessary to comply with the national baseline general permit for construction activities enacted by the U.S. Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System (NPDES) program and all local governing agency requirements. This SWPPP must be executed and permit coverage must be obtained prior to the commencement of construction activity.

This SWPPP has been developed in accordance with the "New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity," Permit No. GP-0-20-001, effective January 29, 2020 through January 28, 2025. The SWPPP and accompanying plans identify and detail stormwater management, pollution prevention, and erosion and sediment control measures necessary during and following completion of construction.

This SWPPP and the accompanying plans entitled "Site Plan Review" have been submitted as a set. These engineering drawings are considered an integral part of this SWPPP. Therefore, this SWPPP is not considered complete without them. References made herein to "the plans" or to a specific "sheet" refer to these drawings.

This report considers the impacts associated with the intended development with the purpose of:

1. Maintaining existing drainage patterns as much as possible while continuing the conveyance of upland watershed runoff;
2. Controlling increases in the rate of stormwater runoff resulting from the proposed development so as not to adversely alter downstream conditions; and
3. Mitigating potential stormwater quality impacts and preventing soil erosion and sedimentation resulting from stormwater runoff generated both during and after construction.

The analysis and design completed and documented in this report is intended to be part of the application made for a multi-family residential redevelopment project with no increase in impervious area completed on behalf of the Owner/Operator.

1.1 Project Description

Neighbors of Watertown, Inc. is proposing redevelopment project with no increase in impervious area, to include: a 61-unit affordable housing building, associated parking, sidewalks, and landscaping. The project will disturb greater than 1-acre of land. A Site Location Map has been provided in Appendix A, as Figure A-1.

This type of project is included in Table 2 of Appendix B of GP-0-20-001; and the project site is not located in one of the watersheds listed in Appendix C of GP-0-20-001. Therefore, this SWPPP includes post-construction stormwater management practices, as well as erosion and sediment controls.

This project is located within the City Of Watertown regulated, traditional land use control Municipal Separate Stormwater Sewer System (MS4). Therefore, an MS4 SWPPP Acceptance Form is required to accompany NOIs submitted to the NYSDEC.

Runoff from the project site will discharge to the Black River, which is not included in the list of Section 303(d) water bodies included in Appendix E of GP-0-20-001.

Project construction activities will consist primarily of site grading, paving, building construction, and the installation of storm drainage, water supply, sanitary sewer, and public utility infrastructure necessary to support the proposed redevelopment project with no increase in impervious area. Construction phase pollutant sources anticipated at the site are disturbed (exposed) soil, vehicle fuels and lubricants, chemicals associated with building construction, and building materials. Without adequate control there is the potential for each type of pollutant to be transported by stormwater.

1.2 Stormwater Pollution Controls

The stormwater pollution controls outlined herein have been designed and evaluated in accordance with the following standards and guidelines:

- New York State Stormwater Management Design Manual, dated January 2015 (Design Manual).
- New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016 (SSESC).

Stormwater quality will be enhanced through the implementation of temporary and permanent erosion and sediment control measures, the proposed stormwater management practice(s), and other construction-phase pollution controls outlined herein.

The proposed stormwater management approach consisting of open drainage ways will adequately collect and convey the stormwater runoff.

Swales will be used to convey stormwater runoff generated by the proposed redevelopment project with no increase in impervious area.

Pre- and post-development surface runoff rates have been evaluated for the 1-, 10-, and 100-year 24-hour storm events. Comparison of pre- and post-development watershed conditions demonstrates that the peak rate of runoff from the project site will not be increased.

2.0 SITE CHARACTERISTICS

2.1 Land Use and Topography

The project site is located within the urban mixed use zoning district. Multi-unit Housing is a permitted subject to Site Plan Approval within this district.

The overall site is moderately sloping, with slopes ranging from 1% to 20% percent. Site elevations range from approximately 429 feet above mean sea level (MSL) to 459 feet MSL. The site generally slopes from east to west down to the northwest and southwest ends of the property. There is significant grade change on the northern portion of the property.

2.2 Soils and Groundwater

The US Department of Agriculture (USDA) Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/) was used to obtain surficial soil conditions for the study area, as follows:

Table 1: USDA Soil Data

Map Symbol & Description	Hydrologic Soil Group	Permeability (inches/hour)	Erosion Factor K	Depth to Water Table (feet)	Depth to Bedrock (feet)
CnB - Collamer silt loam, 3% to 8% slopes	C/D	<0.2	0.24	1.5 - 2.0	>5.0
Ur – Urban land	-	-	-	-	-

Upon review of the soil data presented in Table 1, the project site does not contain soils with a soil slope phase of D with a map unit name that inclusive of slopes greater than 25%, and does not contain soils with a soil slope phase of E or F.

The project site is composed of HSG C soils, and HSG D soils, as shown in the table below. For the purposes of this report, HSG X/D soils were modeled as HSG D soils to reflect the undrained condition.

Table 2: Project Site HSG Data

HSG A	HSG B	HSG C	HSG D
0%	0%	0%	100%

The Soil Conservation Service defines the hydrologic soil groups as follows:

- Type D Soils: Soils having a very low infiltration rate and high runoff potential when thoroughly wet. These soils consist chiefly of clays that have high shrink-swell potential, soils that have a permanent high water table, soils that have a clay pan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very low rate of water transmission.

The soils map for the study area is presented in Appendix A, as Figure A-2.

2.3 Watershed Designation

The project site is not located in a restricted watershed identified in Appendix C of GP-0-20-001.

2.4 Receiving Water Bodies

The nearest natural classified water course into which runoff from the project site will discharge is a Tributary to Black River. The Tributary to Black River is classified by NYSDEC as a Class C water course, and is not included in the Section 303(d) list of impaired waters found in Appendix E of GP-0-20-001.

2.5 Aquifer Designation

The project site is not located over a US EPA designated Sole Source aquifer; nor is it located over a Primary or Principal aquifer listed in the NYSDEC Technical and Operational Guidance Series (TOGS) 2.1.3 (1980).

2.6 Wetlands

A search on the NYSDEC Environmental Resource Mapper on July 6, 2023, and a review of GIS data, determined that there are no known regulated wetlands located on or in the vicinity of the project site.

2.7 Flood Plains

According to the National Flood Insurance Program Flood Insurance Rate Map (FIRM), City of Watertown, New York, Community Panel Number 3603540001E, the project site lies within Flood Zone X, areas determined to be outside 500-year floodplain The FEMA Flood Map has been provided in Appendix A, as Figure A-5.

2.8 Listed, Endangered, or Threatened Species

A search was performed on the NYSDEC Environmental Resource Mapper on July 6, 2023, and determined that the project site may contain threatened or endangered species, or critical habitat. An Environmental Resource Map has been provided in Appendix A, as Figure A-4.

2.9 Historic Places

A search on the New York State Cultural Resource Information System (CRIS) database, performed on July 6, 2023, revealed the construction activity is located within an archeologically sensitive area. A printout of the historic places screening map is presented in Appendix A, as Figure A-3.

As such, NYSOPRHP coordination has been initiated and a Phase 1 Archeological Survey will be conducted as weather permits by an archeologist. A copy of the NYSOPRHP documentation, in accordance with part I.F.8. of GP-0-20-001, will be provided in Appendix A, as Figure A-3A upon receipt.

2.10 Rainfall Data

Rainfall data utilized in the modeling and analysis was obtained from the Cornell University online Extreme Precipitation in New York & New England website (http://precip.eas.cornell.edu/). The standard SCS/NRCS rainfall distributions were applied to evaluate the pre- and post-development stormwater runoff characteristics. Rainfall data specific to the portion of Jefferson County under consideration, for various 24-hour storm events, is presented in the following Table:

Table 3: Rainfall Data

Storm Event Return Period	24-Hour Rainfall (inches)
1-year	1.98
10-year	3.30
100-year	5.50

2.11 Pre-development Watershed Conditions

The pre-development project site is covered predominantly by numerous spoil piles, gravel, and foundation remains. Analysis of pre-development conditions considered existing drainage patterns, soil

types, ground cover, and topography. The Pre-Development Watershed Delineation Map has been provided in Appendix A, as Figure A-5.

The results of the computer modeling used to analyze the overall watershed under pre-development conditions are presented in Appendix D. A summary of the pre-development watershed runoff rates at each analysis point is presented in Table 6.

2.12 Post-development Watershed Conditions

The post-development project site is covered predominantly by grass, landscaping, a new building, parking lot and sidewalks. The analysis of post-development conditions considered existing drainage patterns, soil types, ground cover to remain, planned site development, site grading, and stormwater management facilities proposed as part of site improvements. The Post-Development Watershed Delineation Map has been provided in Appendix A, as Figure A-6.

The results of the computer modeling used to analyze the overall watershed under post-development conditions are presented in Appendix E. A summary of the post-development watershed runoff rates at each analysis point is presented in Table 6.

Due to the decrease in impervious cover in the post-development condition, peak discharge rates from the project site are also decreased. Therefore, stormwater management practices designed to attenuate stormwater runoff are not required for this project.

2.13 Description of Analysis Points

The study area consists of an overall watershed that encompasses approximately 2.9 acres, including the 1.9 acre project site and 1.3 acre area of disturbance. The overall watershed was broken down into smaller watersheds, or subcatchments, to allow for analysis of runoff conditions at several locations throughout the study area. Each of these locations was defined as a Analysis Point (AP) in order to compare the effects resulting from stormwater management facilities proposed as part of the project. Descriptions of each of the selected analysis points are provided below.

- Analysis Point 1: Off-site sheet flow to the property limits (low area) located at the northwest corner of site. Runoff continues to flow overland (sheet flow) to the northwest of the project area.
- Analysis Point 2: Catch basin near the southwest corner of the site. This catch basin is connected to the City of Watertown Storm System and flows west under Main Avenue before eventually discharging to Black River.

3.0 STORMWATER MANAGEMENT PLANNING

Chapter 3 of the Design Manual outlines a six-step planning process for site planning and selection of stormwater management practices that must be implemented for both new development and redevelopment projects. This process is intended to develop a design that maintains pre-construction hydrologic conditions through the application of environmentally sound development principles, as well as treatment and control of runoff discharges from the site. The following sections outline the step-by-step process and how it has been applied to this project.

The goals of this Stormwater Management Plan are to analyze the peak rate of runoff under pre- and post-development conditions, to maintain the pre-development rate of runoff in order to minimize

impacts to adjacent or downstream properties, and to minimize the impact to the quality of runoff exiting the site.

The Design Manual provides both water quality and water quantity objectives to be met by projects requiring a "Full SWPPP". These objectives will be met by applying stormwater control practices to limit peak runoff rates and improve the quality of runoff leaving the developed site.

3.1 STEP 1 – Site Planning

During the Site Planning process, the project site is evaluated for implementation of the green infrastructure planning measures identified in Table 3.1 of the Design Manual, in order to preserve natural resources and reduce impervious cover. Table A of Appendix C provides a description of each green infrastructure planning measure, along with a project specific evaluation.

3.2 STEP 2 – Calculate Water Quality Treatment Volume (WQv)

Stormwater runoff from impervious surfaces is recognized as a significant contributor of pollution that can adversely affect the quality of receiving water bodies. Therefore, treatment of stormwater runoff is important since most runoff related water quality contaminants are transported from land, particularly the impervious surfaces, during the initial stages of storm events.

3.2.1 NYSDEC Requirements for Water Quality Volume

The Design Manual requires that water quality treatment be provided for the initial flush of runoff from every storm. The NYSDEC refers to the amount of runoff to be treated as the "Water Quality Volume" (WQv). Section 4.2 of the Design Manual defines the Water Quality Volume as follows:

$$WQv = \frac{[(P)(R_V)(A)]}{12}$$

Where: P = 90% Rainfall Event Number (per DEC 1.0 inch minimum)
R_v = 0.05 + 0.009 (I)
I = Impervious Cover (Percent)
A = Contributing Area in Acres

This definition ensures that, all other things being equal, the Water Quality Volume will increase along with the impervious cover percentage.

3.2.2 Methodology for Redevelopment Projects

Chapter 9 of the Design Manual outlines alternative WQv treatment objectives for redevelopment projects.

According to Section 9.2.1.B.I, if redevelopment activities result in a reduction of existing impervious cover by a minimum of 25% of the total disturbed, impervious area, then the stormwater criteria for water quality has been achieved. This project is proposing an 44% reduction of existing impervious cover; thereby, the water quality objective has been met.

Table 4: Impervious Reduction Summary

Existing Impervious Cover	Proposed Impervious Cover	Impervious Cover Reduction	
1.6 ac	0.9 ac	0.7 ac	44%

3.3 STEP 3 – Apply RR Techniques and Standard SMPs with RRv Capacity to Reduce Total WQv

Land use change and development in the watershed increases the volume of runoff. As such, reductions in the amount of runoff from new development, accomplished through the implementation of a stormwater management plan for the site, will play an important role in the success or failure of the watershed-wide stormwater management plan. Runoff reduction techniques can be applied to manage, reduce, and treat stormwater, while maintaining and restoring natural hydrology through infiltration, evapo-transpiration, and the capture and reuse of stormwater. Volume reduction techniques by themselves typically are not sufficient to provide adequate attenuation of stormwater runoff, but they can decrease the size of the peak runoff rate reduction facilities.

3.3.1 NYSDEC Requirements for Redevelopment

Section 9.2 of the Design Manual indicates, "Although encouraged, meeting the RRv criteria is not required for redevelopment activities that meet the criteria in Chapter 9 of this manual."

As such, no SMP's with RRv criteria have been applied to the project to meet the WQv objective.

As indicated above, Section 9.2 of the Design Manual indicates, "Although encouraged, meeting the RRv criteria is not required for redevelopment activities that meet the criteria in Chapter 9 of this manual."

3.4 STEP 4 – Calculate the Minimum RRv Required

As previously discussed, meeting the RRv criteria is not required for redevelopment activities with no increase in impervious, that meet the criteria in Chapter 9 of the Design Manual.

3.5 STEP 5 – Apply Standard SMPs to Address Remaining Water Quality Volume

As previously discussed, the water quality objective is being met through impervious cover reduction by greater than 25%. As such, no standard SMPs are required.

3.6 STEP 6 - Apply Volume and Peak Rate Control

This report presents the pre-development and post-development features and conditions associated with the rate of surface water runoff within the study area. For both cases, the drainage patterns, drainage structures, soil types, and ground cover types are considered in this study.

3.6.1 NYSDEC Requirements for Redevelopment

Chapter 9 of the Design Manual provides alternatives to the above quantity criteria, which may be applied to redevelopment projects. As indicated in Section 9.3.2, if redevelopment results in no increase in impervious area or changes to hydrology that increase the discharge rate from the site, then the 10-year and 100-year criteria for quantity control do not apply. In addition, if the hydraulic study shows that the post-construction 1-year 24-hr discharge rate and velocity are less than or equal to the pre-

construction discharge rate, then providing 24-hr detention of the 1-year storm to meet channel protection criteria is not required.

The project proposes an 44% decrease in impervious area and will not result in changes to hydrology that increase the discharge rate from the site. Additionally, based upon the hydrologic analysis performed, the discharge rate from the site has been reduced from pre- to post-development conditions for the 1-year storm event. Therefore, the stormwater quantity criteria have been met and stormwater quantity control practices have not been provided for this project. The following Section describes the methodology behind this hydrologic analysis.

3.6.2 Methodology

In order to demonstrate that the NYSDEC detention requirements are being met, the Design Manual requires that a hydrologic and hydraulic analysis of the pre- and post-development conditions be performed using the Natural Resources Conservation Service Technical Release 20 (TR-20) and Technical Release 55 (TR-55) methodologies. HydroCAD, developed by HydroCAD Software Solutions LLC of Tamworth, New Hampshire, is a Computer-Aided-Design (CAD) program for analyzing the hydrologic and hydraulic characteristics of a given watershed and associated stormwater management facilities. HydroCAD uses the TR-20 algorithms and TR-55 methods to create and route runoff hydrographs.

HydroCAD has the capability of computing hydrographs (which represent discharge rates characteristic of specified watershed conditions, precipitation, and geologic factors) combining hydrographs and routing flows though pipes, streams and ponds. HydroCAD can also calculate the center of mass detention time for various hydraulic features. Documentation for HydroCAD can be found on their website: http://www.hydrocad.net/.

For this analysis, the watershed and drainage system was broken down into a network consisting of three types of components as described below:

1. Subcatchment: A relatively homogeneous area of land, which produces a volume and rate of runoff unique to that area.
2. Reach: Uniform streams, channels, or pipes that convey stormwater from one point to another.
3. Pond: Natural or man-made impoundment, which temporarily stores stormwater runoff and empties in a manner determined by its geometry and the hydraulic structure located at its outlets.

Subcatchments and reaches are represented by hexagons, squares and triangles respectively, on the watershed routing diagrams provided with the computations included in Appendix D and Appendix E.

The analysis of hydrologic and hydraulic conditions and proposed stormwater management facilities, servicing the study area, was performed by dividing the tributary watershed into relatively homogeneous subcatchments. The separation of the watershed into subcatchments was dictated by watershed conditions, methods of collection, conveyance, and points of discharge. Watershed characteristics for each subcatchment were then assessed from United States Geological Service (USGS) 7.5-minute topographic maps, aerial photographs, a topographical survey, soil surveys, site investigations, and land use maps.

Proposed stormwater management practices were designed and evaluated in accordance with the Design Manual and local regulatory requirements. The hydrologic and hydraulic analysis considered the SCS Type II 24-hour storm events identified in the following Table.

Table 5: Design Events

Facility	24-hour Storm Event
Storm Sewer	10--year
Stormwater Management Practice(s)	1-year
	10-year
	100-year
Flood Conditions	100-year

3.6.3 Performance Summary

A comparison of the pre- and post-development watershed conditions was performed for all analysis points and storm events evaluated herein. For all analysis points and design storms, this comparison demonstrates that the peak rate of runoff will not be increased. Therefore, the project will not have a significant adverse impact on the adjacent or downstream properties or receiving water courses.

The results of the computer modeling used to analyze the pre- and post-development watersheds are presented in Appendix D and Appendix E, respectively. The following Table summarizes the results of this analysis.

Table 6: Summary of Pre- and Post-Development Peak Discharge Rates

Pre- vs. Post-Development Discharge Rate (cfs)				
Analysis Point (AP)	10-year 24-hour storm event		100-year 24-hour storm event	
	Pre	Post	Pre	Post
1	3.1	2.8	5.5	5.4
2	3.1	2.4	5.5	4.3
Total	6.2	5.2	11.0	9.7

4.0 CONSTRUCTION SEQUENCE

This project encompasses less than five acres of land and disturbance of additional off-site properties to facilitate construction is not anticipated. Therefore, written approval from NYSDEC OR the City of Watertown allowing the disturbance of more than five acres of land at any one time is not required. If the Contractor's construction sequence requires the disturbance of more than five acres at any one time, written approval must be obtained from NYSDEC OR the City of Watertown prior to disturbing more than five acres at once.

The "Erosion and Sediment Control Plan" in the accompanying drawings identifies the major construction activities that are the subject of this SWPPP. The order (or sequence) in which the major activities are expected to begin is presented on the accompanying drawings, though each activity will not necessarily be completed before the next begins. In addition, these activities could occur in a different order if necessary to maintain adequate erosion and sediment control. If this is the case, the contractor shall notify the Owner's/Operator's Engineer overseeing the implementation of the SWPPP.

The Contractor will be responsible for implementing the erosion and sediment control measures identified on the plans. The Contractor may designate these tasks to certain subcontractors as they see

fit, but the ultimate responsibility for implementing these controls and ensuring their proper function remains with the Contractor.

Refer to the accompanying plans for details and specifications regarding the construction sequencing schedule.

5.0 CONSTRUCTION-PHASE POLLUTION CONTROL

The SWPPP and accompanying plans identify the temporary and permanent erosion and sediment control measures that have been incorporated into the design of this project. These measures will be implemented during construction, to minimize soil erosion and control sediment transport off-site, and after construction, to control the quantity of stormwater runoff from the developed site.

Erosion control measures, designed to minimize soil loss, and sediment control measures, intended to retain eroded soil and prevent it from reaching water bodies or adjoining properties, have been developed in accordance with the following documents:

- NYSDEC SPDES General Permit for Stormwater Discharges From Construction Activity, Permit No. GP-0-20-001 (effective January 29, 2020 through January 28, 2025)
- New York State Standards and Specifications for Erosion and Sediment Control, NYSDEC (November 2016)

The SWPPP and accompanying plans outline the construction scheduling for implementing the erosion and sediment control measures. These documents include limitations on the duration of soil exposure, criteria and specifications for placement and installation of the erosion and sediment control measures, a maintenance schedule, and specifications for the implementation of erosion and sediment control practices and procedures.

Temporary and permanent erosion and sediment control measures that shall be applied during construction generally include:

1. Minimizing soil erosion and sedimentation by stabilization of disturbed areas and by removing sediment from construction site discharges.
2. Preservation of existing vegetation to the greatest extent practical. Following the completion of construction activities in any portion of the site, permanent vegetation shall be established on all exposed soils.
3. Site preparation activities to minimize the area and duration of soil disruption.
4. Establishment of permanent traffic corridors to ensure that “routes of convenience” are avoided.

5.1 Temporary Erosion and Sediment Control Measures

The temporary erosion and sediment control measures described in the following sections are included as part of the construction documents.

5.1.1 Stabilized Construction Access

Prior to construction, stabilized construction access(es) will be installed, per accompanying plans, to reduce the tracking of sediment onto public roadways.

Construction traffic must enter and exit the site at the stabilized construction access(es). The intent is to trap dust and mud that would otherwise be carried off-site by construction traffic.

The access(es) shall be maintained in a condition, which will control tracking of sediment onto public rights-of-way or streets. When necessary, additional aggregate will be placed atop the filter fabric to assure the minimum thickness is maintained. All sediment and/or soil spilled, dropped, or washed onto public rights-of-way must be removed immediately. Periodic inspection and needed maintenance shall be provided after each substantial rainfall event.

5.1.2 Dust Control

Water trucks shall be used as needed during construction to reduce dust generated on-site. Dust control must be provided by the Contractor(s) to a degree that is acceptable to the Owner, and in compliance with the applicable local and state dust control requirements.

5.1.3 Temporary Soil Stockpile

Materials, such as topsoil, will be temporarily stockpiled (if necessary) on the site during the construction process. Stockpiles shall be located in an area away from storm drainage, water bodies and/or courses, and will be properly protected from erosion by a surrounding silt fence barrier.

5.1.4 Silt Fencing

Prior to the initiation of and during construction activities, a geotextile filter fabric (or silt fence) will be established downgradient of all disturbed areas. These barriers may extend into non-impact areas to provide adequate protection of adjacent lands.

Clearing and grubbing will be performed only as necessary for the installation of the sediment control barrier. To facilitate effectiveness of the silt fencing, daily inspections and inspections immediately after significant storm events will be performed by the Contractor(s). Maintenance of the fence will be performed as needed.

5.1.5 Temporary Seeding

For areas undergoing clearing, grading, and disturbance as part of construction activities, where work has temporarily ceased, temporary soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the soil disturbance activity has temporarily ceased.

5.1.6 Filter Fabric Drop Inlet Protection

Install filter fabric or silt fence with wooden stakes at the perimeter of existing or proposed catch basins located in lawn areas, to prevent sediment from entering the catch basins and storm sewer system. Remove sediment accumulation and repair or replace fabric as necessary to ensure proper function.

5.1.7 Erosion Control Blanket

Erosion control blankets shall be installed in accordance with manufacturer's requirements on all slopes exceeding 3:1. Erosion control blankets provide temporary erosion protection, rapid vegetative establishment, and long-term erosion resistance to shear stresses generated by high runoff flow velocities associated with steep slopes.

5.1.8 Stone Check Dams

Stone check dams will be installed within drainage ditches to reduce the velocity of stormwater runoff, promote settling of sediment, and reduce sediment transport off-site.

Sediment accumulated behind the stone check dam will be removed as needed to maintain flow through the stone check dam and prevent large flows from carrying sediment over or around the dam. Stones shall be replaced as needed to maintain the design cross section of the structures.

5.1.9 Compost Filter Sock

Prior to the initiation of and during construction activities, a compost filter sock (or silt sock) will be established downgradient of all disturbed areas. These filters may extend into non-impact areas to provide adequate protection of adjacent lands. The spacing of the compost filter sock, which will depend on the ground slope and diameter of the sock, shall be based upon New York State or EPA guidance.

Clearing and grubbing will be performed only as necessary for the installation of the sediment control filter; and unlike sediment control barriers, trenching is not required. The ends of the filter sock should be directed upslope, to prevent stormwater from running around the end of the sock. The preferred anchoring method is to drive stakes through the center of the sock at regular intervals; alternatively, stakes can be placed on the downstream side of the sock. To facilitate effectiveness of the compost filter sock, daily inspections and inspections immediately after significant storm events will be performed by the Contractor(s) to ensure that they are intact and the area behind the sock is not filled with sediment. Maintenance of the sock will be performed as needed.

5.2 Permanent Erosion and Sediment Control Measures

The permanent erosion and sediment control measures described in the following sections are included as part of the construction documents.

5.2.1 Establishment of Permanent Vegetation

Disturbed areas that will be vegetated must be seeded in accordance with the contract documents. The type of seed, mulch, and maintenance measures as described in the contract documents shall also be followed.

Permanent soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the soil disturbance activity has permanently ceased.

Final site stabilization is achieved when all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of 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.

5.2.2 Rock Outlet Protection

Rock outlet protection shall be installed at the locations as indicated and detailed on the accompanying plans. The installation of rock outlet protection will reduce the velocity and energy of water, such that the flow will not erode downstream surfaces.

5.3 Other Pollutant Controls

Part I.B.1.e of GP-0-20-001 prohibits discharges from construction material wastewater, pollutants used in vehicle and equipment operation and maintenance, vehicle and equipment washing and toxic or hazardous substances.

The following table identifies materials and/or chemicals commonly used and/or stored on construction sites and should be addressed in the site-specific spill prevention and response plan

Table 7: Common Construction Pollutants

Material/Chemical	Physical Description	Stormwater Pollutants	Location*
Pesticides (insecticides, fungicides, herbicides, rodenticides)	Various colored to colorless liquid, powder, pellets, or grains	Chlorinated hydrocarbons, organophosphates, carbamates, arsenic	Herbicides used for noxious weed control
Fertilizer	Liquid or solid grains	Nitrogen, phosphorous	Newly seeded areas
Cleaning solvents	Colorless, blue, or yellow-green liquid	Perchloroethylene, methylene chloride, trichloroethylene, petroleum distillates	No equipment cleaning allowed in project limits
Asphalt	Black solid	Oil, petroleum distillates	Streets and roofing
Concrete	White solid/grey liquid	Limestone, sand, pH, chromium	Curb and gutter, building construction
Curing compounds	Creamy white liquid	Naphtha	Curb and gutter
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oil	Leaks or broken hoses from equipment
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE	Secondary containment / staging area
Diesel Fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil & grease, naphthalene, xylenes	Secondary containment / staging area
Kerosene	Pale yellow liquid petroleum hydrocarbon	Coal oil, petroleum distillates	Secondary containment / staging area
Antifreeze/coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)	Leaks or broken hoses from equipment
Sanitary toilets	Various colored liquid	Bacteria, parasites, and viruses	Staging area
Construction materials			
Granular fill	Various colored solids	Sediment	Stockpile / fill areas
Subbase course	Gray/brown solid	Sediment, dust	Stockpile
Topsoil	Brown solid	Sediment	Stockpile
Mulch	Various colored solid	Sediment, debris	Staging area
Seed	Brown/yellow solid	Nutrients, debris	Staging area
HDPE Storm Pipe	Black solid		Staging area
SDR-35, SDR-21 PVC Pipe	Various colored solid		Staging area
Metals Frames and Grates	Gray solid		Staging area
Joint Sealant	Light gray viscous solid	Polyurethane	Staging area

*(Area where material/chemical is used on-site)

5.4 Construction Housekeeping Practices

During the construction phase, the Contractor(s) will implement the following measures:

5.4.1 Sediment Sweeping/Vacuuming

Any sediment that is tracked by construction vehicles or erosion onto adjacent public or private impervious surfaces must be swept or vacuumed, utilizing self-propelled and/or walk-behind equipment, and removed on a daily basis. Kick brooms and sweeper attachments are not an acceptable means of sweeping. Sweeping or vacuuming should not take place while tracked sediment is wet. If tracked sediment is compacted, the sediment must be scraped loose prior to sweeping or vacuuming.

5.4.2 Material Stockpiles

Material resulting from clearing and grubbing operations that will be stockpiled on-site, must be adequately protected with downgradient erosion and sediment controls.

5.4.3 Equipment Cleaning and Maintenance

The Contractor(s) will designate areas for equipment cleaning, maintenance, and repair. The Contractor(s) and subcontractor(s) will utilize those areas. The areas will be protected by a temporary perimeter berm.

5.4.4 Detergents

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

5.4.5 Spill Prevention and Response

A Spill Prevention and Response Plan shall be developed, for the pollutants identified in Section 5.3, for the site by the Contractor(s) that addresses the following:

1. Reducing chance of spills
2. Stopping the source of spills
3. Containing and cleaning up spills
4. Disposing of materials contaminated by spills
5. Training personnel responsible for spill prevention/response
6. Material handling procedures
7. Material storage requirements

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

5.4.6 Concrete Washout Areas

A temporary concrete washout area shall be provided for every project where concrete will be poured or otherwise formed on-site and shall consist of an excavated or above-ground lined construction pit where concrete trucks or equipment can be washed out after their loads have been discharged. Waste generated from concrete wash water that shall not be allowed to flow into drainage ways, inlets, receiving

waters, highway right-of-way, or any location other than the designated concrete washout area(s). Proper signage shall be placed adjacent to the facility to designate the "Concrete Washout Area". Locate the facility a minimum of 100-feet from drainage swales, storm drain inlets, wetlands, streams, and other surface waters. Prevent surface water from entering the washout area.

The hardened residue from the concrete wash areas will be disposed of in the same manner as other non-hazardous construction waste materials. Maintenance of the washout area shall include removal of hardened material when 75% of the storage capacity is filled, and a minimum freeboard of 12 inches shall be maintained. The Contractor will be responsible for seeing that these procedures are followed. The project may require the use of multiple concrete washout areas based on the frequency of concrete pours.

5.4.7 Material Storage

Construction materials shall be stored in a dedicated staging area. The staging area shall be located in an area that prevents negative impacts of construction materials on 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 of at an approved solid waste or chemical disposal facility.

6.0 INSPECTIONS, MAINTENANCE, AND REPORTING

6.1 Inspection and Maintenance Requirements

6.1.1 Pre-Construction Inspection and Certification

Prior to the commencement of construction, the Qualified Inspector/Qualified Professional shall conduct an assessment of the site and certify that the appropriate erosion and sediment control measures have been adequately installed and implemented. The Contractor shall contact the Qualified Inspector/Qualified Professional once the erosion and sediment control measures have been installed.

6.1.2 Construction Phase Inspections and Maintenance

A Qualified Inspector/Qualified Professional, as defined in Appendix A of the General Permit GP-0-20-001, shall conduct regular site inspections between the time this SWPPP is implemented and final site stabilization. Site inspections shall occur at an interval of at least once every seven (7) calendar days.

The purpose of site inspections is to assess performance of pollutant controls. Based on these inspections, the Qualified Inspector/Qualified Professional will decide whether it is necessary to modify this SWPPP, add or relocate sediment barriers, or whatever else may be needed in order to prevent pollutants from leaving the site via stormwater runoff. The general contractor has the duty to cause pollutant control measures to be repaired, modified, maintained, supplemented, or whatever else is necessary in order to achieve effective pollutant control.

Examples of particular items to evaluate during site inspections are listed below. This list is not intended to be comprehensive. During each inspection the inspector must evaluate overall pollutant control system performance as well as particular details of individual system components. Additional factors should be considered as appropriate to the circumstances.

1. Locations where vehicles enter and exit the site must be inspected for evidence of off-site sediment tracking. A stabilized construction access will be constructed where vehicles enter and exit. This access will be maintained or supplemented as necessary to prevent sediment from leaving the site on vehicles.
2. Sediment barriers must be inspected and, if necessary, they must be enlarged or cleaned in order to provide additional capacity. All material from behind sediment barriers will be stockpiled on the up slope side. Additional sediment barriers must be constructed as needed.
3. Inspections will evaluate disturbed areas and areas used for storing materials that are exposed to rainfall for evidence of, or the potential for, pollutants entering the drainage system. If necessary, the materials must be covered or original covers must be repaired or supplemented. Also, protective berms must be constructed, if needed, in order to contain runoff from material storage areas.
4. Grassed areas will be inspected to confirm that a healthy stand of grass is maintained. The site has achieved final stabilization once all areas are covered with building foundation or pavement, or have a stand of grass with at least 80 percent density. The density of 80 percent or greater must be maintained to be considered as stabilized. Areas must be watered, fertilized, and reseeded as needed to achieve this goal.
5. All discharge points must be inspected to determine whether erosion control measures are effective in preventing significant impacts to receiving waters.

The inspection reports must be completed entirely and additional remarks should be included if needed to fully describe a situation. An important aspect of the inspection report is the description of additional measures that need to be taken to enhance plan effectiveness. The inspection report must identify whether the site was in compliance with the SWPPP at the time of inspection and specifically identify all incidents of non-compliance.

Within one (1) business day of the completion of an inspection, the *Qualified Inspector/Qualified Professional* shall notify the Owner/Operator and appropriate contractor or subcontractor of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one (1) business day of the notification and shall complete the corrective actions in a reasonable time frame.

In addition to the inspections performed by the *Qualified Inspector/Qualified Professional*, the Contractor shall perform routine inspections that include a visual check of all erosion and sediment control measures. All inspections and maintenance shall be performed in accordance with the inspection and maintenance schedule provided on the accompanying plans. Sediment removed from erosion and sediment control measures will be exported from the site, stockpiled for later use, or used immediately for general non-structural fill.

It is the responsibility of the general contractor to assure the adequacy of site pollutant discharge controls. Actual physical site conditions or contractor practices could make it necessary to install more structural controls than are shown on the accompanying plans. (For example, localized concentrations of runoff could make it necessary to install additional sediment barriers, sediment traps, etc.) Assessing the need for additional controls and implementing them or adjusting existing controls will be a continuing aspect of this SWPPP until the site achieves final stabilization.

6.1.3 Temporary Suspension of Construction Activities

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 frequency

of Qualified Inspector/Qualified Professional inspections can be reduced to once every 30 calendar days. Prior to reducing the frequency of inspections, the Owner/Operator shall notify the NYSDEC Region 6 stormwater contact person and the City of Watertown in writing.

6.1.4 Partial Project Completion

For construction sites where soil disturbance activities have been shut down with partial project completion, 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 inspections by the Qualified Inspector/Qualified Professional can stop. Prior to the shutdown, the Owner/Operator shall notify the NYSDEC Region 6 stormwater contact person and the City of Watertown in writing.

If soil disturbance activities have not resumed within two years from the date of shutdown, a Notice of Termination (NOT) shall be properly completed and submitted to the NYSDEC.

6.1.5 Post-Construction Inspections and Maintenance

Inspections and maintenance of final stabilization measures shall be performed in accordance with Appendix G, once all disturbed areas are stabilized and all stormwater management systems are in place and operable.

6.2 Reporting Requirements

6.2.1 Inspection Reports

Pursuant to Part IV.C of GP-0-20-001, inspection reports shall be prepared for the duration of construction, as outlined herein, and shall be signed by the *Qualified Inspector* or *Qualified Professional*. A sample inspection form is provided in Appendix F.

At a minimum, each inspection report shall record the following information:

1. Date and time of inspection.
2. Name and title of person(s) performing inspection.
3. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection.
4. 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.
5. 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.
6. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance.
7. 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.

8. 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.
9. Indication of the 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.
10. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures
11. Identification and status of all corrective actions that were required by previous inspection.
12. Color photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *Qualified Inspector/Qualified Professional* 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/Qualified Professional* 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/Qualified Professional* shall attach the 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.

6.2.2 Site Log Book

Pursuant to Part II.D.2 of GP-0-20-001, the Owner/Operator shall retain a copy of the General Permit, NOI, NOI Acknowledgment Letter, MS4 SWPPP Acceptance Form (if applicable), inspection reports, contractor and subcontractor certification forms, and all documentation necessary to demonstrate eligibility under the permit, at the construction site from commencement of construction activity until the date that all areas of disturbance have achieved final stabilization and the Notice of Termination has been submitted to the NYSDEC.

The Site Log Book shall be maintained on-site in a secure location (i.e. job trailer, on-site construction office, or mailbox with lock) and must be accessible during normal business hours to an individual performing a compliance inspection.

6.2.3 Post Construction Records and Archiving

Following construction, the Owner/Operator shall retain copies of the SWPPP, the complete construction Site Log Book, and records of all data used to complete the NOI to be covered by this permit, for a period of at least five years from the date that the site is finally stabilized. This period may be extended by the NYSDEC, at its sole discretion, at any time upon written notification.

Records shall be maintained of all post construction inspections and maintenance work performed in accordance with the requirements outlined in Appendix G.

7.0 SWPPP IMPLEMENTATION RESPONSIBILITIES

A summary of the responsibilities and obligations of all parties involved with compliance with the NYSDEC SPDES General Permit GP-0-20-00 conditions is outlined in the subsequent sections. For a complete listing of the definitions, responsibilities, and obligations, refer to the SPDES General Permit GP-0-20-001 presented in Appendix J.

7.1 Owner's/Operator's Responsibilities

1. Ensure that control measures are selected, designed, installed, implemented and maintained to minimize the discharge of pollutants and prevent a violation of the water quality standards, meeting the non-numeric effluent limitations in Part I.B.1.(a)-(f) of the SPDES General Permit and in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.

2. Retain the services of a "Qualified Inspector" or "Qualified Professional" as defined under Section 2.1, to provide the services outlined in Section 2.5 "Qualified Inspector's/Qualified Professional's Responsibilities."

3. Retain the services of a "Qualified Professional," as defined under Section 2.1, to provide the services outlined in Section 2.3 "Owner's/Operator's Engineers Responsibilities."

4. Have an authorized corporate officer sign the Owner/Operator Certification Form to accompany the eNOI. A copy of the completed NOI is included in Appendix B.

5. Submit the electronic version of the NOI (eNOI) along with the MS4 SWPPP acceptance form using the NYSDEC's website (http://www.dec.ny.gov/chemical/43133.html).

6. Pay the required initial and annual fees upon receipt of invoices from NYSDEC. These invoices are generally issued in the fall of each year. The initial fee is calculated as $110.00 per acre disturbed plus $675.00 per acre of net increase in impervious cover, and the annual fee is $110.00.

7. Prior to the commencement of construction activity, identify the contractor(s) and subcontractor(s) that will be responsible for implementing the erosion and sediment control measures and stormwater management practices described in this SWPPP. Have each of these contractors and subcontractors identify at least one "Trained Contractor", as defined under Section 2.1 that will be responsible for the implementation of the SWPPP. Ensure that the Contractor has at least one "Trained Contractor" on site on a daily basis when soil disturbance activities are being performed.

8. Schedule a pre-construction meeting which shall include the City of Watertown representative, Owner's/Operator's Engineer, Qualified Inspector, Contractor, and their sub-contractors to discuss responsibilities as they relate to the implementation of this SWPPP.

9. Require the Contractor to fully implement the SWPPP prepared for the site by the Owner/Operator's Engineer to 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 NYSDEC.

10. Forward a copy of the NOI Acknowledgement Letter received from the regulatory agency to the Owner's/Operator's Engineer for project records, and to the Contractor for display at the construction site.

11. Maintain a copy of the General Permit (GP-0-20-001), NOI, NOI Acknowledgement Letter, SWPPP, MS4 SWPPP Acceptance Form, inspection reports, Spill Prevention, Countermeasures, Cleanup ("SPCC") Plan, and all documentation in accordance with Part I.F.8.a.-d of GP-0-20-001 necessary to demonstrate eligibility with the permit at the construction site, until all disturbed areas have achieved final stabilization and the NOT has been submitted to the NYSDEC. Place

documents in a secure location that must be accessible during normal business hours to an individual performing a compliance inspection.

12. Prior to submitting a Notice of Termination, ensure for post-construction stormwater management practice(s) that are privately owned, the Owner/Operator has a deed restriction in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

13. Submit a Notice of Termination (NOT) form (see Appendix B) within 48 hours of receipt of the Owner's/Operator's Engineer's certification of final site stabilization to the following:

    NOTICE OF TERMINATION
    NYS DEC, Bureau of Water Permits
    625 Broadway, 4th Floor
    Albany, New York 12233-3505

    City of Watertown
    245 Washington Street
    Watertown, NY 13601

14. Request and receive all SWPPP records from the Owner's/Operator's Engineer and archive those records for a minimum of five (5) years after the NOT is filed.

15. Implement the Post-Construction Inspections and Maintenance procedures outlined in Appendix G.

16. The NOI, SWPPP, and inspection reports required by GP-0-20-001 are public documents that the Owner/Operator must make available for review and copying by any person within five (5) business days of the Owner/Operator receiving a written request by any such person to review the NOI, SWPPP, or inspection reports. Copying of documents will be done at the requester's expense.

17. The Owner/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/Operator shall amend the SWPPP, including construction drawings:

    a) Whenever the current provisions prove to be ineffective in minimizing pollutants in stormwater discharges from the project 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.

    d) To document the final construction conditions.

18. 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. For construction activities subject to the requirements of a regulated, traditional

land use control MS4, the original owner or operator must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.

a) 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.B.1. of the 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.

b) 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.

7.2 Owner's/Operator's Engineer's Responsibilities

1. Prepare the SWPPP using good engineering practices, best management practices, and in compliance with all federal, state, and local regulatory requirements.

2. Prepare the electronic Notice of Intent (eNOI) (see Appendix B) and sign the "SWPPP Preparer Certification Form." Forward the Owner/Operator Certification Form to the Owner/Operator for signature.

3. Provide copies of the SWPPP to the City of Watertown once all signatures and attachments are complete.

4. Enter Contractor's information in Section 2.5 "SWPPP Participants" once a Contractor is selected by the Owner/Operator.

5. Participate in a pre-construction meeting which shall include the City of Watertown representative, Owner/Operator, Qualified Inspector, Contractor, and all subcontractors to discuss responsibilities as they relate to the implementation of this SWPPP.

6. Update the SWPPP each time there is a significant modification to the pollution prevention measures or a change of the principal Contractor working on the project who may disturb site soil.

7.3 Contractor's Responsibilities

1. Sign the SWPPP Contractor's Certification Form contained within Appendix B and forward to the Owner's/Operator's Engineer for inclusion in the Site Log Book.

2. Identify at least one Trained Contractor that will be responsible for implementation of this SWPPP. Ensure that at least one Trained Contractor is on site on a daily basis when soil disturbance activities are being performed. The Trained Contractor shall 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 conditions 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.

3. Provide the names and addresses of all subcontractors working on the project site. Require all subcontractors who will be involved with construction activities that will result in soil disturbance to identify at least one Trained Contractor that will be on site on a daily basis when soil disturbance activities are being performed; and to sign a copy of the Subcontractor's Certification Form contained within Appendix B, then forward to the Owner's/Operator's Engineer for inclusion into the Site Log Book. This information must be retained as part of the Site Log Book.

4. Maintain a Spill Prevention and Response Plan in accordance with requirements outlined in Section 5 of this SWPPP. This plan shall be provided to the Owner's/Operator's Engineer for inclusion in the Site Log Book, prior to mobilization on-site.

5. Participate in a pre-construction meeting which shall include the City of Watertown representative, Owner/Operator, Owner's/Operator's Engineer, Qualified Inspector, and all subcontractors to discuss responsibilities as they relate to the implementation of this SWPPP.

6. If Contractor plans on utilizing adjacent properties for material, waste, borrow, or equipment storage areas, or if Contractor plans to engage in industrial activity other than construction (such as operating asphalt and/or concrete plants) at the site, Contractor shall submit appropriate documentation to the Owner's/Operator's Engineer so that the SWPPP can be modified accordingly.

7. Implement site stabilization, erosion and sediment control measures, and other requirements of the SWPPP.

8. In accordance with the requirements in the most current version of the NYS Standards and Specifications for Erosion and Sediment Control, conduct inspections of erosion and sediment control measures installed at the site to ensure that they remain in effective operating condition at all times. Prepare and retain written documentation of inspections as well as of all repairs/maintenance activities performed. This information must be retained as part of the Site Log Book.

9. Begin implementing corrective actions within one (1) business day of receipt of notification by the Qualified Inspector/Qualified Professional that deficiencies exist with the erosion and sediment control measures employed at the site. Corrective actions shall be completed within a reasonable time frame.

10. Maintain a record of the date(s) and location(s) that soil restoration is performed in accordance with the accompanying plans and NYSDEC Division of Water's publication "Deep-Ripping and Decompaction," dated April 2008. A copy of this is publication is provided in Appendix H. The record that is to be maintained shall be a copy of the overall site grading plan delineating the area(s) and date(s) that the soil was restored.

11. Upon completion of all construction at the site, the contractor responsible for overall SWPPP Compliance shall sign the certification on their Contractor Certification Form indicating that: a.) all temporary erosion and sediment control measures have been removed from the site, b.) the on-site soils disturbed by construction activity have been restored in accordance with the SWPPP and the NYSDEC Division of Water's publication "Deep-Ripping and Decompaction".

7.4 Qualified Inspector's/Qualified Professional's Responsibilities

1. Participate in a pre-construction meeting with the City of Watertown representative, Owner/Operator, Owner/Operator's Engineer, Contractor, and their subcontractors to discuss responsibilities as they relate to the implementation of this SWPPP.

2. Conduct an initial assessment of the site prior to the commencement of construction and certify in an inspection report that the appropriate erosion and sediment control measures described within this SWPPP have been adequately installed and implemented to ensure overall preparedness of the site.

3. Provide on-site inspections to determine compliance with the SWPPP. Site inspections shall occur at an interval of at least once every seven calendar days. A written inspection report shall be provided to the Owner/Operator and general contractor within one business day of the completion of the inspection, with any deficiencies identified. A sample inspection form is provided in Appendix F.

4. Prepare an inspection report subsequent to each and every inspection that shall include/address the items listed in Part IV.C.4.a-k of GP-0-20-001. Sign all inspection reports and maintain on site with the SWPPP.

5. Notify the owner/operator and appropriate contractor or subcontractor of any corrective actions that need to be taken.

6. Prepare a construction Site Log Book to be used as a record of all inspection reports generated throughout the duration of construction. Ensure that the construction Site Log Book is maintained and kept up-to-date throughout the duration of construction.

7. Review the Contractor's SWPPP records on a periodic basis to ensure compliance with the requirements for daily reports, soil restoration, inspections, and maintenance logs.

8. Prepare the Notice of Termination (NOT). The Qualified Professional shall sign the NOT Certifications VI (Final Stabilization) and forward the NOT to the Owner/Operator for signature on Certification VIII (Owner/Operator Certification).

9. Transfer the SWPPP documents, along with all NOI's, permit certificates, NOT's, construction Site Log Book, and written records required by the General Permit to the Owner/Operator for archiving.

7.5 SWPPP Participants

1. Owner's/Operator's Engineer [2]: Robert Steehler, P.E.
   LaBella Associates, DPC
   300 State Street, Suite 201
   Rochester, NY 14614
   Phone: (585) 454-6110

2. Owner/Operator [3]: Reginald Schweitzer
   Neighbors of Watertown, Inc.
   112 Franklin St,
   Watertown, NY 13601
   Phone: (315) 782-8497

3. Contractor[4,6]:
   Name and Title: _____
   Company Name: _____
   Mailing Address: _____
   _____
   Phone: _____
   Fax: _____

[2] Refer to Appendix B for the SWPPP Preparer Certification Form.
[3] Refer to Appendix B for the Owner/Operator Certification Form.
[5] Refer to Appendix B for Contractor and Subcontractor Certification Form.
[6] Contractor's information to be entered once the Contractor has been selected.

APPENDIX A:
FIGURES

A-1: Site Location Map
A-2: Soils Map
A-3: Historic Places Screening Map
A-4: Environmental Resource Map
A-5: Pre-Development Watershed Delineation Map
A-6: Post-Development Watershed Delineation Map

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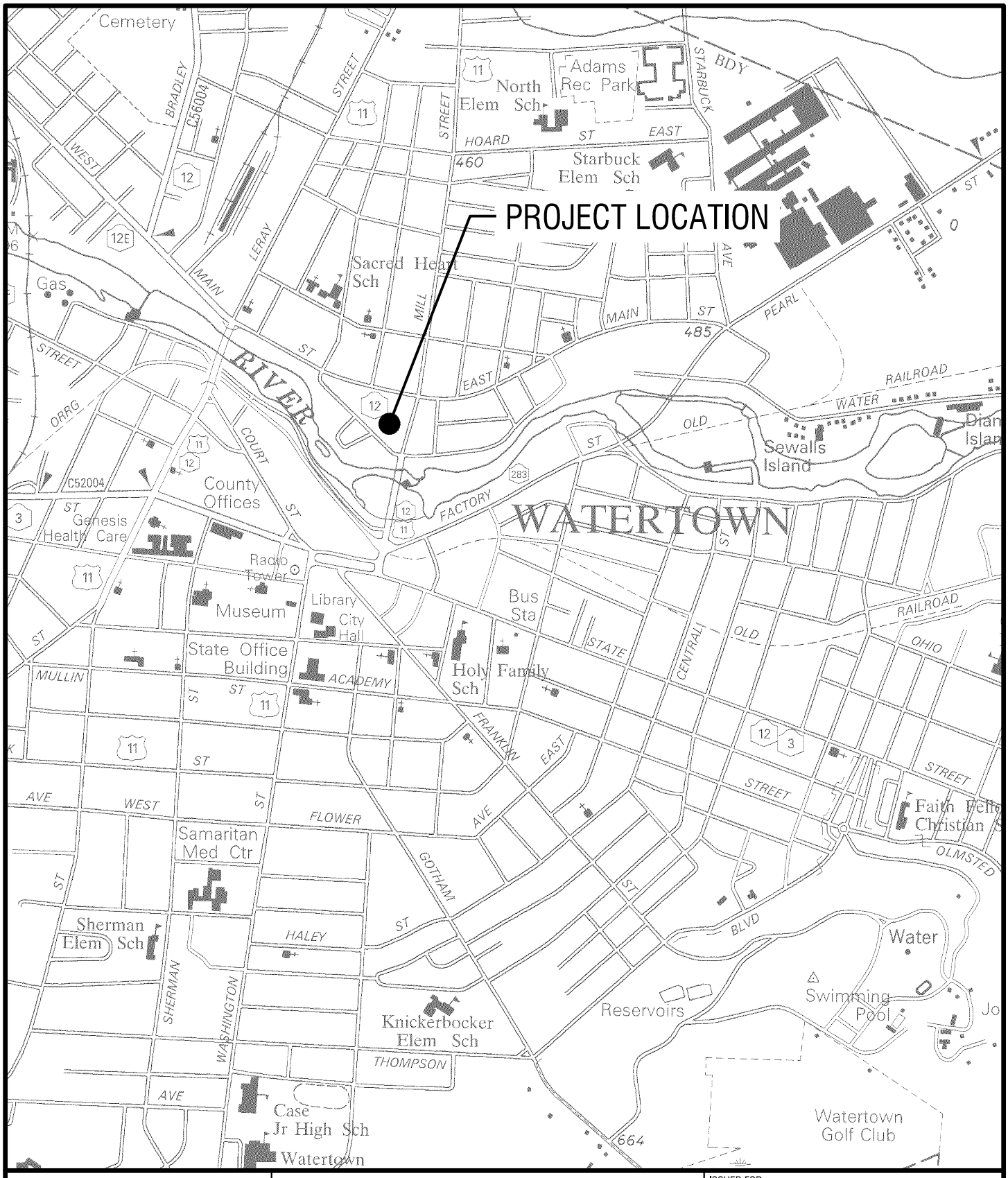

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585-454-6110
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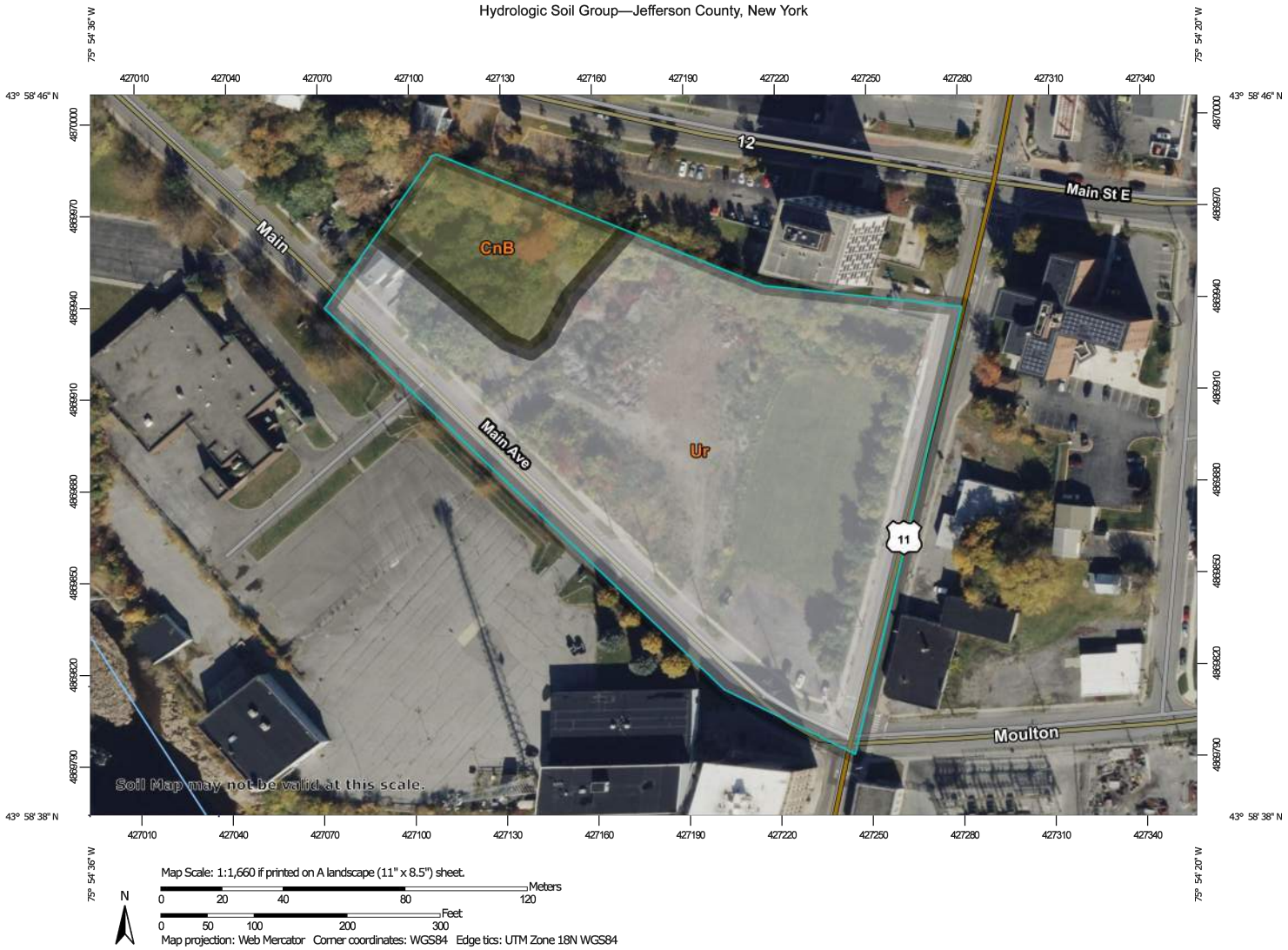
ISSUED FOR: SWPPP FIGURE - NOT FOR CONSTRUCTION

DRAWING NAME: **SITE LOCATION MAP**

DRAWN BY:	DATE:	PROJECT NO.:
--	JULY 2023	2232540

PROJECT NAME: **MILL AND MAIN APARTMENTS**
MAIN AVE. WATERTOWN, NY 13601

DRAWING NUMBER: **A-1**



USDA **Natural Resources Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

7/6/2023
Page 1 of 4

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ISSUED FOR:
SWPPP FIGURE - NOT FOR CONSTRUCTION

DRAWING NAME:
SOILS MAP

DRAWN BY:	DATE:	PROJECT NO.:
--	JULY 2023	2232540

PROJECT NAME:
MILL AND MAIN APARTMENTS
MAIN AVE, WATERTOWN, NY 13601

DRAWING NUMBER:
A-2

\\cash.lab\P\GLOBAL\Projects\Neighbors of Watertown\2232540 - NOW Watertown Apartments\05_Design\Civil\LD-LA\SWPPP\Parts\2_App A_FIGURES.dwg

7/6/2023 10:39:30 AM

MAP LEGEND

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

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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

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

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

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

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

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

Soil Survey Area: Jefferson County, New York
Survey Area Data: Version 22, Sep 10, 2022

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

Date(s) aerial images were photographed: Sep 15, 2022—Oct 28, 2022

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

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ISSUED FOR: SWPPP FIGURE - NOT FOR CONSTRUCTION

DRAWING NAME: **SOILS LEGEND**

DRAWN BY: --

DATE: JULY 2023

PROJECT NO.: 2232540

PROJECT NAME: **MILL AND MAIN APARTMENTS**
MAIN AVE, WATERTOWN, NY 13601

DRAWING NUMBER: **A-2**

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CnB	Collamer silt loam, 3 to 8 percent slopes	C/D	0.7	13.2%
Ur	Urban land		4.5	86.8%
Totals for Area of Interest			**5.2**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

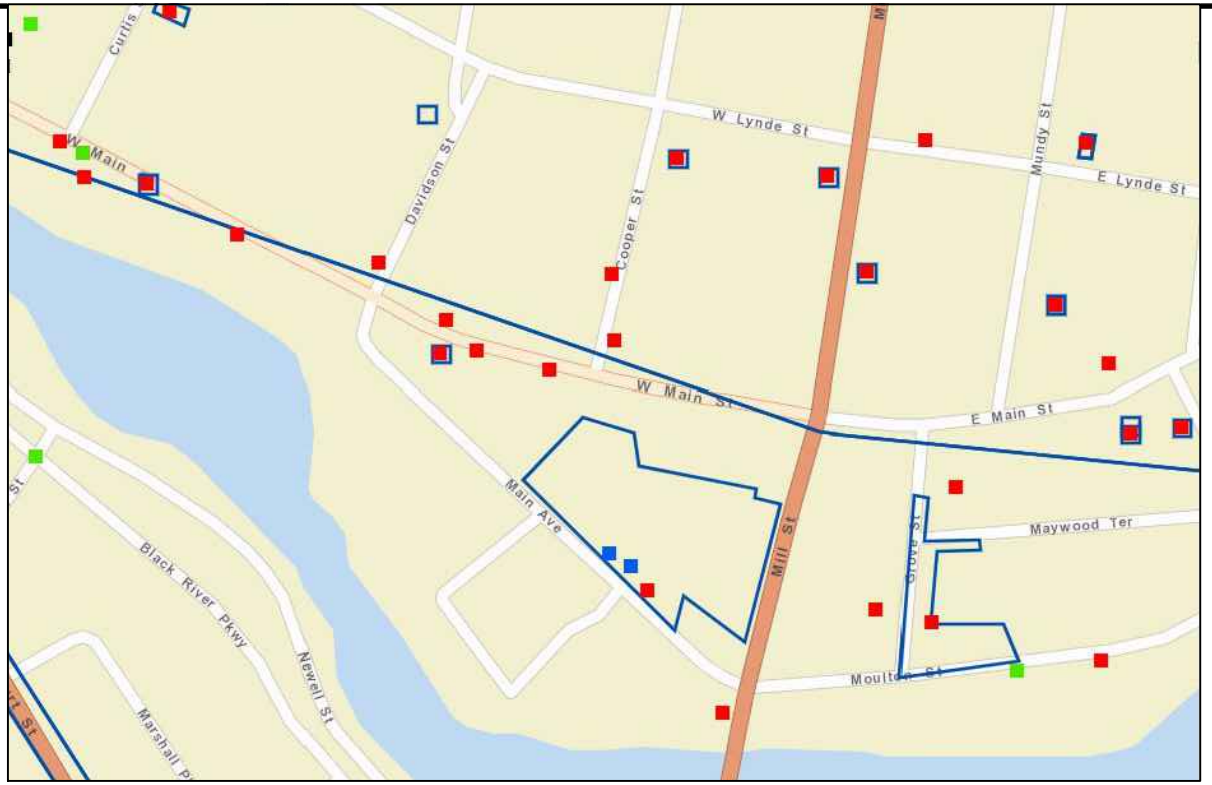
Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition



LEGEND

Consultation Projects (View)

Archeologically Sensitive Areas

Survey Building Areas (View)

LPC Historic Districts

LPC Landmarks

USN Building Points (View)

- Eligible
- Listed
- Not Eligible
- Not Eligible - Demolished
- Undetermined

Survey Archaeology Areas (View)

National Register Building Sites (View)

USN Building Districts (View)

Cemeteries

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ISSUED FOR: SWPPP FIGURE - NOT FOR CONSTRUCTION

DRAWING NAME: **HISTORIC PLACES SCREENING MAP**

DRAWN BY:	DATE:	PROJECT NO.:
--	JULY 2023	2232540

PROJECT NAME: **MILL AND MAIN APARTMENTS**
MAIN AVE, WATERTOWN, NY 13601

DRAWING NUMBER: **A-3**

Mill and Main Apartments

July 6, 2023

1:2,257

0 0.02 0.04 0.08 mi

0 0.03 0.06 0.12 km

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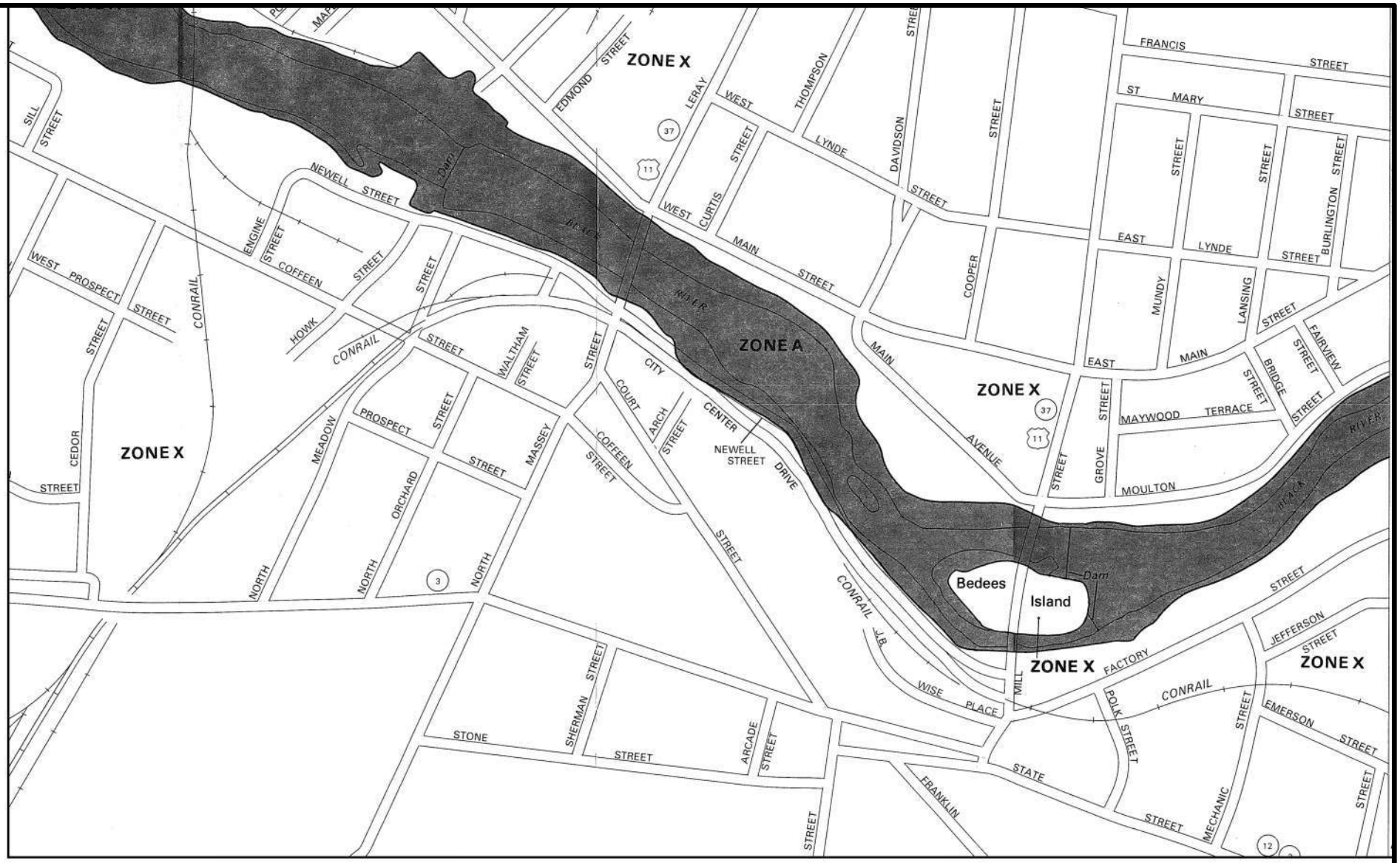
ISSUED FOR:
SWPPP FIGURE - NOT FOR CONSTRUCTION

DRAWING NAME:
ENVIRONMENTAL RESOURCE MAP

DRAWN BY:	DATE:	PROJECT NO.:
--	JULY 2023	2232540

PROJECT NAME:
MILL AND MAIN APARTMENTS
MAIN AVE, WATERTOWN, NY 13601

DRAWING NUMBER:
A-4



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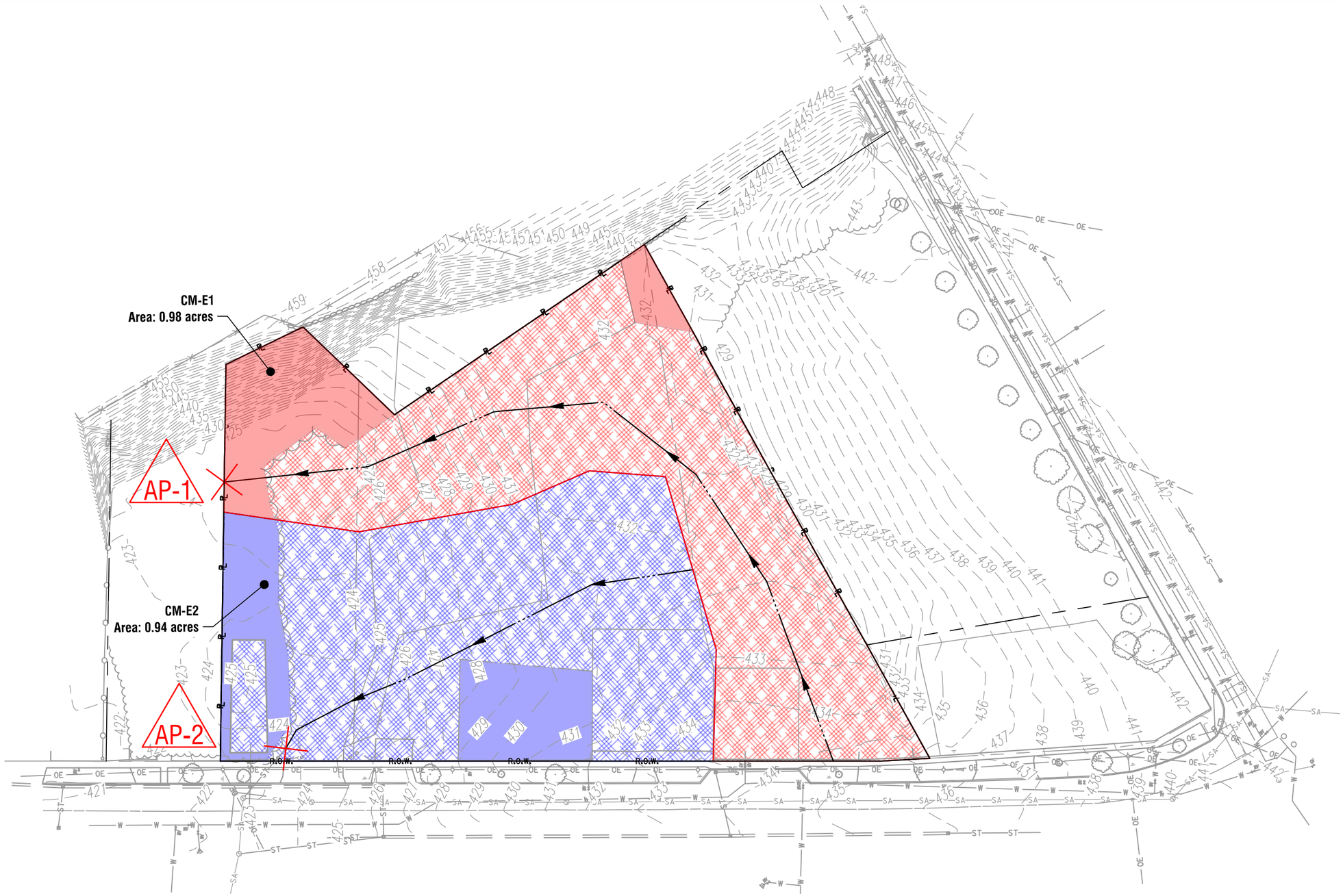
ISSUED FOR:
SWPPP FIGURE - NOT FOR CONSTRUCTION

DRAWING NAME:
FEMA FIRM MAP

DRAWN BY:	DATE:	PROJECT NO.:
--	JULY 2023	2232540

PROJECT NAME:
MILL AND MAIN APARTMENTS
MAIN AVE, WATERTOWN, NY 13601

DRAWING NUMBER:
A-5



LEGEND

APX	ANALYSIS POINT	———	Tc PATH
×	ANALYSIS POINT LOCATION	CM-X	CATCHMENT AREA

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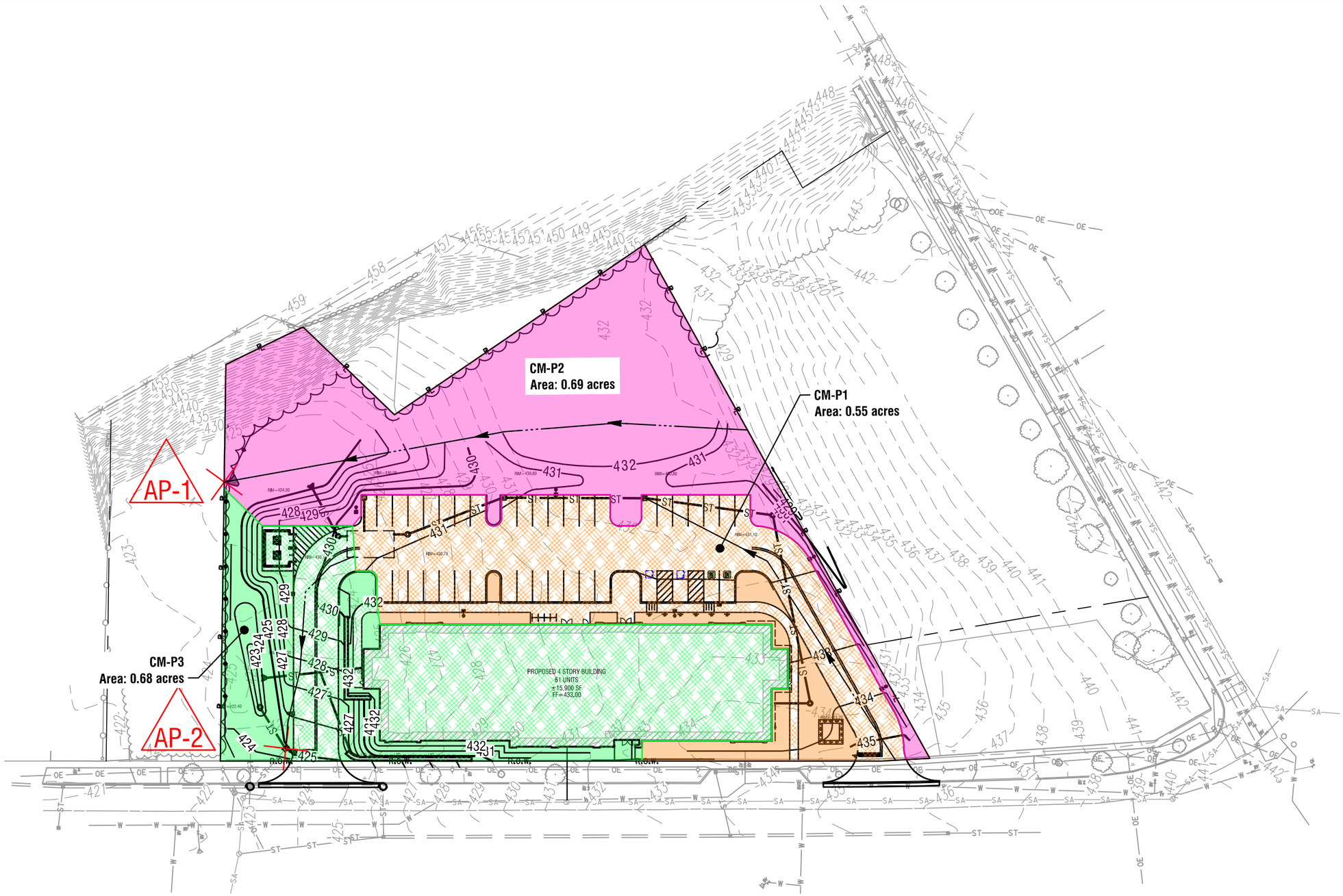
PROJECT
NEIGHBORS OF WATERTOWN INC.
MILL AND MAIN APARTMENTS
WATERTOWN, NY 13601

DRAWING TITLE
FIGURE A6
PRE-DEVELOPMENT WATERSHED MAP

BY: SCB

DATE: JULY 2023

DRAWING SCALE: 1"=60'



LEGEND

APX	ANALYSIS POINT	———	Tc PATH
×	ANALYSIS POINT LOCATION	CM-X	CATCHMENT AREA

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PROJECT
NEIGHBORS OF WATERTOWN INC.
MILL AND MAIN APARTMENTS
WATERTOWN, NY 13601

DRAWING TITLE
FIGURE A7
POST-DEVELOPMENT WATERSHED MAP

BY: SCB	DATE:
DRAWING SCALE: 1"=60'	JULY 2023

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APPENDIX B:
FORMS

Notice of Intent
MS4 SWPPP Acceptance Form
SWPPP Preparer Certification Form
Owner/Operator Certification Form
Contractor and Subcontractor Certification Forms
Notice of Termination (NOT)
5 Acre Waiver

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NOI for coverage under Stormwater General Permit for Construction Activity

version 1.35

(Submission #: HPW-76HZ-2JGEE, version 1)

Details

Originally Started By	Shelby Vakiener
Alternate Identifier	Mill and Main Apartments
Submission ID	HPW-76HZ-2JGEE
Submission Reason	New
Status	Draft

Form Input

Owner/Operator Information

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)
Neighbors of Watertown, Inc

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
Schweitzer

Owner/Operator Contact Person First Name
Reginald

Owner/Operator Mailing Address
112 Franklin Street

City
Watertown

State
NY

Zip
13601

Phone
315-782-8497

Email
NONE PROVIDED

Federal Tax ID
NONE PROVIDED

Project Location

Project/Site Name
Mill and Main Apartments

Street Address (Not P.O. Box)
160 Main Avenue

Side of Street
North

City/Town/Village (THAT ISSUES BUILDING PERMIT)
Watertown

State
NY

Zip
13601

DEC Region
6

County
JEFFERSON

Name of Nearest Cross Street
Mill Street

Distance to Nearest Cross Street (Feet)
225

Project In Relation to Cross Street
West

Tax Map Numbers Section-Block-Parcel
2-01-332

Tax Map Numbers
6 Parcels

1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are:
- Navigate to the project location on the map (below) and click to place a marker and obtain the XY coordinates.
- The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the map to the correct location and click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates
43.97872057768134,-75.90816890185243

Project Details

2. What is the nature of this project?
Redevelopment with no increase in impervious area

3. Select the predominant land use for both pre and post development conditions.

Pre-Development Existing Landuse
Other: Unused Urban Lot; gravel lot; shrubs and grub

Post-Development Future Land Use
Multifamily Residential

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.
NONE PROVIDED

---

4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area.

*** ROUND TO THE NEAREST TENTH OF AN ACRE. ***

Total Site Area (acres)
1.9

Total Area to be Disturbed (acres)
1.6

Existing Impervious Area to be Disturbed (acres)
1.3

Future Impervious Area Within Disturbed Area (acres)
0.9

5. Do you plan to disturb more than 5 acres of soil at any one time?
No

---

6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A (%)
0

B (%)
0

C (%)
0

D (%)
100

7. Is this a phased project?
No

8. Enter the planned start and end dates of the disturbance activities.

Start Date
09/01/2024

End Date
09/01/2025

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.
Tributary to Black River

9a. Type of waterbody identified in question 9?
River Off Site

Other Waterbody Type Off Site Description
NONE PROVIDED

9b. If "wetland" was selected in 9A, how was the wetland identified?
NONE PROVIDED

10. Has the surface waterbody(ies in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001?
No

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?
No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?
No

If No, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as D (provided the map unit name is inclusive of slopes greater than 25%), E or F on the USDA Soil Survey?
No

If Yes, what is the acreage to be disturbed?
NONE PROVIDED

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?
No

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?
Yes

16. What is the name of the municipality/entity that owns the separate storm sewer system?
City of Watertown

17. Does any runoff from the site enter a sewer classified as a Combined Sewer?
Yes

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?
No

19. Is this property owned by a state authority, state agency, federal government or local government?
No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)
No

Required SWPPP Components

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

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

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction SMP Identification sections.

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

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:
Professional Engineer (P.E.)

SWPPP Preparer
Robert Steehler, PE

Contact Name (Last, Space, First)
Vakiener, Shelby

Mailing Address
300 State Street, Suite 201

City
Rochester

State
NY

Zip
14614

Phone
585-454-6110

Email
svakiener@labellapc.com

Download SWPPP Preparer Certification Form
Please take the following steps to prepare and upload your preparer certification form:

1) Click on the link below to download a blank certification form
2) The certified SWPPP preparer should sign this form

3) Scan the signed form
4) Upload the scanned document
Download SWPPP Preparer Certification Form

Please upload the SWPPP Preparer Certification
NONE PROVIDED
Comment
NONE PROVIDED

Erosion & Sediment Control Criteria

25. Has a construction sequence schedule for the planned management practices been prepared?
Yes

26. Select all of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural
Construction Road Stabilization
Silt Fence
Stabilized Construction Entrance
Storm Drain Inlet Protection

Biotechnical
None

Vegetative Measures
Seeding
Topsoiling
Mulching

Permanent Structural
Land Grading
Rock Outlet Protection

Other
NONE PROVIDED

Post-Construction Criteria

*** 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 Buffers
Preservation of Undisturbed Area
Reduction of Clearing and Grading
Locating Development in Less Sensitive Areas

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).

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet)
0.0

29. Post-construction SMP Identification
Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing 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 the Post-Construction SMP Identification section 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.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet)
0.0

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)?
Yes

If Yes, go to question 36. If No, go to question 32.

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (acre-feet)
NONE PROVIDED

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?
NONE PROVIDED

If Yes, go to question 33.
Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs
Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section 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. (acre-feet)
NONE PROVIDED

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 - 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).
NONE PROVIDED

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)?
NONE PROVIDED

If Yes, go to question 36.

If No, sizing criteria has not been met; therefore, 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.

CPv Required (acre-feet)
NONE PROVIDED

CPv Provided (acre-feet)
NONE PROVIDED

36a. The need to provide channel protection has been waived because:
NONE PROVIDED

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (#37a), if applicable.

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS)
NONE PROVIDED

Post-Development (CFS)
NONE PROVIDED

Total Extreme Flood Control Criteria (Qf)

Pre-Development (CFS)
NONE PROVIDED

Post-Development (CFS)
NONE PROVIDED

37a. The need to meet the Qp and Qf criteria has been waived because:
NONE PROVIDED

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?
Yes

If Yes, Identify the entity responsible for the long term Operation and Maintenance
Neighbors of Watertown

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). (See question #32a) This space can also be used for other pertinent project information.
According to Section 9.2.1.B.I, if redevelopment activities result in a reduction of existing impervious cover by a minimum of 25% of the total disturbed, impervious area, then the stormwater criteria for water quality has been achieved. This project is proposing an 42% reduction of existing impervious cover; thereby, the water quality objective has been met.

Storm chambers will be used to help reduce flows below pre-construction quantities for one of the subject analysis points.

Post-Construction SMP Identification

Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SMPs
Identify the Post-construction SMPs to be used by providing 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.

RR Techniques (Area Reduction)

Round to the nearest tenth

Total Contributing Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

Total Contributing Impervious Acres for Vegetated Swale (RR-5)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Garden (RR-6)
NONE PROVIDED

Total Contributing Impervious Acres for Stormwater Planter (RR-7)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8)
NONE PROVIDED

Total Contributing Impervious Acres for Porous Pavement (RR-9)
NONE PROVIDED

Total Contributing Impervious Acres for Green Roof (RR-10)
NONE PROVIDED

Standard SMPs with RRv Capacity

Total Contributing Impervious Acres for Infiltration Trench (I-1)
NONE PROVIDED

Total Contributing Impervious Acres for Infiltration Basin (I-2)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Well (I-3)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Infiltration System (I-4)
NONE PROVIDED

Total Contributing Impervious Acres for Bioretention (F-5)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Swale (O-1)
NONE PROVIDED

Standard SMPs

Total Contributing Impervious Acres for Micropool Extended Detention (P-1)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Pond (P-2)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Extended Detention (P-3)
NONE PROVIDED

Total Contributing Impervious Acres for Multiple Pond System (P-4)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Pond (P-5)
NONE PROVIDED

Total Contributing Impervious Acres for Surface Sand Filter (F-1)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Sand Filter (F-2)
NONE PROVIDED

Total Contributing Impervious Acres for Perimeter Sand Filter (F-3)
NONE PROVIDED

Total Contributing Impervious Acres for Organic Filter (F-4)
NONE PROVIDED

Total Contributing Impervious Acres for Shallow Wetland (W-1)
NONE PROVIDED

Total Contributing Impervious Acres for Extended Detention Wetland (W-2)
NONE PROVIDED

Total Contributing Impervious Acres for Pond/Wetland System (W-3)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Wetland (W-4)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Swale (O-2)
NONE PROVIDED

Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Total Contributing Impervious Area for Hydrodynamic
NONE PROVIDED

Total Contributing Impervious Area for Wet Vault
NONE PROVIDED

Total Contributing Impervious Area for Media Filter
NONE PROVIDED

"Other" Alternative SMP?
NONE PROVIDED

Total Contributing Impervious Area for "Other"
NONE PROVIDED

Provide the name and manufaturer of the alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

Manufacturer of Alternative SMP
NONE PROVIDED

Name of Alternative SMP
NONE PROVIDED

Other Permits

40. Identify other DEC permits, existing and new, that are required for this project/facility.
None

If SPDES Multi-Sector GP, then give permit ID
NONE PROVIDED

If Other, then identify
NONE PROVIDED

41. Does this project require a US Army Corps of Engineers Wetland Permit?
No

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth
NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.
NONE PROVIDED

MS4 SWPPP Acceptance

43. Is this project subject to the requirements of a regulated, traditional land use control MS4?
Yes - Please attach the MS4 Acceptance form below

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI?
NONE PROVIDED

MS4 SWPPP Acceptance Form Download
Download form from the link below. Complete, sign, and upload.
MS4 SWPPP Acceptance Form

MS4 Acceptance Form Upload
NONE PROVIDED
Comment
NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download
Download the certification form by clicking the link below. Complete, sign, scan, and upload the form.

Owner/Operator Certification Form (PDF, 45KB)

Upload Owner/Operator Certification Form

NONE PROVIDED

Comment

NONE PROVIDED

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

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information
1. Owner/Operator Name:
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

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

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

SWPPP Preparer Certification Form

SPDES General Permit for Stormwater Discharges From Construction Activity (GP-0-20-001)

Project Site Information

Project/Site Name

Owner/Operator Information

Owner/Operator (Company Name/Private Owner/Municipality Name)

Certification Statement – SWPPP Preparer

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-20-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

First name | MI | Last Name

Signature | Date

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Owner/Operator Certification Form

SPDES General Permit For Stormwater Discharges From Construction Activity (GP-0-20-001)

Project/Site Name: _____

eNOI Submission Number: _____

eNOI Submitted by: ☐ **Owner/Operator** ☐ **SWPPP Preparer** ☐ **Other**

Certification Statement - Owner/Operator

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Owner/Operator First Name M.I. Last Name

_____

Signature

_____

Date

Stormwater Pollution Prevention Plan
Contractor Certification Statement
(Responsible for overall SWPPP Compliance)

Mill and Main Apartments
160 Main Ave, City of Watertown, Jefferson County, New York

This is to certify that the following contracting firm will be responsible for installing, constructing, repairing, inspecting and/or maintaining the erosion and sediment control practices and post-construction stormwater management control practices required by the SWPPP.

Contracting Firm Information

Name: _____

Address: _____

Telephone & Fax: _____

Trained Contractor(s)[1] Responsible for SWPPP Implementation (Provide name, title, and date of last training)

_____

_____

Prior to commencement of construction activity, the following certification shall be issued:

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.

Printed Name: _____

Title/Position: _____

Signature: _____ Date: _____

Upon completion of construction activities, the following certification shall be issued, prior to issuance of the NOT:

I hereby certify that that all permanent stormwater management practices required by the SWPPP have been installed in accordance with the contract documents. I further certify that all temporary erosion and sediment control measures have been removed from the site, and that the on-site soils disturbed by construction activity have been restored in accordance with the SWPPP and the NYSDEC Division of Water's publication "Deep-Ripping and Decompaction".

Printed Name: _____

Title/Position: _____

Signature: _____ Date: _____

[1] "Trained Contractor" means an employee from a contracting (construction) company 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 that meets the "qualified inspector" qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder, 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" will be responsible for the day to day implementation of the SWPPP.

[2] Signatory Requirements:

a. For a corporation, this form shall be signed by (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principle 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, this form shall be signed by a general partner or the proprietor, respectively.

c. For a municipality, State, Federal, or other public agency, this form 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).

Stormwater Pollution Prevention Plan
Subcontractor Certification Statement
(whose work involves soil disturbance)

Mill and Main Apartments
160 Main Ave, City of Watertown, Jefferson County, New York

Each Subcontractor whose work will involve soil disturbance of any kind is required to complete and sign this Certification Statement before commencing any construction activity at the site. This completed Certification Statement(s) shall be maintained at the construction site in the Site Log Book.

Subcontracting Firm Information

Name: _____

Address: _____

_____

Telephone & Fax: _____

Trained Contractor(s)[2] Responsible for SWPPP Implementation (Provide name, title, and date of last training)

_____

_____

Prior to commencement of construction activities, the following certification shall be issued:

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.

Printed Name: _____

Title/Position: _____

Signature: _____ Date: _____

[2] "Trained Contractor" means an employee from a contracting (construction) company 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 that meets the "qualified inspector" qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder, 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" will be responsible for the day to day implementation of the SWPPP.

[2] Signatory Requirements:

a. For a corporation, this form shall be signed by (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principle 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, this form shall be signed by a general partner or the proprietor, respectively.

c. For a municipality, State, Federal, or other public agency, this form 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).

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:

4b. 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, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

□ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? □ yes □ no

(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:

(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:	
Title/Position:	
Signature:	Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

(NYS DEC Notice of Termination - January 2015)

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APPENDIX C:
PROJECT EVALUATION AND DESIGN CALCULATIONS

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P=	1.00	*inch*			
AREA	**Total Area** *(Acres)*	**Existing Imperv** *(Acres)*	**Proposed Imperv** *(Acres)*	**Existing Disturbed Imperv Area** *(Acres)*	**Imperv Reduction** *(Acres)*
TO ALTERNATIVE PRACTICES					0%
TO AREA REDUCTION SMPS					
SITE REMAINING AREA	1.92	1.59	0.92	1.30	42%
TOTAL SITE	1.92	1.59	0.92	1.30	42%

Water Quality Volume Calculation

New Development / Redevelopment	**WQv Treatment %**	**Total Area** *(Acres)*	**Exist Disturbed Imperv Area (REDEVELOPMENT)** (Acres)	**Imperv Area (NEW DEVELOPMENT)** *(Acres)*	**Percent Impervious** *%*	**Rv**	**WQv** *(ft^3)*	**WQv Adjusted** *(ft^3)*	**TOTAL WQV REQUIRED** *(ft^3)*	**System Generated Notes**
REDEVELOPMENT ALTERNATIVE	75%	0.00	0.00	-	0%	0.00	0	0	0	>25% REDUCTION OF IMPERVIOUS AREA, THEREFORE WQV TREATMENT IS NOT REQUIRED
NEW DEVELOPMENT ALTERNATIVE	100%	0.00	-	0.00	0%	0.00	0	0		
REDEVELOPMENT REMAINING AREA	0%	1.30	1.30	-	100%	0.95	4,483	0		
NEW DEVELOPMENT REMAINING AREA	100%	0.62	-	0.00	0%	0.00	0	0		

Minimum Runoff Reduction Volume Calculation

AREA	**Total Impervious Area Added (NEW DEVELOPMENT)** *(Acres)*	**Soil Group A** *%*	**Soil Group B** *%*	**Soil Group C** *%*	**Soil Group D** *%*	**Percent Impervious** *%*	**Rv**	**Weighted S Factor**	**MINIMUM RRv REQUIRED** *(ft^3)*	**System Generated Notes**
TOTAL SITE	0.00	0%	0%	0%	100%	100%	0.95	0.20	0	NO INCREASE IN IMPERVIOUS AREA, RRV IS NOT REQUIRED FOR REDEVELOPMENT

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APPENDIX D:
PRE-DEVELOPMENT STORMWATER MODELING

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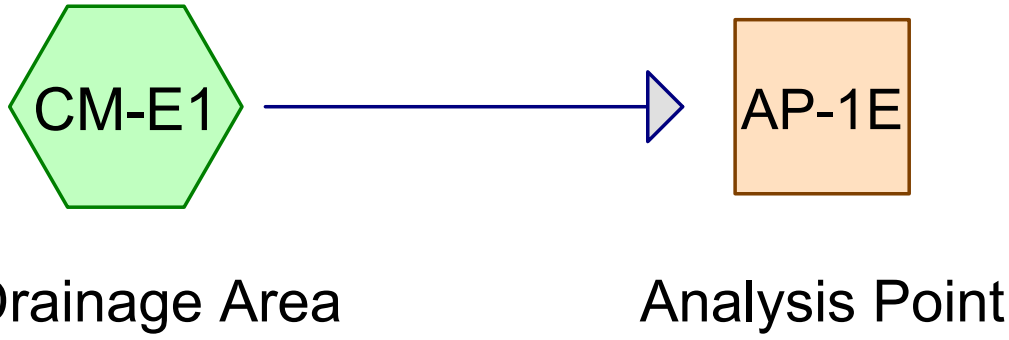


N Drainage Area

Analysis Point

S Drainage Area

Analysis Point

Subcat Reach Pond Link

Routing Diagram for 3_App E_NOW Apartments
Prepared by Labella Associates, Printed 7/18/2023

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	10-yr	Type II 24-hr		Default	24.00	1	3.30	2
2	100-yr	Type II 24-hr		Default	24.00	1	5.50	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.150	80	>75% Grass cover, Good, HSG D (CM-E1)
1.590	96	Gravel surface, HSG D (CM-E1, CM-E2)
0.180	86	Woods/grass comb., Poor, HSG D (CM-E2)

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
1.920	HSG D	CM-E1, CM-E2
0.000	Other	

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.150	0.000	0.150	>75% Grass cover, Good	CM-E1
0.000	0.000	0.000	1.590	0.000	1.590	Gravel surface	CM-E1, CM-E2
0.000	0.000	0.000	0.180	0.000	0.180	Woods/grass comb., Poor	CM-E2

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment CM-E1: N Drainage Area Runoff Area=0.980 ac 0.00% Impervious Runoff Depth=2.64"
Flow Length=480' Tc=15.6 min CN=94 Runoff=3.13 cfs 0.216 af

Subcatchment CM-E2: S Drainage Area Runoff Area=0.940 ac 0.00% Impervious Runoff Depth=2.64"
Flow Length=260' Slope=0.0450 '/' Tc=14.5 min CN=94 Runoff=3.11 cfs 0.207 af

Reach AP-1E: Analysis Point Inflow=3.13 cfs 0.216 af
Outflow=3.13 cfs 0.216 af

Reach AP-2E: Analysis Point Inflow=3.11 cfs 0.207 af
Outflow=3.11 cfs 0.207 af

Summary for Subcatchment CM-E1: N Drainage Area

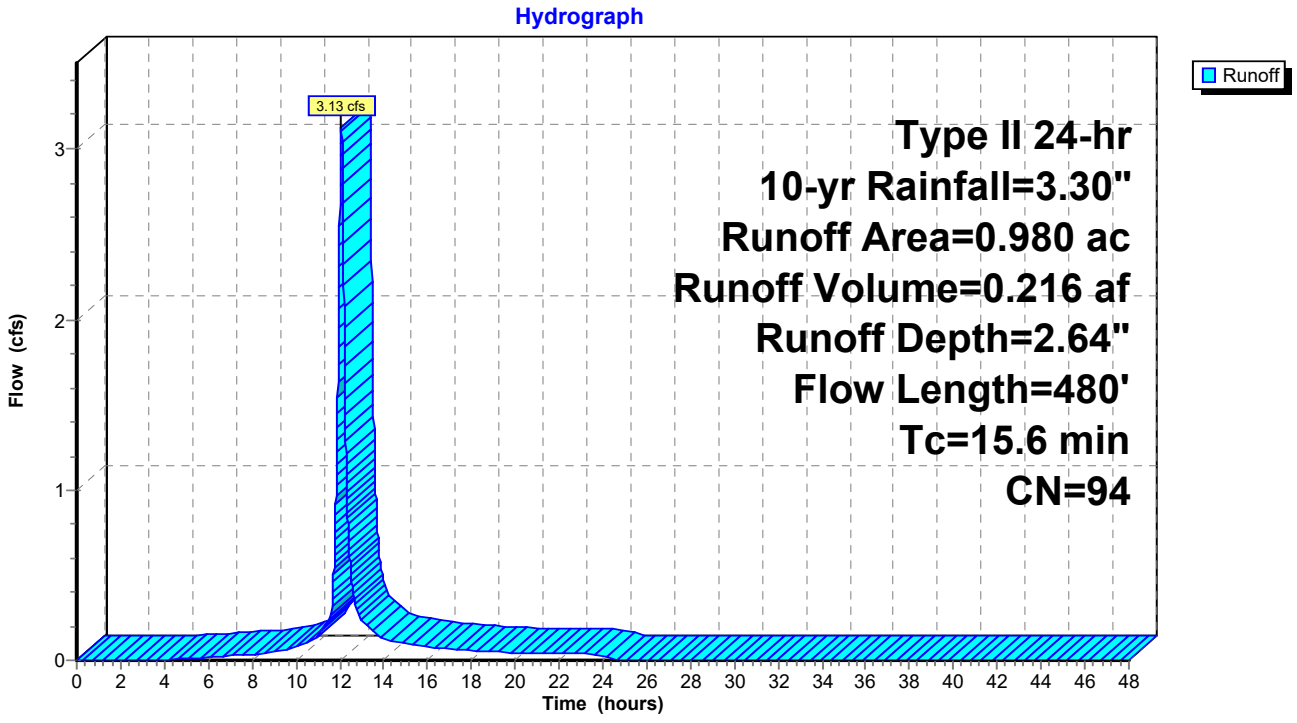
Runoff = 3.13 cfs @ 12.07 hrs, Volume= 0.216 af, Depth= 2.64"
Routed to Reach AP-1E : Analysis Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.30"

Area (ac)	CN	Description
0.150	80	>75% Grass cover, Good, HSG D
0.830	96	Gravel surface, HSG D
0.980	94	Weighted Average
0.980		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	100	0.0450	0.13		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 1.00"
2.9	380	0.1000	2.21		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.6	480	Total			

Subcatchment CM-E1: N Drainage Area



Summary for Subcatchment CM-E2: S Drainage Area

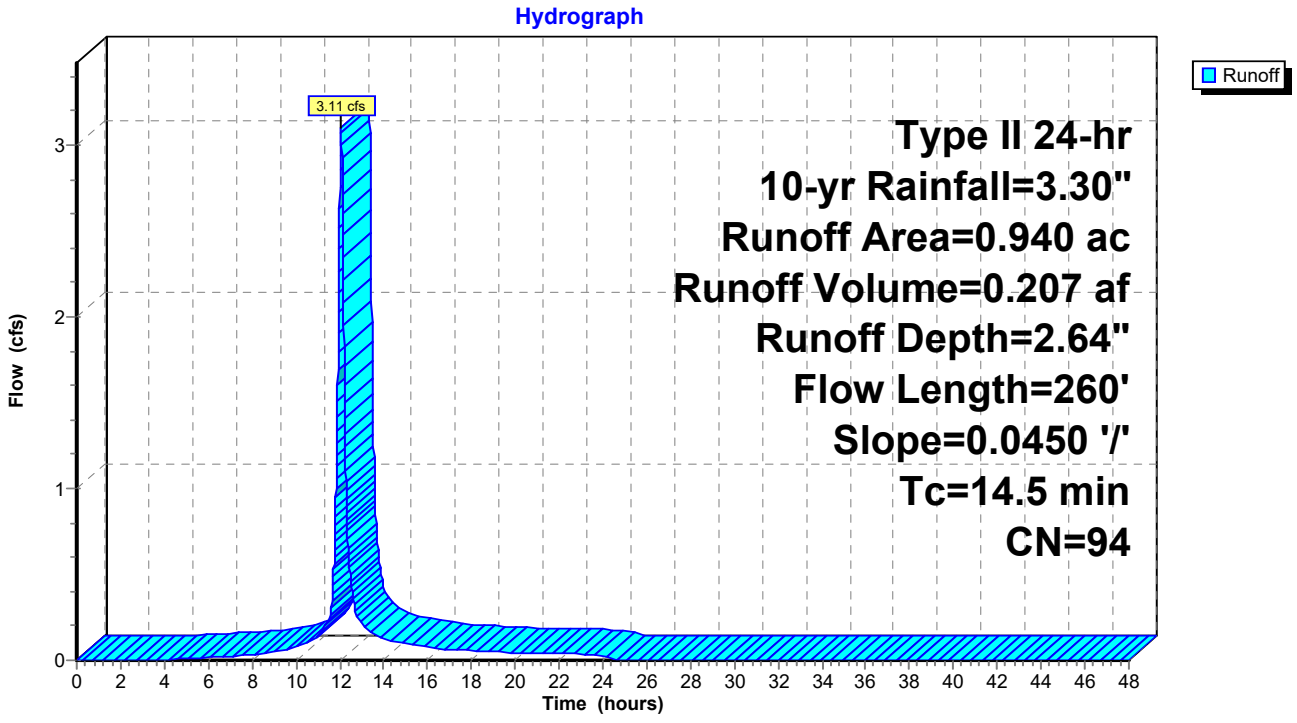
Runoff = 3.11 cfs @ 12.06 hrs, Volume= 0.207 af, Depth= 2.64"
Routed to Reach AP-2E : Analysis Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.30"

Area (ac)	CN	Description
0.180	86	Woods/grass comb., Poor, HSG D
0.760	96	Gravel surface, HSG D
0.940	94	Weighted Average
0.940		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	100	0.0450	0.13		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 1.00"
1.8	160	0.0450	1.48		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
14.5	260	Total			

Subcatchment CM-E2: S Drainage Area



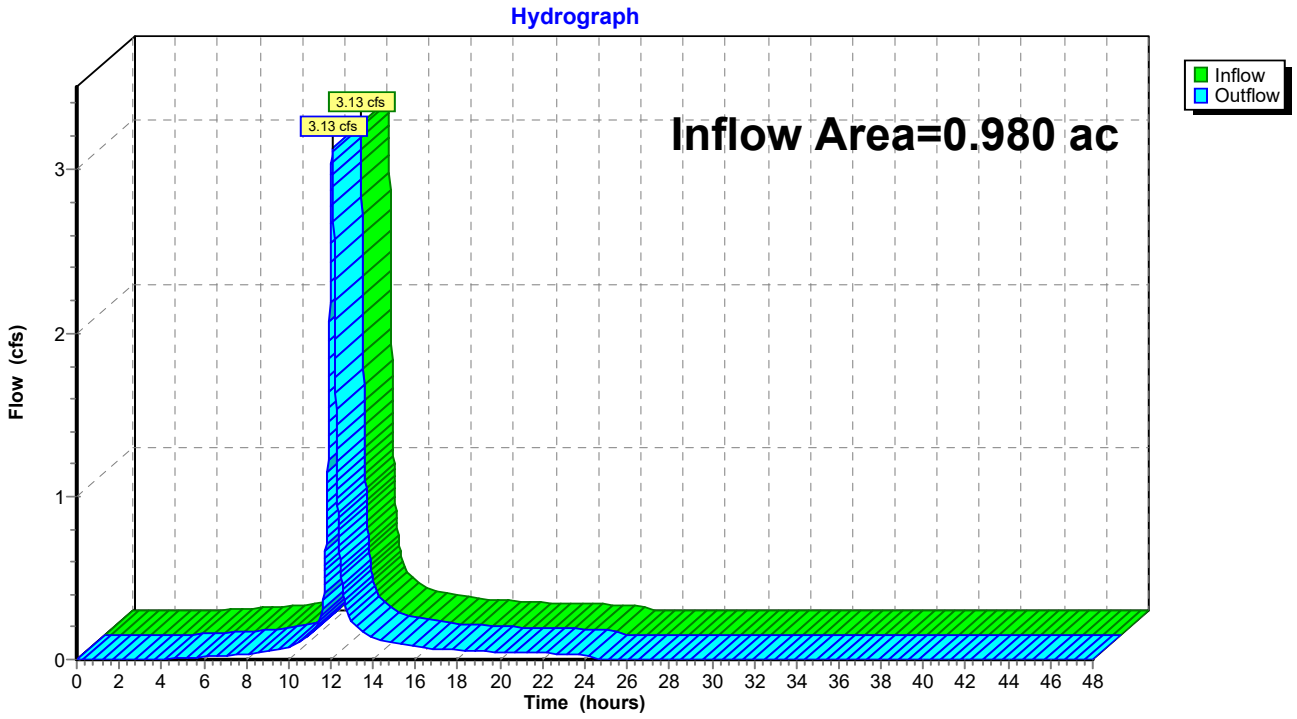
Summary for Reach AP-1E: Analysis Point

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.980 ac, 0.00% Impervious, Inflow Depth = 2.64" for 10-yr event
Inflow = 3.13 cfs @ 12.07 hrs, Volume= 0.216 af
Outflow = 3.13 cfs @ 12.07 hrs, Volume= 0.216 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach AP-1E: Analysis Point



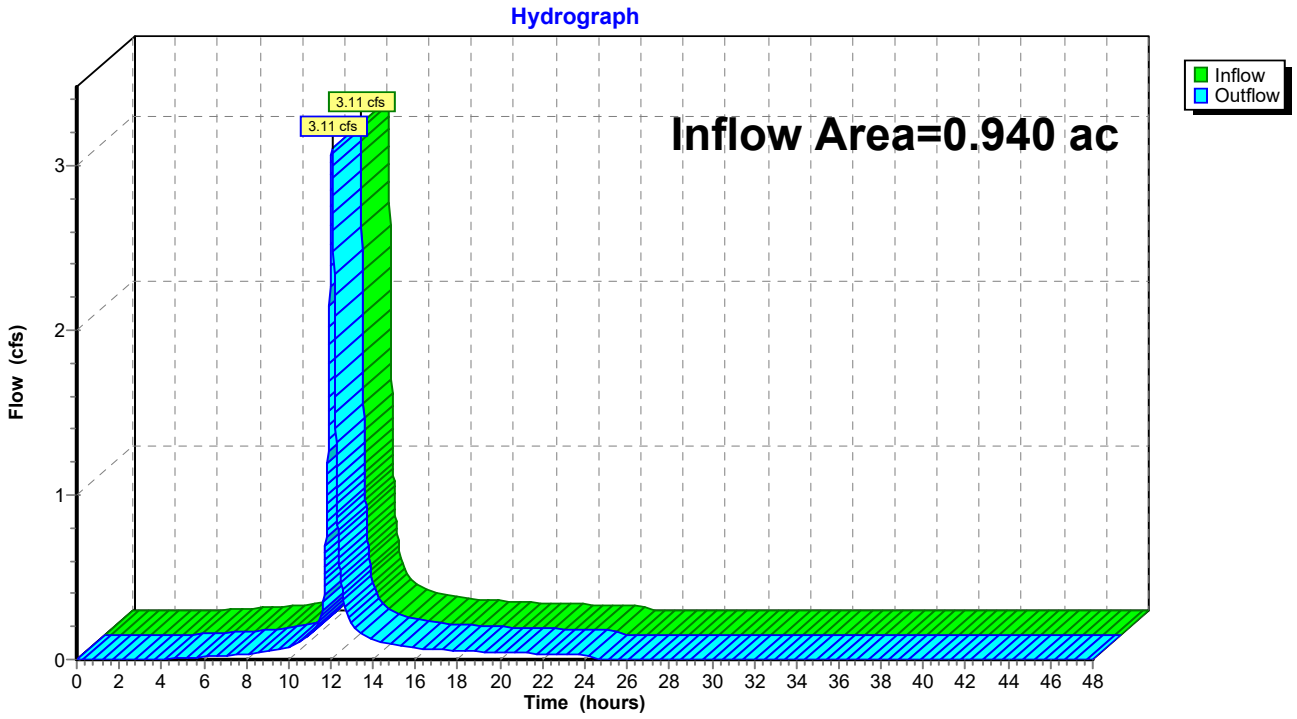
Summary for Reach AP-2E: Analysis Point

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.940 ac, 0.00% Impervious, Inflow Depth = 2.64" for 10-yr event
Inflow = 3.11 cfs @ 12.06 hrs, Volume= 0.207 af
Outflow = 3.11 cfs @ 12.06 hrs, Volume= 0.207 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach AP-2E: Analysis Point



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment CM-E1: N Drainage Area Runoff Area=0.980 ac 0.00% Impervious Runoff Depth=4.80"
Flow Length=480' Tc=15.6 min CN=94 Runoff=5.50 cfs 0.392 af

Subcatchment CM-E2: S Drainage Area Runoff Area=0.940 ac 0.00% Impervious Runoff Depth=4.80"
Flow Length=260' Slope=0.0450 '/' Tc=14.5 min CN=94 Runoff=5.46 cfs 0.376 af

Reach AP-1E: Analysis Point Inflow=5.50 cfs 0.392 af
Outflow=5.50 cfs 0.392 af

Reach AP-2E: Analysis Point Inflow=5.46 cfs 0.376 af
Outflow=5.46 cfs 0.376 af

Summary for Subcatchment CM-E1: N Drainage Area

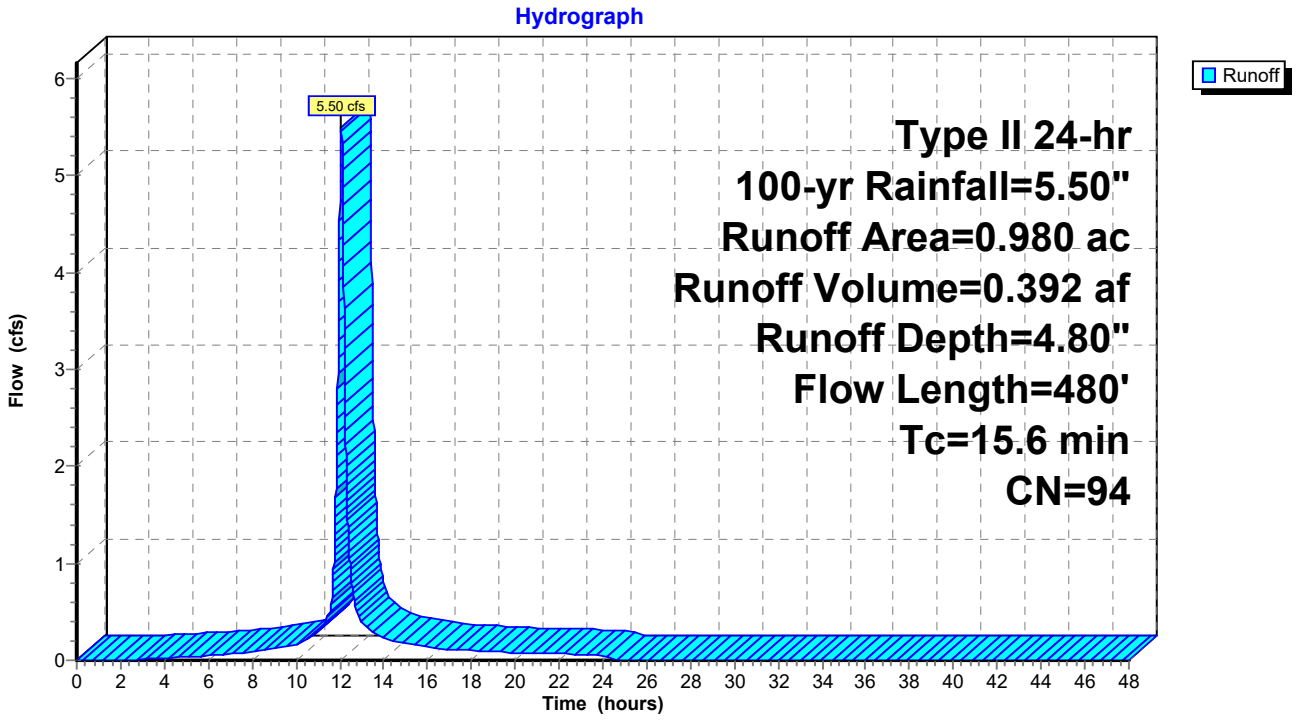
Runoff = 5.50 cfs @ 12.07 hrs, Volume= 0.392 af, Depth= 4.80"
Routed to Reach AP-1E : Analysis Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.50"

Area (ac)	CN	Description
0.150	80	>75% Grass cover, Good, HSG D
0.830	96	Gravel surface, HSG D
0.980	94	Weighted Average
0.980		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	100	0.0450	0.13		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 1.00"
2.9	380	0.1000	2.21		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.6	480	Total			

Subcatchment CM-E1: N Drainage Area



Summary for Subcatchment CM-E2: S Drainage Area

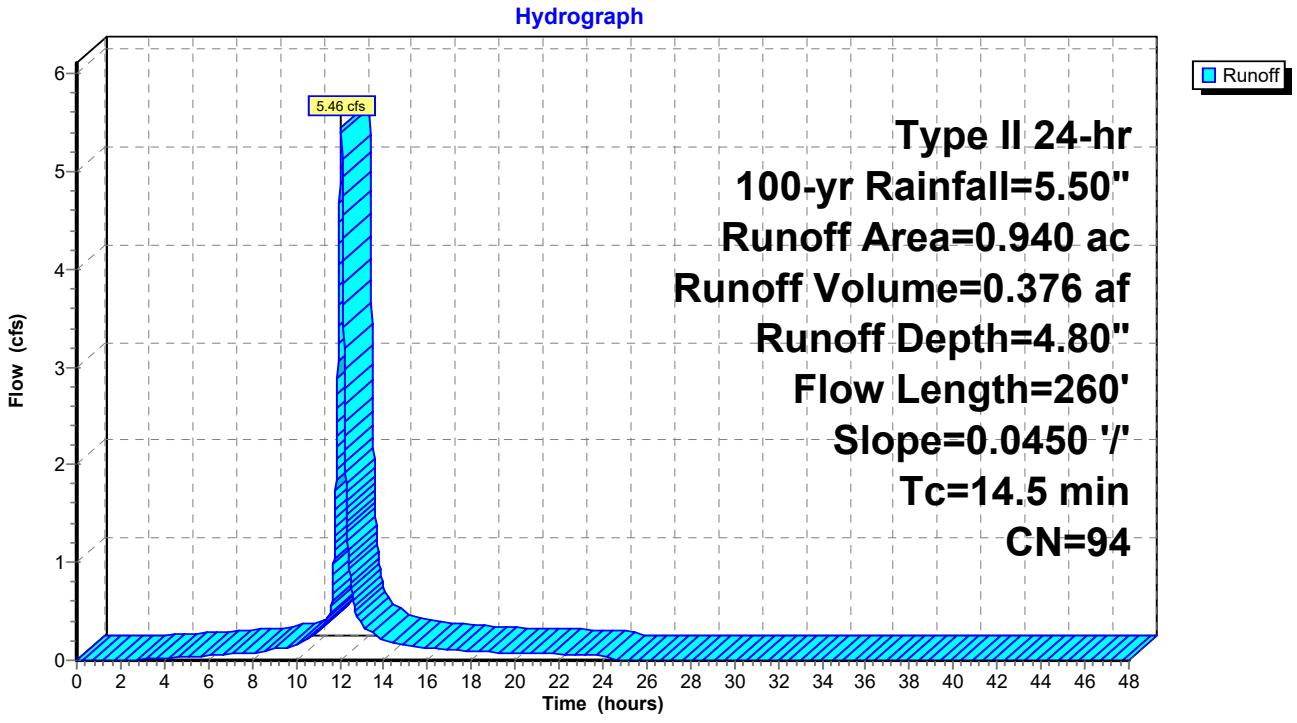
Runoff = 5.46 cfs @ 12.06 hrs, Volume= 0.376 af, Depth= 4.80"
Routed to Reach AP-2E : Analysis Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.50"

Area (ac)	CN	Description
0.180	86	Woods/grass comb., Poor, HSG D
0.760	96	Gravel surface, HSG D
0.940	94	Weighted Average
0.940		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	100	0.0450	0.13		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 1.00"
1.8	160	0.0450	1.48		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
14.5	260	Total			

Subcatchment CM-E2: S Drainage Area



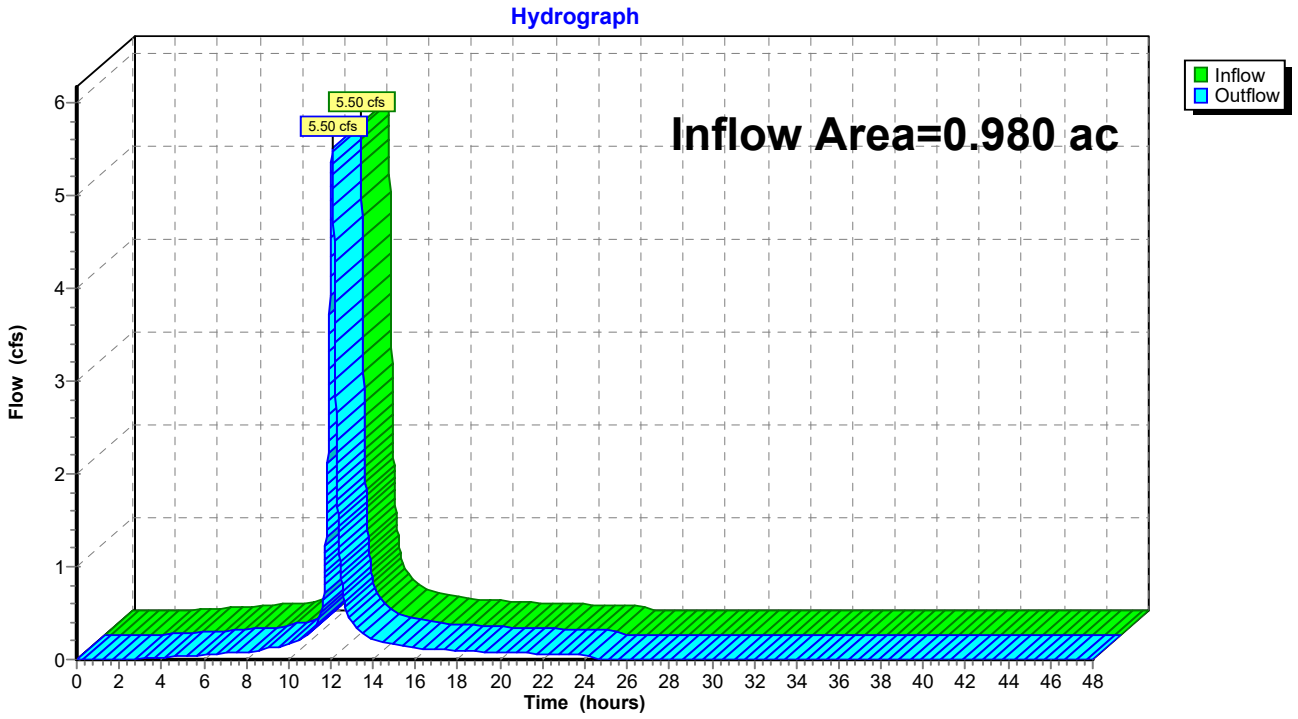
Summary for Reach AP-1E: Analysis Point

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.980 ac, 0.00% Impervious, Inflow Depth = 4.80" for 100-yr event
Inflow = 5.50 cfs @ 12.07 hrs, Volume= 0.392 af
Outflow = 5.50 cfs @ 12.07 hrs, Volume= 0.392 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach AP-1E: Analysis Point



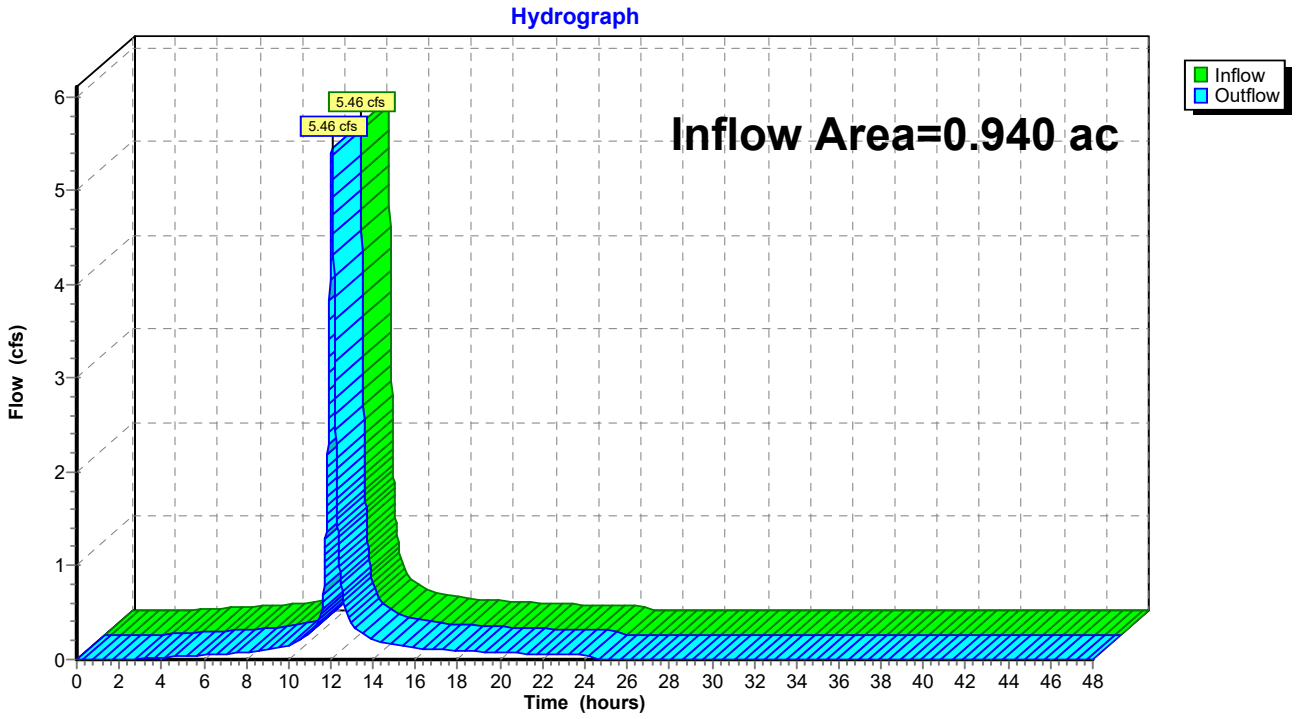
Summary for Reach AP-2E: Analysis Point

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.940 ac, 0.00% Impervious, Inflow Depth = 4.80" for 100-yr event
Inflow = 5.46 cfs @ 12.06 hrs, Volume= 0.376 af
Outflow = 5.46 cfs @ 12.06 hrs, Volume= 0.376 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach AP-2E: Analysis Point



Events for Subcatchment CM-E1: N Drainage Area

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
10-yr	3.30	3.13	0.216	2.64
100-yr	**5.50**	**5.50**	**0.392**	**4.80**

Events for Subcatchment CM-E2: S Drainage Area

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
10-yr	3.30	3.11	0.207	2.64
100-yr	**5.50**	**5.46**	**0.376**	**4.80**

Events for Reach AP-1E: Analysis Point

Event	Inflow (cfs)	Outflow (cfs)	Elevation (feet)	Storage (cubic-feet)
10-yr	3.13	3.13	**0.00**	**0**
100-yr	**5.50**	**5.50**	0.00	0

Events for Reach AP-2E: Analysis Point

Event	Inflow (cfs)	Outflow (cfs)	Elevation (feet)	Storage (cubic-feet)
10-yr	3.11	3.11	**0.00**	**0**
100-yr	**5.46**	**5.46**	0.00	0

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APPENDIX E:
POST DEVELOPMENT STORMWATER MODELING

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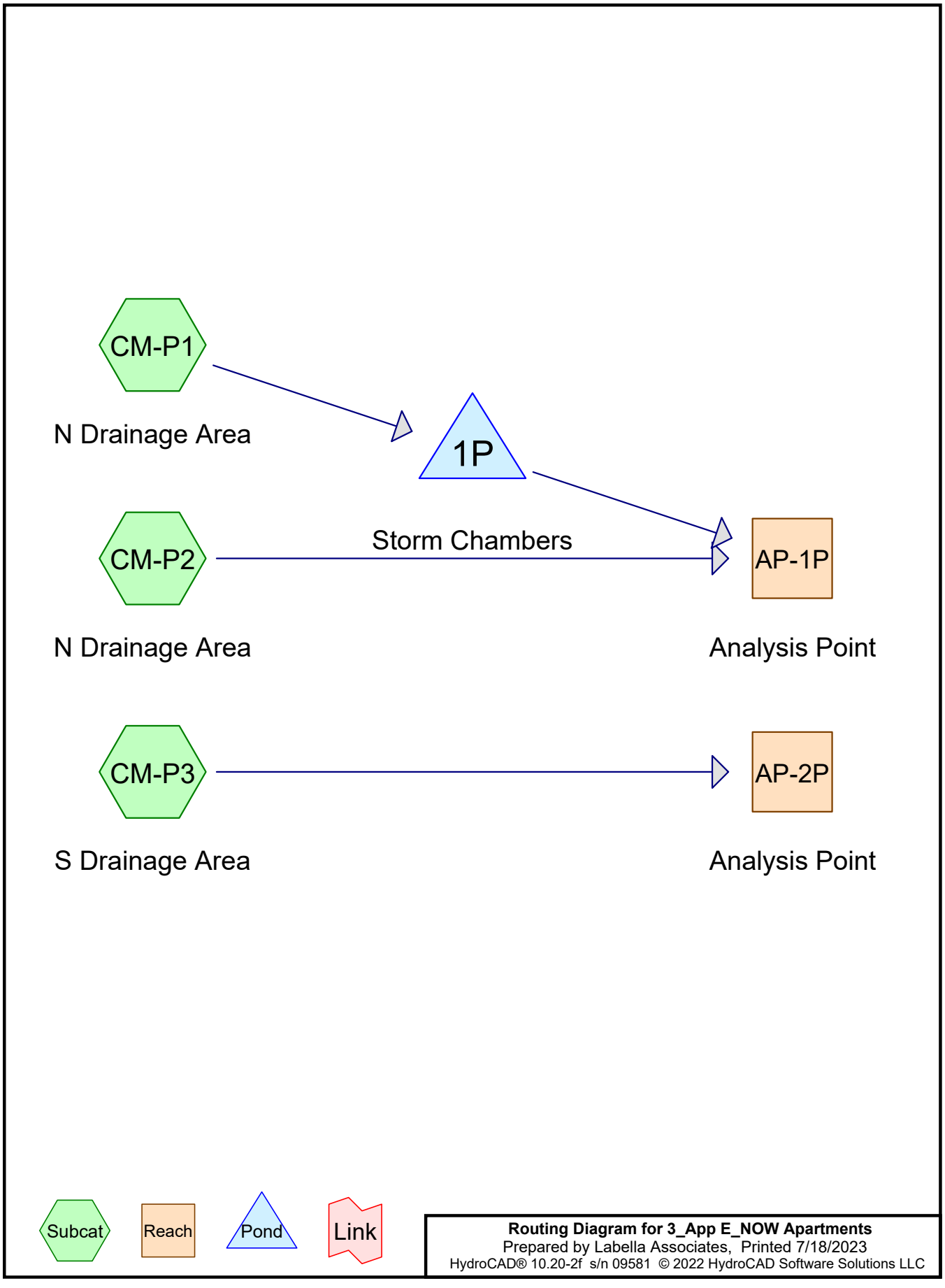


Routing Diagram for 3_App E_NOW Apartments
Prepared by Labella Associates, Printed 7/18/2023

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	10-yr	Type II 24-hr		Default	24.00	1	3.30	2
2	100-yr	Type II 24-hr		Default	24.00	1	5.50	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.004	80	>75% Grass cover, Good, HSG D (CM-P1, CM-P2, CM-P3)
0.551	98	Paved parking, HSG D (CM-P1, CM-P3)
0.365	98	Roofs, HSG D (CM-P3)
1.920	**89**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
1.920	HSG D	CM-P1, CM-P2, CM-P3
0.000	Other	
1.920		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	1.004	0.000	1.004	>75% Grass cover, Good	CM-P1, CM-P2, CM-P3
0.000	0.000	0.000	0.551	0.000	0.551	Paved parking	CM-P1, CM-P3
0.000	0.000	0.000	0.365	0.000	0.365	Roofs	CM-P3
0.000	**0.000**	**0.000**	**1.920**	**0.000**	**1.920**	**TOTAL AREA**	

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment CM-P1: N Drainage Area Runoff Area=0.550 ac 80.00% Impervious Runoff Depth=2.64"
Tc=6.0 min CN=94 Runoff=2.39 cfs 0.121 af

Subcatchment CM-P2: N Drainage Area Runoff Area=0.690 ac 0.00% Impervious Runoff Depth=1.48"
Flow Length=305' Tc=19.1 min CN=80 Runoff=1.16 cfs 0.085 af

Subcatchment CM-P3: S Drainage Area Runoff Area=0.680 ac 70.00% Impervious Runoff Depth=2.54"
Flow Length=276' Slope=0.0900 '/' Tc=11.0 min CN=93 Runoff=2.44 cfs 0.144 af

Reach AP-1P: Analysis Point Inflow=2.81 cfs 0.206 af
Outflow=2.81 cfs 0.206 af

Reach AP-2P: Analysis Point Inflow=2.44 cfs 0.144 af
Outflow=2.44 cfs 0.144 af

Pond 1P: Storm Chambers Peak Elev=1.22' Storage=0.013 af Inflow=2.39 cfs 0.121 af
Outflow=1.86 cfs 0.121 af

Total Runoff Area = 1.920 ac Runoff Volume = 0.350 af Average Runoff Depth = 2.19"
52.29% Pervious = 1.004 ac 47.71% Impervious = 0.916 ac

Summary for Subcatchment CM-P1: N Drainage Area

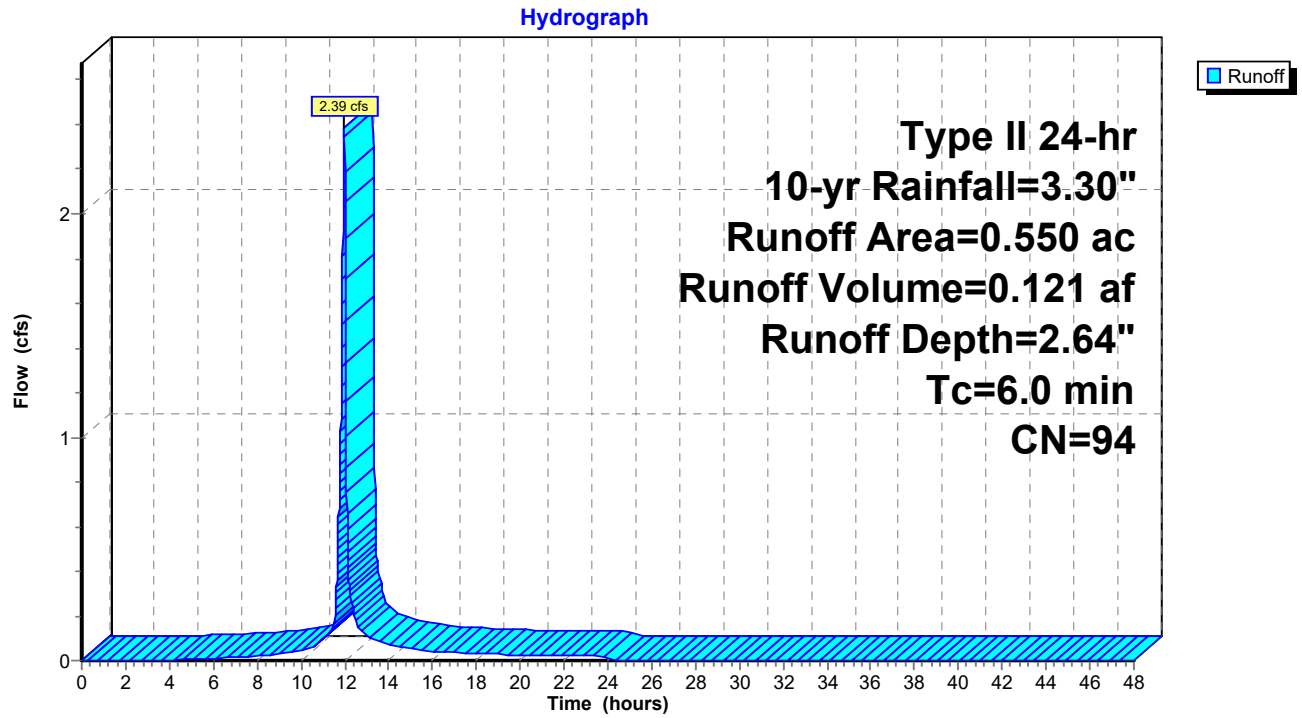
Runoff = 2.39 cfs @ 11.97 hrs, Volume= 0.121 af, Depth= 2.64"
Routed to Pond 1P : Storm Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.30"

Area (ac)	CN	Description
0.110	80	>75% Grass cover, Good, HSG D
0.440	98	Paved parking, HSG D
0.550	94	Weighted Average
0.110		20.00% Pervious Area
0.440		80.00% Impervious Area

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

Subcatchment CM-P1: N Drainage Area



Summary for Subcatchment CM-P2: N Drainage Area

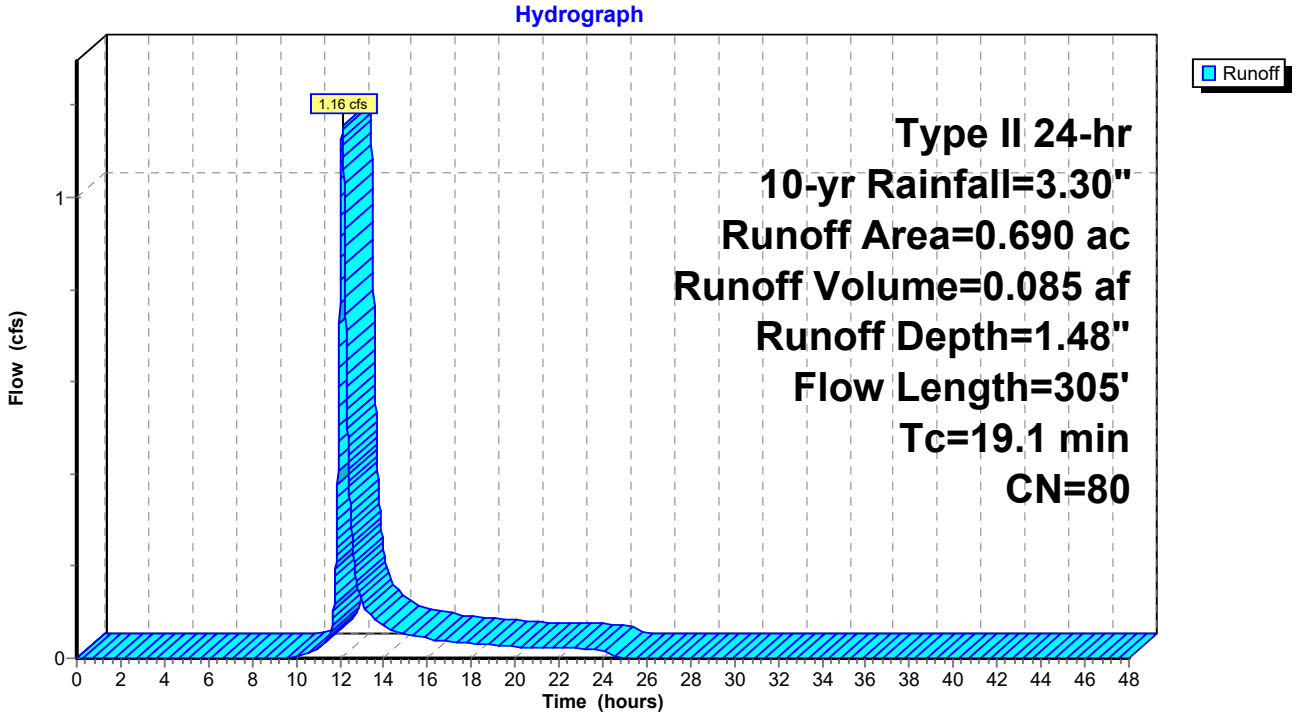
Runoff = 1.16 cfs @ 12.12 hrs, Volume= 0.085 af, Depth= 1.48"
Routed to Reach AP-1P : Analysis Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.30"

Area (ac)	CN	Description
0.690	80	>75% Grass cover, Good, HSG D
0.690		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.5	100	0.0200	0.10		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 1.00"
1.6	205	0.0900	2.10		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
19.1	305	Total			

Subcatchment CM-P2: N Drainage Area



Summary for Subcatchment CM-P3: S Drainage Area

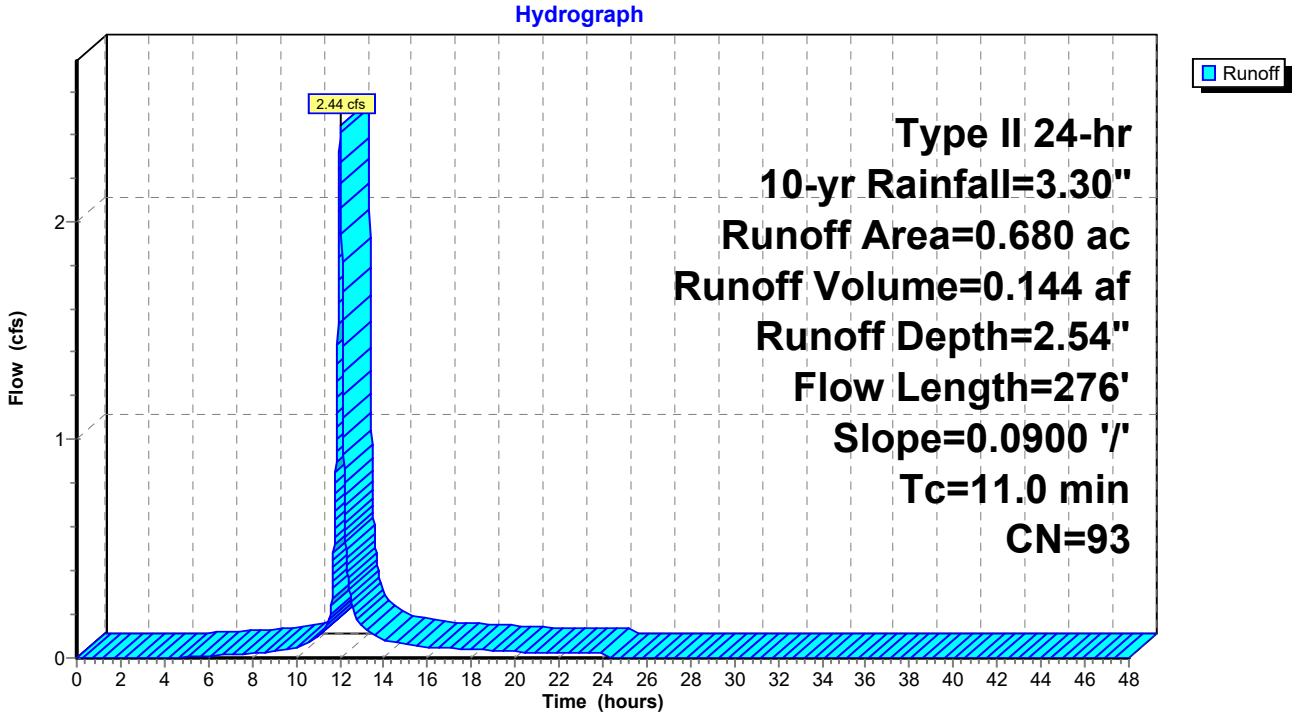
Runoff = 2.44 cfs @ 12.02 hrs, Volume= 0.144 af, Depth= 2.54"
Routed to Reach AP-2P : Analysis Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.30"

Area (ac)	CN	Description
0.204	80	>75% Grass cover, Good, HSG D
0.111	98	Paved parking, HSG D
0.365	98	Roofs, HSG D
0.680	93	Weighted Average
0.204		30.00% Pervious Area
0.476		70.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0900	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 1.00"
1.4	176	0.0900	2.10		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
11.0	276	Total			

Subcatchment CM-P3: S Drainage Area



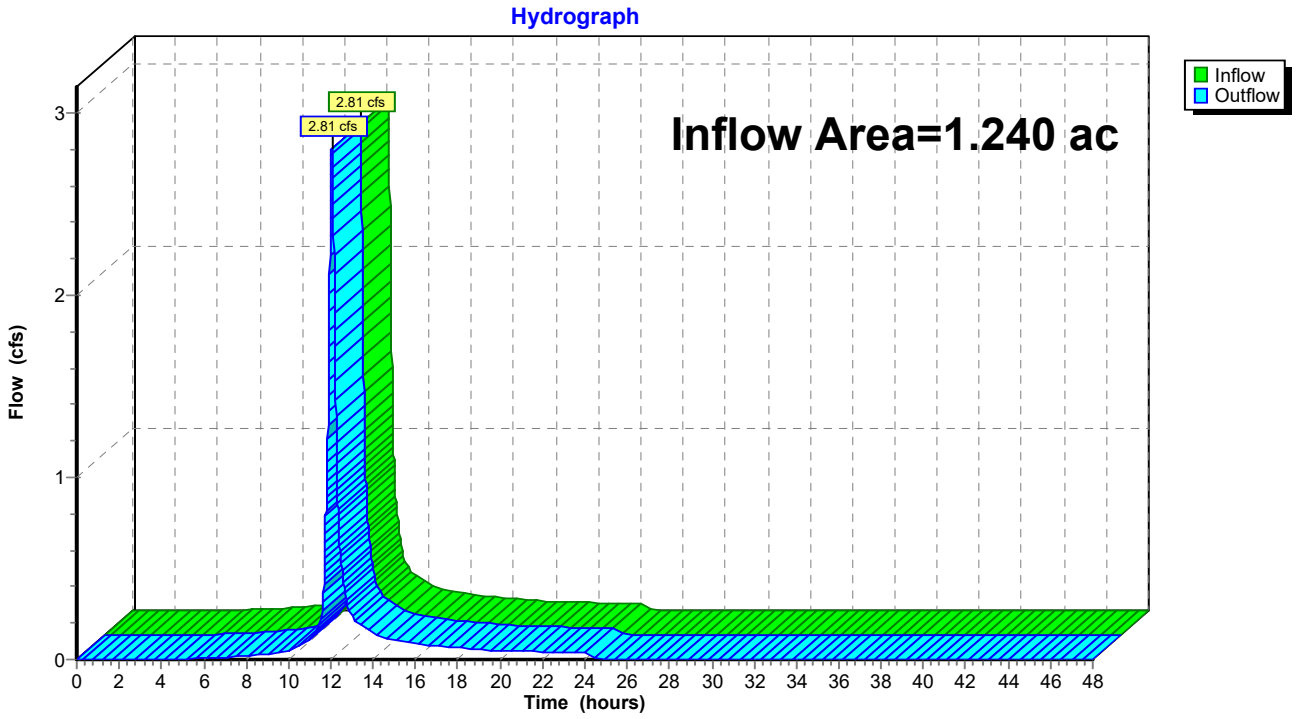
Summary for Reach AP-1P: Analysis Point

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.240 ac, 35.48% Impervious, Inflow Depth = 1.99" for 10-yr event
Inflow = 2.81 cfs @ 12.05 hrs, Volume= 0.206 af
Outflow = 2.81 cfs @ 12.05 hrs, Volume= 0.206 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach AP-1P: Analysis Point



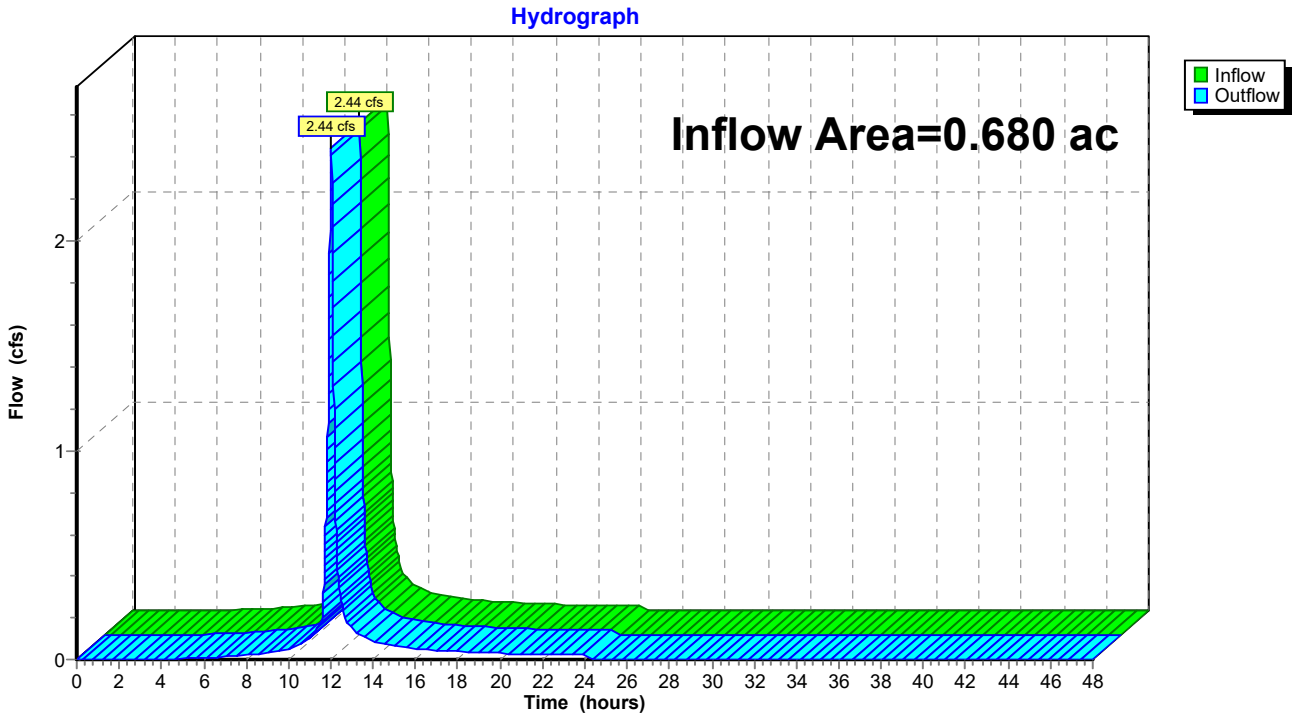
Summary for Reach AP-2P: Analysis Point

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.680 ac, 70.00% Impervious, Inflow Depth = 2.54" for 10-yr event
Inflow = 2.44 cfs @ 12.02 hrs, Volume= 0.144 af
Outflow = 2.44 cfs @ 12.02 hrs, Volume= 0.144 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach AP-2P: Analysis Point



Summary for Pond 1P: Storm Chambers

Inflow Area = 0.550 ac, 80.00% Impervious, Inflow Depth = 2.64" for 10-yr event
Inflow = 2.39 cfs @ 11.97 hrs, Volume= 0.121 af
Outflow = 1.86 cfs @ 12.02 hrs, Volume= 0.121 af, Atten= 22%, Lag= 3.2 min
Primary = 1.86 cfs @ 12.02 hrs, Volume= 0.121 af
Routed to Reach AP-1P : Analysis Point

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 1.22' @ 12.02 hrs Surf.Area= 0.017 ac Storage= 0.013 af

Plug-Flow detention time= 10.6 min calculated for 0.121 af (100% of inflow)
Center-of-Mass det. time= 10.3 min (793.2 - 782.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	0.016 af	**15.75'W x 46.34'L x 3.50'H Field A** 0.059 af Overall - 0.019 af Embedded = 0.040 af x 40.0% Voids
#2A	0.50'	0.019 af	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 18 Chambers in 3 Rows
		0.035 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**10.0" Round Culvert** L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 0.00' / -0.80' S= 0.0267 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.55 sf
#2	Device 1	0.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 1.0' Crest Height
#3	Device 1	0.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.86 cfs @ 12.02 hrs HW=1.22' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 1.86 cfs @ 3.40 fps)
↑**2=Sharp-Crested Rectangular Weir** (Passes < 18.99 cfs potential flow)
3=Orifice/Grate (Passes < 0.43 cfs potential flow)

Pond 1P: Storm Chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTechSC-740 +Cap (ADS StormTech®SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

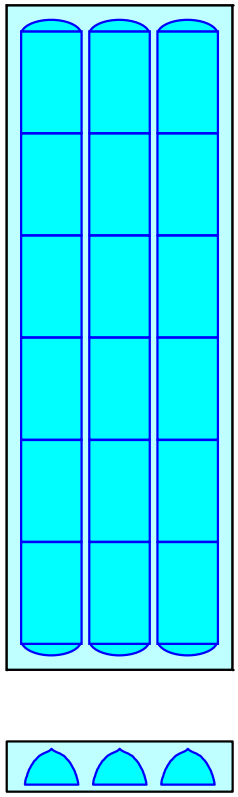
6 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 44.34' Row Length +12.0" End Stone x 2 = 46.34' Base Length
3 Rows x 51.0" Wide + 6.0" Spacing x 2 + 12.0" Side Stone x 2 = 15.75' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

18 Chambers x 45.9 cf = 826.9 cf Chamber Storage

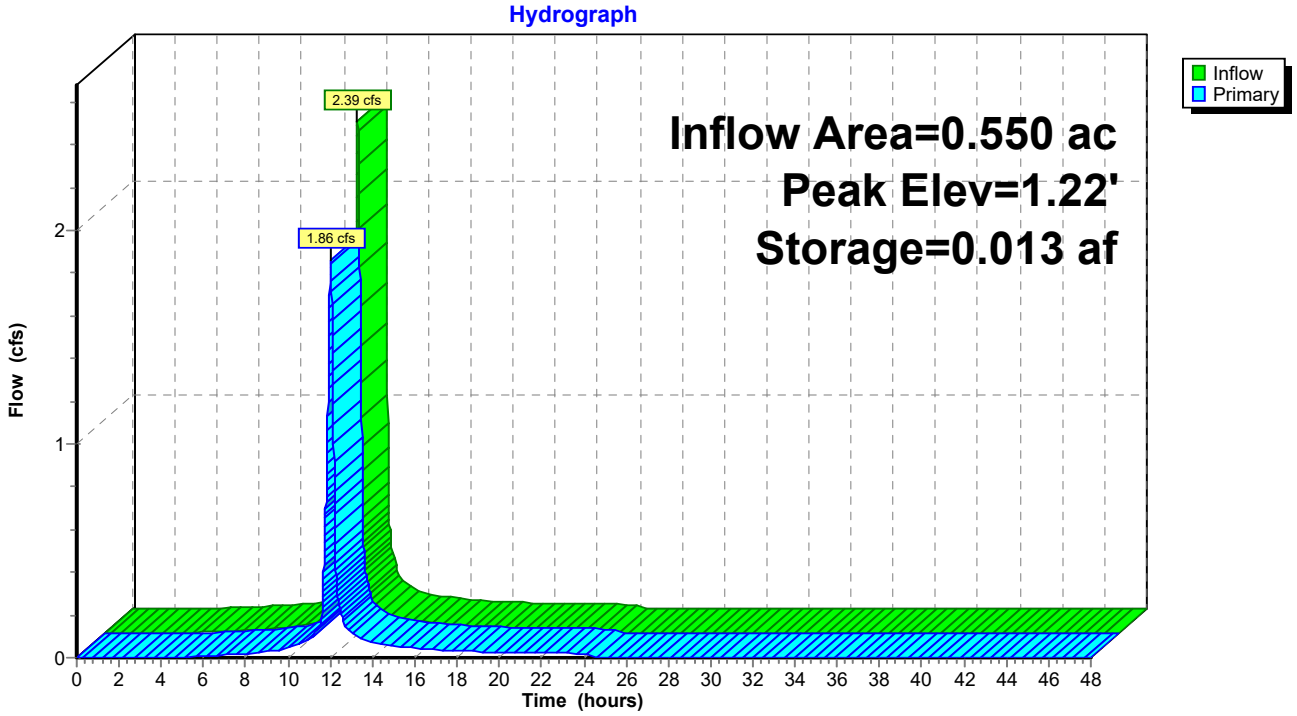
2,554.3 cf Field - 826.9 cf Chambers = 1,727.4 cf Stone x 40.0% Voids = 691.0 cf Stone Storage

Chamber Storage + Stone Storage = 1,517.9 cf = 0.035 af
Overall Storage Efficiency = 59.4%
Overall System Size = 46.34' x 15.75' x 3.50'

18 Chambers
94.6 cy Field
64.0 cy Stone



Pond 1P: Storm Chambers



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment CM-P1: N Drainage Area Runoff Area=0.550 ac 80.00% Impervious Runoff Depth=4.80"
Tc=6.0 min CN=94 Runoff=4.18 cfs 0.220 af

Subcatchment CM-P2: N Drainage Area Runoff Area=0.690 ac 0.00% Impervious Runoff Depth=3.33"
Flow Length=305' Tc=19.1 min CN=80 Runoff=2.63 cfs 0.192 af

Subcatchment CM-P3: S Drainage Area Runoff Area=0.680 ac 70.00% Impervious Runoff Depth=4.69"
Flow Length=276' Slope=0.0900 '/' Tc=11.0 min CN=93 Runoff=4.35 cfs 0.266 af

Reach AP-1P: Analysis Point Inflow=5.31 cfs 0.412 af
Outflow=5.31 cfs 0.412 af

Reach AP-2P: Analysis Point Inflow=4.35 cfs 0.266 af
Outflow=4.35 cfs 0.266 af

Pond 1P: Storm Chambers Peak Elev=2.46' Storage=0.027 af Inflow=4.18 cfs 0.220 af
Outflow=2.96 cfs 0.220 af

Total Runoff Area = 1.920 ac Runoff Volume = 0.677 af Average Runoff Depth = 4.23"
52.29% Pervious = 1.004 ac 47.71% Impervious = 0.916 ac

Summary for Subcatchment CM-P1: N Drainage Area

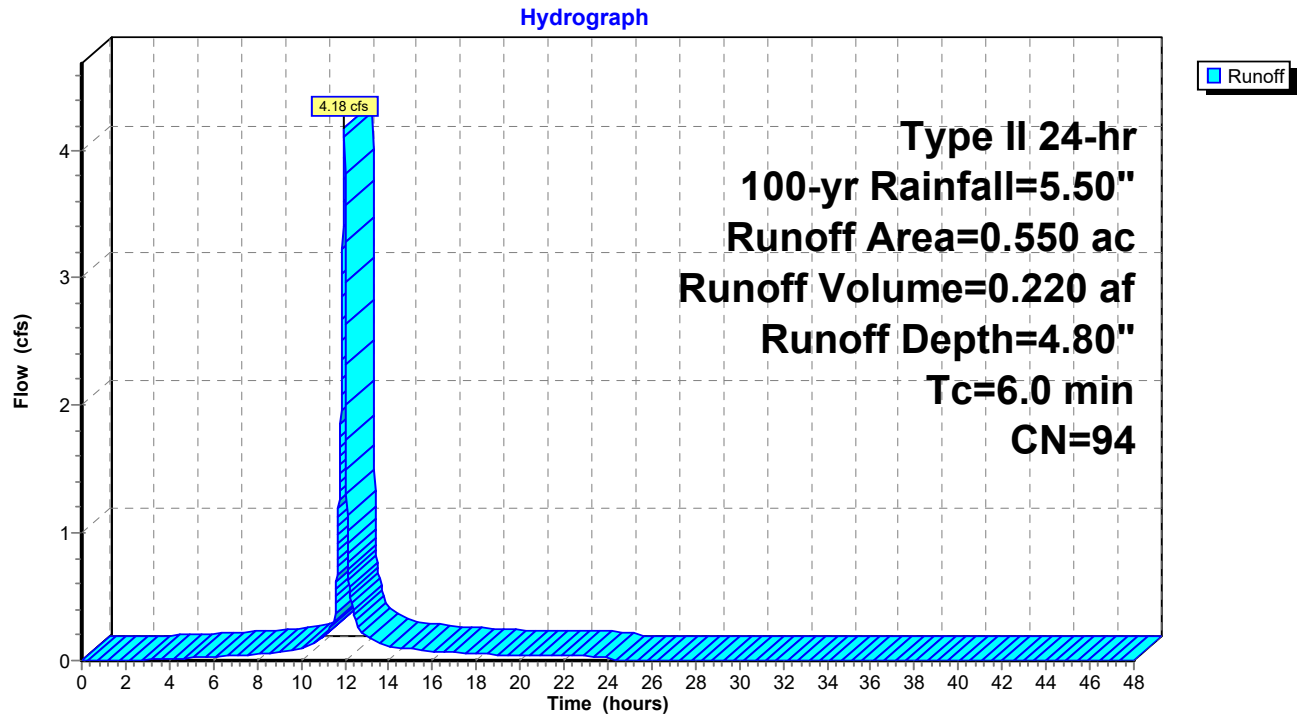
Runoff = 4.18 cfs @ 11.97 hrs, Volume= 0.220 af, Depth= 4.80"
Routed to Pond 1P : Storm Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.50"

Area (ac)	CN	Description
0.110	80	>75% Grass cover, Good, HSG D
0.440	98	Paved parking, HSG D
0.550	94	Weighted Average
0.110		20.00% Pervious Area
0.440		80.00% Impervious Area

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

Subcatchment CM-P1: N Drainage Area



Summary for Subcatchment CM-P2: N Drainage Area

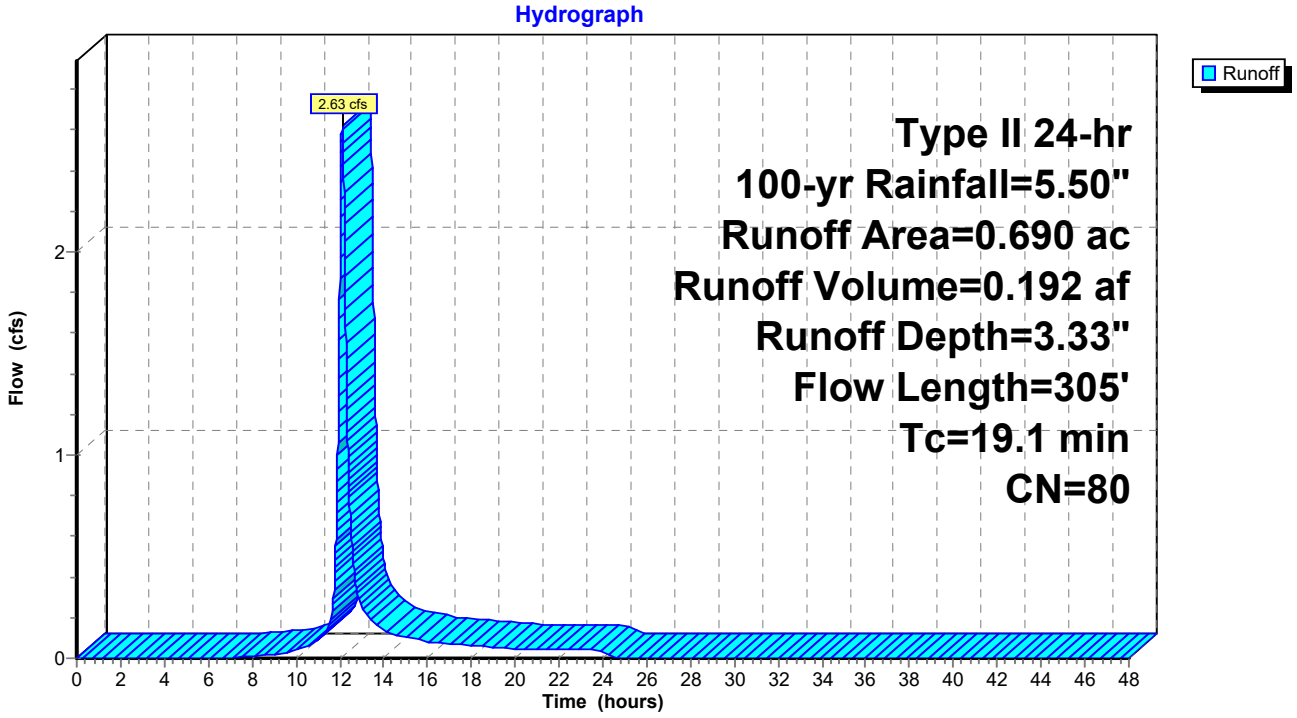
Runoff = 2.63 cfs @ 12.12 hrs, Volume= 0.192 af, Depth= 3.33"
Routed to Reach AP-1P : Analysis Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.50"

Area (ac)	CN	Description
0.690	80	>75% Grass cover, Good, HSG D
0.690		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.5	100	0.0200	0.10		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 1.00"
1.6	205	0.0900	2.10		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
19.1	305	Total			

Subcatchment CM-P2: N Drainage Area



Summary for Subcatchment CM-P3: S Drainage Area

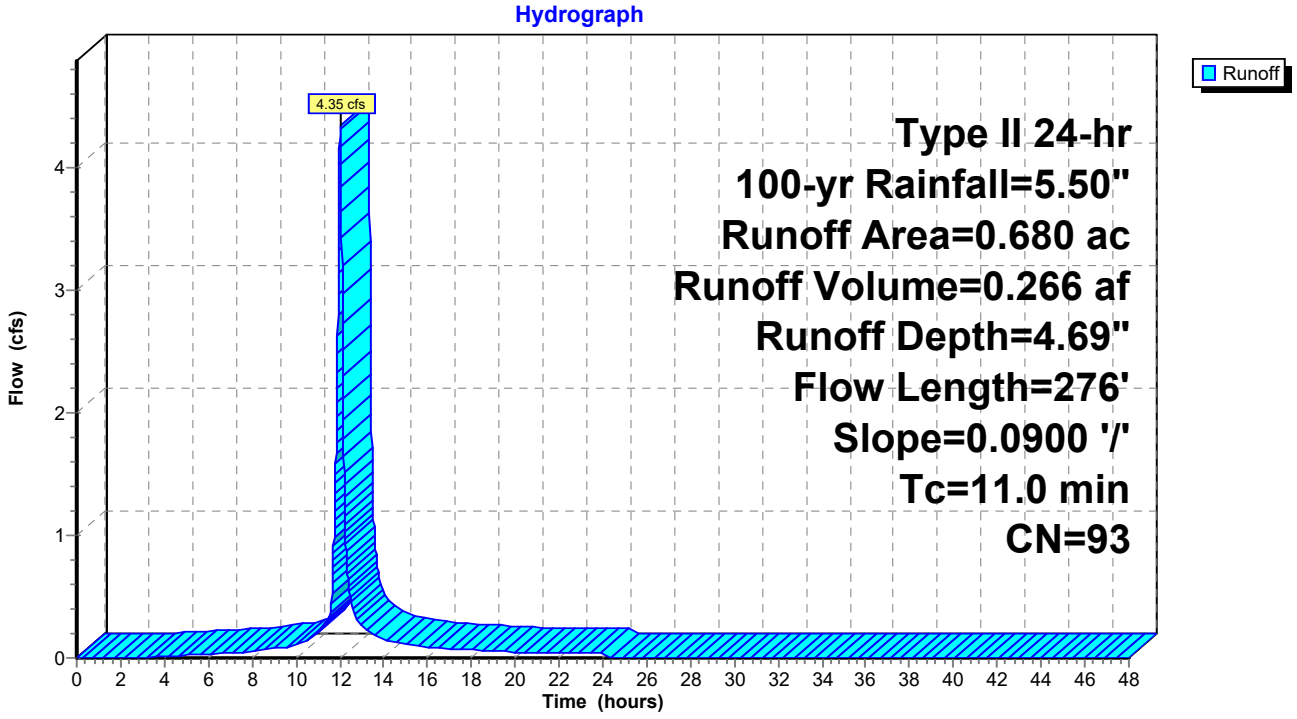
Runoff = 4.35 cfs @ 12.02 hrs, Volume= 0.266 af, Depth= 4.69"
Routed to Reach AP-2P : Analysis Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.50"

Area (ac)	CN	Description
0.204	80	>75% Grass cover, Good, HSG D
0.111	98	Paved parking, HSG D
0.365	98	Roofs, HSG D
0.680	93	Weighted Average
0.204		30.00% Pervious Area
0.476		70.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0900	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 1.00"
1.4	176	0.0900	2.10		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
11.0	276	Total			

Subcatchment CM-P3: S Drainage Area



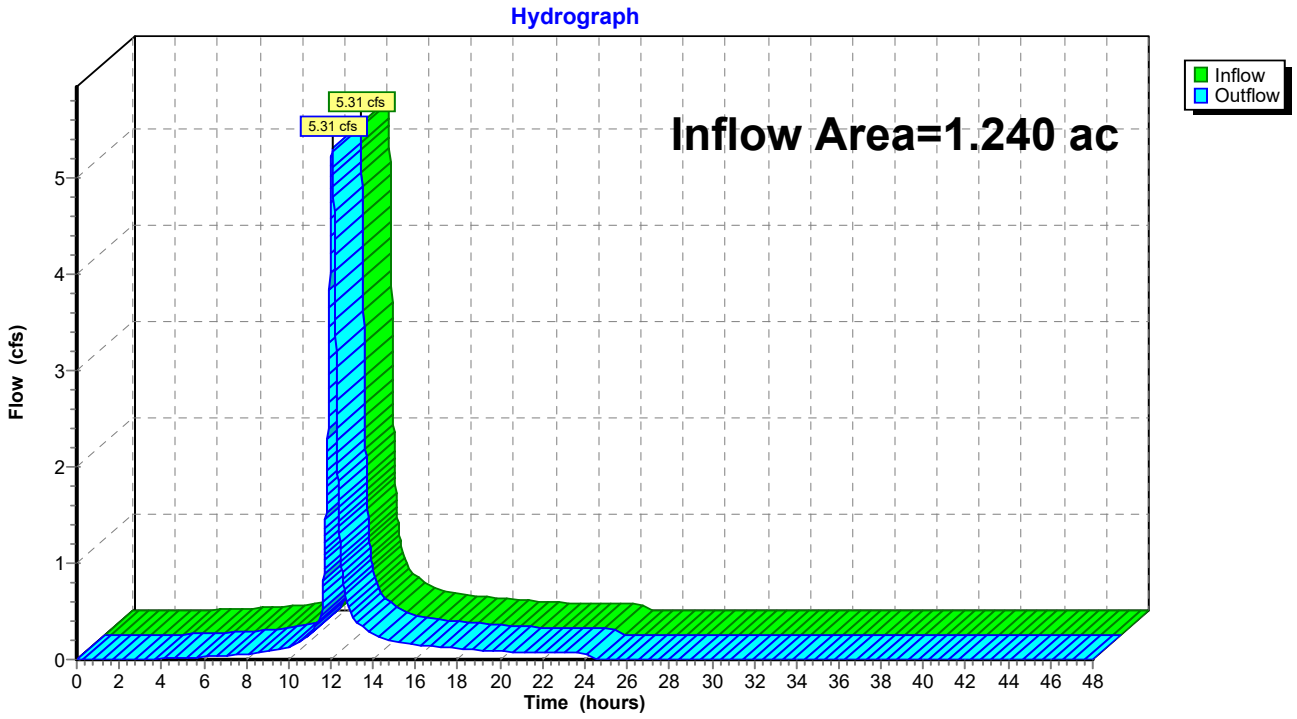
Summary for Reach AP-1P: Analysis Point

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.240 ac, 35.48% Impervious, Inflow Depth = 3.98" for 100-yr event
Inflow = 5.31 cfs @ 12.07 hrs, Volume= 0.412 af
Outflow = 5.31 cfs @ 12.07 hrs, Volume= 0.412 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach AP-1P: Analysis Point



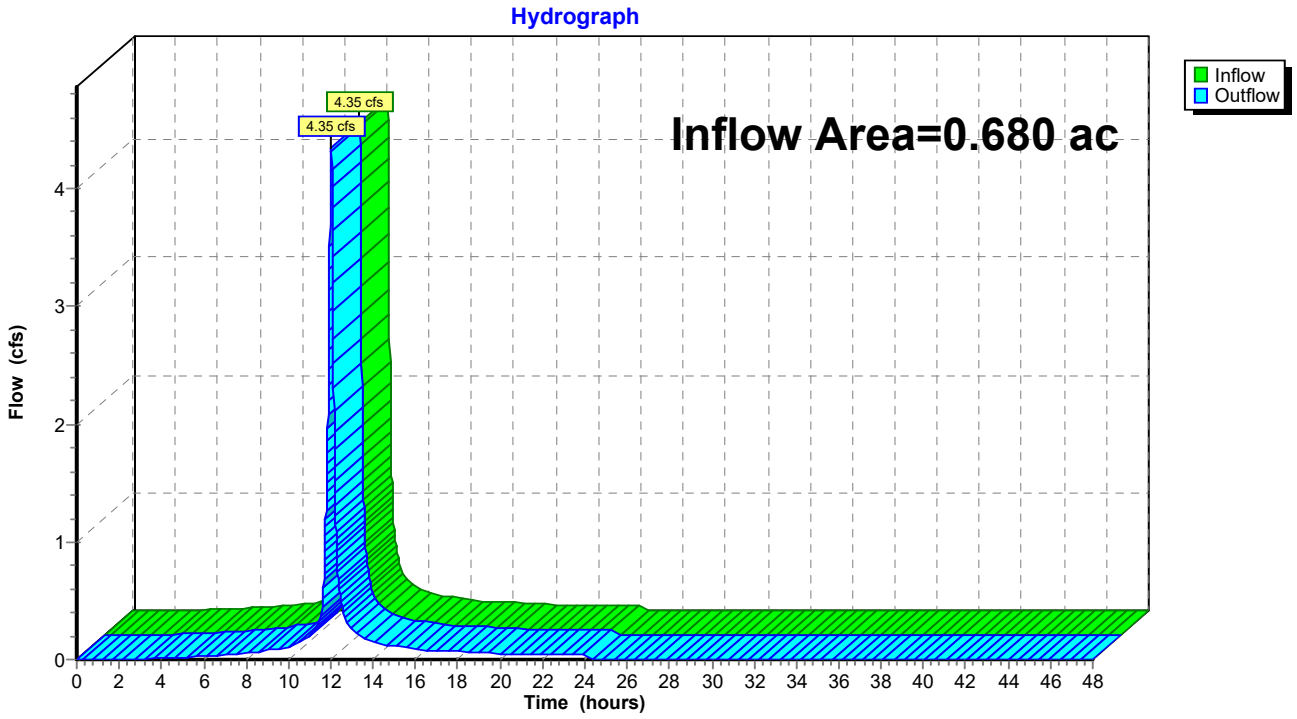
Summary for Reach AP-2P: Analysis Point

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.680 ac, 70.00% Impervious, Inflow Depth = 4.69" for 100-yr event
Inflow = 4.35 cfs @ 12.02 hrs, Volume= 0.266 af
Outflow = 4.35 cfs @ 12.02 hrs, Volume= 0.266 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach AP-2P: Analysis Point



Summary for Pond 1P: Storm Chambers

Inflow Area = 0.550 ac, 80.00% Impervious, Inflow Depth = 4.80" for 100-yr event
Inflow = 4.18 cfs @ 11.97 hrs, Volume= 0.220 af
Outflow = 2.96 cfs @ 12.03 hrs, Volume= 0.220 af, Atten= 29%, Lag= 3.8 min
Primary = 2.96 cfs @ 12.03 hrs, Volume= 0.220 af
Routed to Reach AP-1P : Analysis Point

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 2.46' @ 12.03 hrs Surf.Area= 0.017 ac Storage= 0.027 af

Plug-Flow detention time= 8.7 min calculated for 0.220 af (100% of inflow)
Center-of-Mass det. time= 8.5 min (775.8 - 767.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	0.016 af	**15.75'W x 46.34'L x 3.50'H Field A** 0.059 af Overall - 0.019 af Embedded = 0.040 af x 40.0% Voids
#2A	0.50'	0.019 af	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 18 Chambers in 3 Rows
		0.035 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**10.0" Round Culvert** L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 0.00' / -0.80' S= 0.0267 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.55 sf
#2	Device 1	0.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 1.0' Crest Height
#3	Device 1	0.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.96 cfs @ 12.03 hrs HW=2.46' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.96 cfs @ 5.43 fps)
  ├─**2=Sharp-Crested Rectangular Weir** (Passes < 57.47 cfs potential flow)
  └─**3=Orifice/Grate** (Passes < 0.64 cfs potential flow)

Pond 1P: Storm Chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTechSC-740 +Cap (ADS StormTech®SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

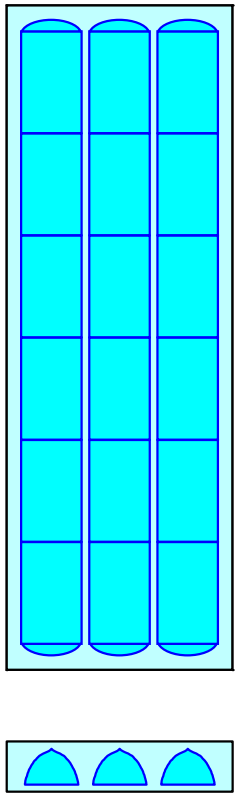
6 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 44.34' Row Length +12.0" End Stone x 2 = 46.34' Base Length
3 Rows x 51.0" Wide + 6.0" Spacing x 2 + 12.0" Side Stone x 2 = 15.75' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

18 Chambers x 45.9 cf = 826.9 cf Chamber Storage

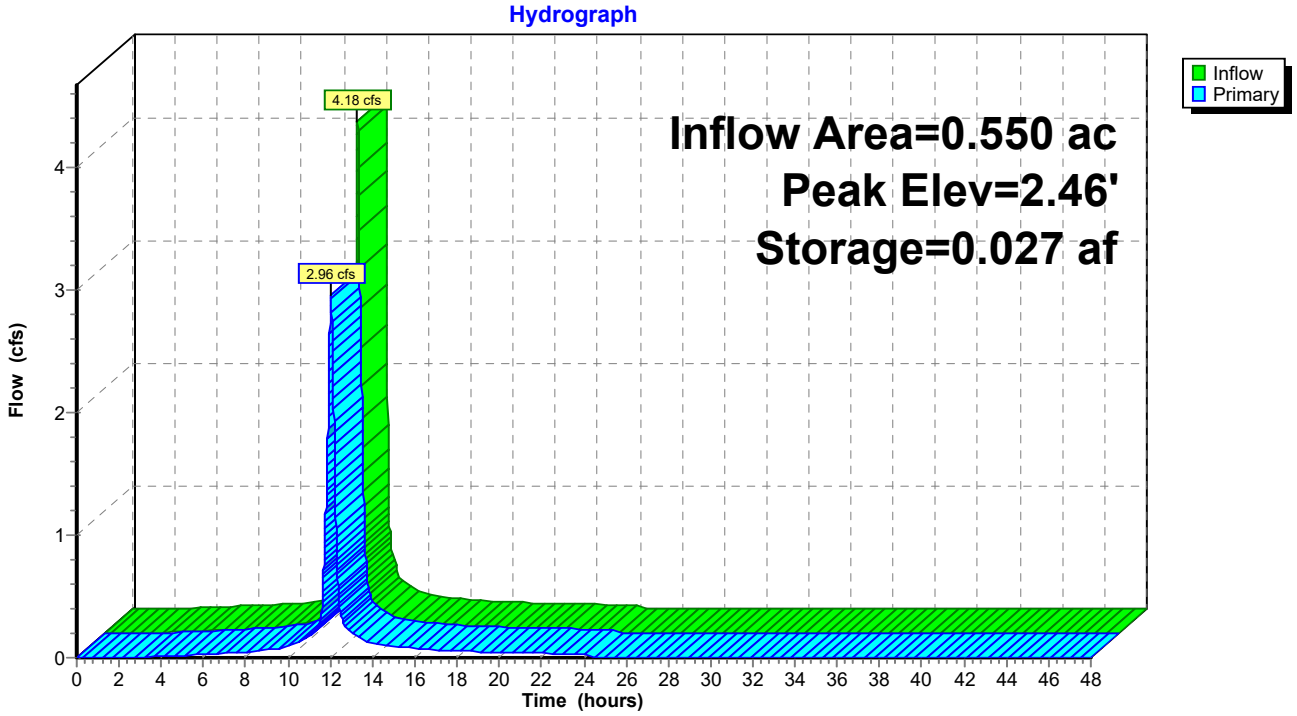
2,554.3 cf Field - 826.9 cf Chambers = 1,727.4 cf Stone x 40.0% Voids = 691.0 cf Stone Storage

Chamber Storage + Stone Storage = 1,517.9 cf = 0.035 af
Overall Storage Efficiency = 59.4%
Overall System Size = 46.34' x 15.75' x 3.50'

18 Chambers
94.6 cy Field
64.0 cy Stone



Pond 1P: Storm Chambers



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APPENDIX F:
SWPPP INSPECTION REPORT
(SAMPLE FORM)

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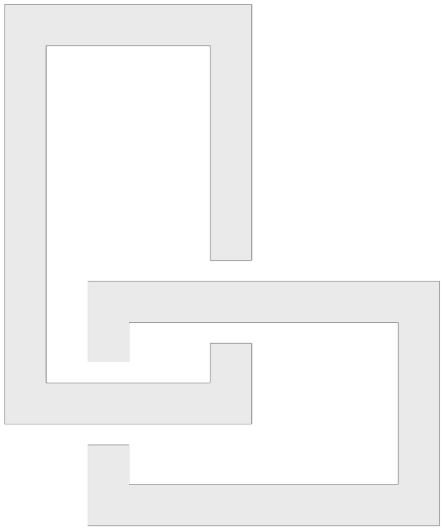
Prepared by:
Choose an item.
Choose an item.
Choose an item.
Choose an item.

SWPPP INSPECTION REPORT NUMBER XX
CLIENT NAME
PROJECT NAME
PROJECT ADDRESS, TOWN OF X, X COUNTY, NY



Performed: 9/29/2021 @ 12:00 AM
Report Issued: 9/29/2021

Status: POTENTIAL CLEAN WATER ACT VIOLATION (Contractor must begin repairs within one (1) business day. Overdue corrective actions may result in fines from the NYSDEC in the amount of $37,500/day/violation)

Qualified Inspector (name and title)	Qualified Professional (name and title)
Date	Date
Signature	Signature

NYSDEC Documentation and SWPPP Forms

NYSDEC Issued Permit Identification Number: NYRXXXXXX

5-Acre Waiver: N/A (No 5-acre waiver for this project - Contractor not authorized to disturb >5 acres)

303d Status: Project does not directly discharge to a 303d impaired waterbody

Number of Inspections required: 1 / week

Location of SWPPP and Site Log Book on-site:

YES	NO	N/A	CONTAINED IN SITE LOG BOOK?
☐	☐	☐	Preconstruction Assessment
☐	☐	☐	NOI Acknowledgement letter
☐	☐	☐	Copy of eNOI
☐	☐	☐	Owner / Operator Certification
☐	☐	☐	SWPPP Preparer Certification
☐	☐	☐	MS4 SWPPP Acceptance Form
☐	☐	☐	Contractor and Subcontractor Certifications
☐	☐	☐	SPDES General Permit
☐	☐	☐	5 Acre Waiver
☐	☐	☐	NOT

Comments:

Site Conditions

Approximate Disturbed Area at Time of Inspection: XX Acres			
Allowable Disturbed Area Per NOI and/or 5-acre waiver: XX Acres			
Current Status of Construction: Description			
Weather Conditions: Conditions		**Temperature:** XX °F	**Soil Conditions:** Choose an item.
Description of Discharge Point/Natural Surface Waterbody	**Condition of Runoff**	**Sediment Discharge Noted Y / N**	**Corrective Action**

Erosion and Sediment Control Deficiencies and Corrective Actions

SWPPP Component	Functional Y / N / NA	Deficiency (See Checklist and/or note)	Deficiency Location	Initial Date	Corrective Action	Corrected Y / N
General Site Conditions						
Silt Fence						
Stabilized Construction Access						
Compost Filter Sock						
Inlet Protection						
Soil Stockpiles						
Temporary Stabilization						
Permanent Stabilization						
Dewatering Operations						
Stone Check Dams						
Rock Outlet Protection						
Sediment Traps and Basins						
Temporary Stream Crossing						
Pavement Sweeping						
Concrete Washout						
Filter Strips						
Slope Protection Measures						
Temporary Swales and Berms						
Temporary Parking Areas						
Fiber Roll						
Permanent Turf Reinforcement						
Water Bars						
Flow Diffusers						
Other:						

SWPPP Inspection Checklist and Deficiency Numbers

1	General Site Conditions
1A	Adjoining properties are not protected from erosion and sediment deposition
1B	Downstream waterways are not protected from erosion and sediment deposition
1C	All E&SC measures have not been constructed as detailed in the SWPPP
1D	Dust is not adequately controlled
1E	Storage areas contain spills, leaks, or harmful materials
1F	Garbage and waste building materials are not being managed properly
1G	Temporary control measures that are no longer needed have not been removed
1H	Permanent SWM practices not constructed per plans

2	Silt Fence
2A	Silt fence not installed on contour
2B	Silt fence not across conveyance channels
2C	Silt fence not at least 10 feet from toe of slope
2D	Silt fence not at appropriate spacing intervals based on slope
2E	Silt fence ends are not wrapped for continuous support
2F	Silt fence fabric is loose or contains rips or frayed areas
2G	Silt fence posts are unstable
2H	Silt fence is not buried 6 inches minimum
2I	Silt fence contains bulges or material buildup

3	Stabilized Construction Access
3A	Temporary construction access not installed or not per NYS standards
3B	Other access areas have not been stabilized immediately as work takes place
3C	Sediment has tracked onto public streets and is not being cleaned daily
3D	Stone is not clean enough to effectively remove mud from vehicles
3E	Adequate drainage not provided to prevent ponding

4	Compost Filter Sock
4A	Filter sock not installed on contour
4B	Filter sock terminal ends do not extended 8' upslope at 45˚ angle
4C	Inappropriate diameter based on slope steepness and slope length
4D	Filter sock not anchored at 10' intervals
4E	More than 50% sediment has built up

5	Inlet Protection
5A	Inlet protection not installed or installation is not per SWPPP or Blue Book specifications
5B	Incorrect type(s) of inlet control installed or is inappropriate for location
5C	Drainage area for inlet protection is greater than 1 acre
5D	Sediment has not been removed when 50% of storage volume has been achieved
5E	A 2" x 4" wood frame and wood posts has not been installed
5F	Filter fabric is not buried a minimum of 1 foot below ground or secured to frame/posts
5G	Posts are unstable, fabric is loose, and contains rips or frayed areas
5H	Post spacing exceeds maximum 3' spacing

6	Soil Stockpiles
6A	No sediment controls at downhill slope

7	Temporary Stabilization
7A	Areas inactive for 14 days or more have not been stabilized (If <5 acres disturbed)
7B	Areas inactive for 7 days or more have not been stabilized (If >5 acres disturbed or 303d)
7C	Soil preparation has not been applied as specified in the SWPPP or the Blue Book
7D	Rolled EC products specified for steep slopes or channels have not been installed

8	Permanent Stabilization
8A	Lawn in disturbed areas has not been established to 80% germination
8B	Soil preparation has not been applied as specified in the SWPPP or the Blue Book
8C	Rolled EC products specified for steep slopes or channels have not been installed

9	Dewatering Operations
9A	Upstream and downstream berms are not installed or functioning poorly
9B	Clean water from upstream pool is not being pumped to the downstream pool
9C	Sediment laden water from work area is not being discharged to a silt-trapping device
9D	Groundwater from excavations managed improperly (No sumps/sediment control)

10	Stone Check Dam
10A	Not installed per standards
10B	Channel is unstable (flow is eroding soil underneath or around the structure)
10C	Check dam in poor condition (rocks not in place or lack of geotextile fabric)
10D	Sediment needs to be removed

11	Rock Outlet Protection
11A	Rock outlet protection not installed per plan or Blue Book
11B	Rock outlet protection not installed concurrently with pipe installation

12	Sediment Traps and Basins
12A	Outlet structure constructed improperly
12B	Geotextile fabric has not been placed beneath rock fill
12C	Depth of sediment in basin has exceeded allowable threshold
12D	Basin and outlet structure not constructed per the approved plan
12E	Basin side slopes are not stabilized with seed/mulch
12F	More than 50% capacity has built up

13	Temporary Stream Crossing
13A	Construction crossings at concentrated flow areas have not been culverted

14	Pavement Sweeping
14A	Pavement has not been swept daily and sediment has traveled into road

Stormwater Management Practice Deficiencies and Corrective Actions

Practice	Sign Y / N	Current Phase of Construction	Items Not in Conformance with SWPPP	Deficiency Location	Initial Date	Corrective Action	Corrected Y / N
Practice 1:							
Practice 2:							
Practice 3:							
Practice 4:							
Practice 5:							
Practice 6:							

Photo Log

Photo 1 *Date – Item in need of repair or maintenance:*	***Photo 1A*** *Date – Corrected Action:*
Photo 2 *Date – Item in need of repair or maintenance:*	***Photo 2A*** *Date – Corrected Action:*
Photo 3 *Date – Item in need of repair or maintenance:*	***Photo 3A*** *Date – Corrected Action:*

Photo Log (continued)

Photo 4	***Photo 4A***
Date – Item in need of repair or maintenance:	*Date – Corrected Action:*
Photo 5	***Photo 5A***
Date – Item in need of repair or maintenance:	*Date – Corrected Action:*
Photo 6	***Photo 6A***
Date – Item in need of repair or maintenance:	*Date – Corrected Action:*

Disturbance / Photo Location Map

Replace this page to include an 11x17 erosion control plan sketch to scale showing:

1. Areas with active soil disturbance activity
2. Areas that have been disturbed but are inactive at the time of the inspection
3. Areas that have been stabilized (temporary and/or final) since the last inspection
4. Limit of disturbance line per the SWPPP and the grading plan
5. Photo locations

Use Bluebeam template with standard colors to indicate limits

APPENDIX G:
POST-CONSTRUCTION INSPECTIONS AND MAINTENANCE

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APPENDIX H:
NYSDEC "DEEP-RIPPING AND DECOMPACTION," APRIL 2008

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New York State
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water

Deep-Ripping and Decompaction

April 2008

Document Prepared by:

John E. Lacey,
Land Resource Consultant and Environmental Compliance Monitor
(Formerly with the Division of Agricultural Protection and Development Services,
NYS Dept. of Agriculture & Markets)

New York State
Department of Environmental Conservation

Alternative Stormwater Management
Deep-Ripping and Decompaction

Description

The two-phase practice of 1) “Deep Ripping;” and 2) “Decompaction” (deep subsoiling), of the soil material as a step in the cleanup and restoration/landscaping of a construction site, helps mitigate the physically induced impacts of soil compression; i.e.: soil compaction or the substantial increase in the bulk density of the soil material.

Deep Ripping and Decompaction are key factors which help in restoring soil pore space and permeability for water infiltration. Conversely, the physical actions of cut-and-fill work, land grading, the ongoing movement of construction equipment and the transport of building materials throughout a site alter the architecture and structure of the soil, resulting in: the mixing of layers (horizons) of soil materials, compression of those materials and diminished soil porosity which, if left unchecked, severely impairs the soil’s water holding capacity and vertical drainage (rainfall infiltration), from the surface downward.

In a humid climate region, compaction damage on a site is virtually guaranteed over the duration of a project. Soil in very moist to wet condition when compacted, will have severely reduced permeability. Figure 1 displays the early stage of the deep-ripping phase (Note that all topsoil was stripped prior to construction access, and it remains stockpiled until the next phase – decompaction – is complete). A heavy-duty tractor is pulling a three-shank ripper on the first of several series of incrementally deepening passes through the construction access corridor's densely compressed subsoil material. Figure 2 illustrates the approximate volumetric composition of a loam surface soil when conditions are good for plant growth, with adequate natural pore space for fluctuating moisture conditions.

Fig. 1. A typical deep ripping phase of this practice, during the first in a series of progressively deeper “rips” through severely compressed subsoil.

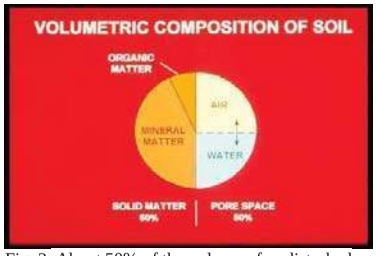

Fig. 2. About 50% of the volume of undisturbed loam surface soil is pore space, when soil is in good condition for plant growth. Brady, 2002.

Recommended Application of Practice

The objective of Deep Ripping and Decompaction is to effectively fracture (vertically and lateralllly) through the thickness of the physically compressed subsoil material (see Figure 3), restoring soil porosity and permeability and aiding infiltration to help reduce runoff. Together with topsoil stripping, the “two-phase” practice of Deep Ripping and Decompaction first became established as a “best management practice” through ongoing success on commercial farmlands affected by heavy utility construction right-of-way projects (transmission pipelines and large power lines).

Fig. 3. Construction site with significant compaction of the deep basal till subsoil extends 24 inches below this exposed cut-and-fill work surface.

Soil permeability, soil drainage and cropland productivity were restored. For broader construction application, the two-phase practice of Deep Ripping and Decompaction is best adapted to areas impacted with significant soil compaction, on contiguous open portions of large construction sites and inside long, open construction corridors used as temporary access over the duration of construction. Each mitigation area should have minimal above-and-below-ground obstructions for the easy avoidance and maneuvering of a large tractor and ripping/decompacting implements. Conversely, the complete two-phase practice is not recommended in congested or obstructed areas due to the limitations on tractor and implement movement.

Benefits

Aggressive “deep ripping” through the compressed thickness of exposed subsoil before the replacement/respreading of the topsoil layer, followed by “decompaction,” i.e.: “sub-soiling,” through the restored topsoil layer down into the subsoil, offers the following benefits:

- Increases the project (larger size) area’s direct surface infiltration of rainfall by providing the open site’s mitigated soil condition and lowers the demand on concentrated runoff control structures
- Enhances direct groundwater recharge through greater dispersion across and through a broader surface than afforded by some runoff-control structural measures
- Decreases runoff volume generated and provides hydrologic source control
- May be planned for application in feasible open locations either alone or in

conjunction with plans for structural practices (e.g., subsurface drain line or infiltration basin) serving the same or contiguous areas

- Promotes successful long-term revegetation by restoring soil permeability, drainage and water holding capacity for healthy (rather than restricted) root-system development of trees, shrubs and deep rooted ground cover, minimizing plant drowning during wet periods and burnout during dry periods.

Feasibility/Limitations

The effectiveness of Deep Ripping and Decompaction is governed mostly by site factors such as: the original (undisturbed) soil's hydrologic characteristics; the general slope; local weather/timing (soil moisture) for implementation; the space-related freedom of equipment/implement maneuverability (noted above in **Recommended Application of Practice**), and by the proper selection and operation of tractor and implements (explained below in **Design Guidance**). The more notable site-related factors include:

Soil
In the undisturbed condition, each identified soil type comprising a site is grouped into one of four categories of soil hydrology, Hydrologic Soil Group A, B, C or D, determined primarily by a range of characteristics including soil texture, drainage capability when thoroughly wet, and depth to water table. The natural rates of infiltration and transmission of soil-water through the undisturbed soil layers for Group A is "high" with a low runoff potential while soils in Group B are moderate in infiltration and the transmission of soil-water with a moderate runoff potential, depending somewhat on slope. Soils in Group C have slow rates of infiltration and transmission of soil-water and a moderately high runoff potential influenced by soil texture and slope; while soils in Group D have exceptionally slow rates of infiltration and transmission of soil-water, and high runoff potential.

In Figure 4, the profile displays the undisturbed horizons of a soil in Hydrologic Soil Group C and the naturally slow rate of infiltration through the subsoil. The slow rate of infiltration begins immediately below the topsoil horizon (30 cm), due to the limited amount of macro pores, e.g.: natural subsoil fractures, worm holes and root channels. Infiltration after the construction-induced mixing and compression of such subsoil material is virtually absent; but can be restored back to this natural level with the two-phase practice of deep ripping and decompaction, followed by the permanent establishment of an appropriate, deep taproot

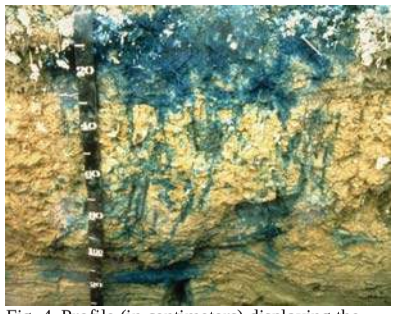

Fig. 4. Profile (in centimeters) displaying the infiltration test result of the natural undisturbed horizons of a soil in Hydrologic Soil Group C.

lawn/ground cover to help maintain the restored subsoil structure. Infiltration after construction-induced mixing and compression of such subsoil material can be notably rehabilitated with the Deep Ripping and Decompaction practice, which prepares the site for the appropriate long-term lawn/ground cover mix including deep taproot plants such as clover, fescue or trefoil, etc. needed for all rehabilitated soils.

Generally, soils in Hydrologic Soil Groups A and B, which respectively may include deep, well-drained, sandy-gravelly materials or deep, moderately well-drained basal till materials, are among the easier ones to restore permeability and infiltration, by deep ripping and decompaction. Among the many different soils in Hydrologic Soil Group C are those unique glacial tills having a natural fragipan zone, beginning about 12 to 18 inches (30 – 45cm), below surface. Although soils in Hydrologic Soil Group C do require a somewhat more carefully applied level of the Deep Ripping and Decompaction practice, it can greatly benefit such affected areas by reducing the runoff and fostering infiltration to a level equal to that of pre-disturbance.

Soils in Hydrologic Soil Group D typically have a permanent high water table close to the surface, influenced by a clay or other highly impervious layer of material. In many locations with clay subsoil material, the bulk density is so naturally high that heavy trafficking has little or no added impact on infiltration; and structural runoff control practices rather than Deep Ripping and Decompaction should be considered.

The information about Hydrologic Soil Groups is merely a general guideline. Site-specific data such as limited depths of cut-and-fill grading with minimal removal or translocation of the inherent subsoil materials (as analyzed in the county soil survey) or, conversely, the excavation and translocation of deeper, unconsolidated substratum or consolidated bedrock materials (unlike the analyzed subsoil horizons' materials referred to in the county soil survey) should always be taken into account.

Sites made up with significant quantities of large rocks, or having a very shallow depth to bedrock, are not conducive to deep ripping and decompation (subsoiling); and other measures may be more practical.

Slope
The two-phase application of 1) deep ripping and 2) decompaction (deep subsoiling), is most practical on flat, gentle and moderate slopes. In some situations, such as but not limited to temporary construction access corridors, inclusion areas that are moderately steep along a project's otherwise gentle or moderate slope may also be deep ripped and decompacted. For limited instances of moderate steepness on other projects, however, the post-construction land use and the relative alignment of the potential ripping and decompaction work in relation to the lay of the slope should be reviewed for safety and practicality. In broad construction areas predominated by moderately steep or steep slopes, the practice is generally not used.

Local Weather/Timing/Soil Moisture
Effective fracturing of compressed subsoil material from the exposed work surface, laterally and vertically down through the affected zone is achieved only when the soil material is moderately dry to moderately moist. Neither one of the two-phases, deep ripping nor decompaction (deep

subsoiling), can be effectively conducted when the soil material (subsoil or replaced topsoil) is in either a “plastic” or “liquid” state of soil consistency. Pulling the respective implements legs through the soil when it is overly moist only results in the “slicing and smearing” of the material or added “squeezing and compression” instead of the necessary fracturing. Ample drying time is needed for a “rippable” soil condition not merely in the material close to the surface, but throughout the material located down to the bottom of the physically compressed zone of the subsoil.

The “poor man’s Atterberg field test” for soil plasticity is a simple “hand-roll” method used for quick, on-site determination of whether or not the moisture level of the affected soil material is low enough for: effective deep ripping of subsoil; respreading of topsoil in a friable state; and final decompaction (deep subsoiling). Using a sample of soil material obtained from the planned bottom depth of ripping, e.g.: 20 - 24 inches below exposed subsoil surface, the sample is hand rolled between the palms down to a 1/8-inch diameter thread. (Use the same test for stored topsoil material before respreading on the site.) If the respective soil sample crumbles apart in segments no greater than 3/8 of an inch long, by the time it is rolled down to 1/8 inch diameter, it is low enough in moisture for deep ripping (or topsoil replacement), and decompaction. Conversely, as shown in Figure 5, if the rolled sample stretches out in increments greater than 3/8 of an inch long before crumbling, it is in a “plastic” state of soil consistency and is too wet for subsoil ripping (as well as topsoil replacement) and final decompaction.

Fig. 5. Augered from a depth of 19 inches below the surface of the replaced topsoil, this subsoil sample was hand rolled to a 1/8-inch diameter. The test shows the soil at this site stretches out too far without crumbling; it indicates the material is in a plastic state of consistence, too wet for final decompaction (deep subsoiling) at this time.

Design Guidance

Beyond the above-noted site factors, a vital requirement for the effective Deep Ripping and Decompaction (deep subsoiling), is implementing the practice in its distinct, two-phase process:

1) Deep rip the affected thickness of exposed subsoil material (see Figure 10 and 11), aggressively fracturing it before the protected topsoil is reapplied on the site (see Figure 12); and

2) Decompact (deep subsoil), simultaneously through the restored topsoil layer and the upper half of the affected subsoil (Figure 13). The second phase, “decompaction,” mitigates the partial recompaction which occurs during the heavy process of topsoil spreading/grading. Prior to deep ripping and decompacting the site, all construction activity, including construction equipment and material storage, site cleanup and trafficking (Figure 14), should be finished; and the site closed off to further disturbance. Likewise, once the practice is underway and the area’s soil permeability and

rainfall infiltration are being restored, a policy limiting all further traffic to permanent travel lanes is maintained.

The other critical elements, outlined below, are: using the proper implements (deep, heavy-duty rippers and subsoilers), and ample pulling-power equipment (tractors); and conducting the practice at the appropriate speed, depth and pattern(s) of movement.

Note that an appropriate plan for the separate practice of establishing a healthy perennial ground cover, with deep rooting to help maintain the restored soil structure, should be developed in advance. This may require the assistance of an agronomist or landscape horticulturist.

Implements

Avoid the use of all undersize implements. The small-to-medium, light-duty tool will, at best, only “scarify” the uppermost surface portion of the mass of compacted subsoil material. The term “chisel plow” is commonly but incorrectly applied to a broad range of implements. While a few may be adapted for the moderate subsoiling of non-impacted soils, the majority are less durable and used for only lighter land-fitting (see Figure 6).

Fig. 6. A light duty chisel implement, not adequate for either the deep ripping or decompaction (deep subsoiling) phase.

Fig. 7. One of several variations of an agricultural ripper. This unit has long, rugged shanks mounted on a steel V-frame for deep, aggressive fracturing through Phase 1.

Use a “heavy duty” agricultural-grade, deep ripper (see Figures 7,9,10 and 11) for the first phase: the lateral and vertical fracturing of the mass of exposed and compressed subsoil, down and through, to the bottom of impact, prior to the replacement of the topsoil layer. (Any oversize rocks which are uplifted to the subsoil surface during the deep ripping phase are picked and removed.) Like the heavy-duty class of implement for the first phase, the decompaction (deep subsoiling) of Phase 2 is conducted with the heavy-duty version of the deep subsoiler. More preferable is the angled-leg variety of deep subsoiler (shown in Figures 8 and 13). It minimizes the inversion of the subsoil and topsoil layers while laterally and vertically fracturing the upper half of the previously ripped subsoil layer and all of the topsoil layer by delivering a momentary, wave-like “lifting and shattering” action up through the soil layers as it is pulled.

Pulling-Power of Equipment

Use the following rule of thumb for tractor horsepower (hp) whenever deep ripping and decompacting a significantly impacted site: For both types of implement, have at least 40 hp of tractor pull available for each mounted shank/ leg.

Using the examples of a 3-shank and a 5-shank implement, the respective tractors should have 120 and 200 hp available for fracturing down to the final depth of 20-to-24 inches per phase. Final depth for the deep ripping in Phase 1 is achieved incrementally by a progressive series of passes (see Depth and Patterns of Movement, below); while for Phase 2, the full operating depth of the deep subsoiler is applied from the beginning.

The operating speed for pulling both types of implement should not exceed 2 to 3 mph. At this slow and managed rate of operating speed, maximum functional performance is sustained by the tractor and the implement performing the soil fracturing. Referring to Figure 8, the implement is the 6-leg version of the deep angled-leg subsoiler. Its two outside legs are "chained up" so that only four legs will be engaged (at the maximum depth), requiring no less than 160 hp, (rather than 240 hp) of pull. The 4-wheel drive, articulated-frame tractor in Figure 8 is 174 hp. It will be decompacting this unobstructed, former construction access area simultaneously through 11 inches of replaced topsoil and the upper 12 inches of the previously deep-ripped subsoil. In constricted areas of Phase 1) Deep Ripping, a medium-size tractor with adequate hp, such as the one in Figure 9 pulling a 3-shank deep ripper, may be more maneuverable.

Fig. 8. A deep, angled-leg subsoiler, ideal for Phase 2 decompaction of after the topsoil layer is graded on top of the ripped subsoil.

Fig. 9. This medium tractor is pulling a 3-shank deep ripper. The severely compacted construction access corridor is narrow, and the 120 hp tractor is more maneuverable for Phase 1 deep ripping (subsoil fracturing), here.

Some industrial-grade variations of ripping implements are attached to power graders and bulldozers. Although highly durable, they are generally not recommended. Typically, the shanks or "teeth" of these rippers are too short and stout; and they are mounted too far apart to achieve the well-distributed type of lateral and vertical fracturing of the soil materials necessary to restore soil permeability and infiltration. In addition, the power graders and bulldozers, as pullers, are far less maneuverable for turns and patterns than the tractor.

Depth and Patterns of Movement

As previously noted both Phase 1 Deep Ripping through significantly compressed, exposed subsoil and Phase 2 Decompaction (deep subsoiling) through the replaced topsoil and upper subsoil need to be performed at maximum capable depth of each implement. With an implement's guide wheels attached, some have a "normal" maximum operating depth of 18 inches, while others may go deeper. In many situations, however, the tractor/implement operator must first remove the guide wheels and other non essential elements from the implement. This adapts the ripper or the deep subsoiler for skillful pulling with its frame only a few inches above surface, while the shanks or legs, fracture the soil material 20-to-24 inches deep.

There may be construction sites where the depth of the exposed subsoil's compression is moderate, e.g.: 12 inches, rather than deep. This can be verified by using a ¾ inch cone penetrometer and a shovel to test the subsoil for its level of compaction, incrementally, every three inches of increasing depth. Once the full thickness of the subsoil's compacted zone is finally "pieced" and there is a significant drop in the psi measurements of the soil penetrometer, the depth/thickness of compaction is determined. This is repeated at several representative locations of the construction site. If the thickness of the site's subsoil compaction is verified as, for example, ten inches, then the Phase 1 Deep Ripping can be correspondingly reduced to the implement's minimum operable depth of 12 inches. However, the Phase 2 simultaneous Decompation (subsoiling) of an 11 inch thick layer of replaced topsoil and the upper subsoil should run at the subsoiling implements full operating depth.

Fig. 10. An early pass with a 3-shank deep ripper penetrating only 8 inches into this worksite's severely compressed subsoil.

Fig. 11. A repeat run of the 3-shank ripper along the same patterned pass area as Fig. 9; here, incrementally reaching 18 of the needed 22 inches of subsoil fracture.

Typically, three separate series (patterns) are used for both the Phase 1 Deep Ripping and the Phase 2 Decompaction on significantly compacted sites. For Phase 1, each series begins with a moderate depth of rip and, by repeat-pass, continues until full depth is reached. Phase 2 applies the full depth of Decompation (subsoiling), from the beginning.

Every separate series (pattern) consists of parallel, forward-and-return runs, with each progressive

pass of the implement's legs or shanks evenly staggered between those from the previous pass. This compensates for the shank or leg-spacing on the implement, e.g., with 24-to-30 inches between each shank or leg. The staggered return pass ensures lateral and vertical fracturing actuated every 12 to 15 inches across the densely compressed soil mass.

Large, Unobstructed Areas
For larger easy areas, use the standard patterns of movement:

- The first series (pattern) of passes is applied lengthwise, parallel with the longest spread of the site; gradually progressing across the site's width, with each successive pass.

- The second series runs obliquely, crossing the first series at an angle of about 45 degrees.

- The third series runs at right angle (or 90 degrees), to the first series to complete the fracturing and shattering on severely compacted sites, and avoid leaving large unbroken blocks of compressed soil material. (In certain instances, the third series may be optional, depending on how thoroughly the first two series loosen the material and eliminate large chunks/blocks of material as verified by tests with a ¾-inch cone penetrometer.)

Fig. 12. Moderately dry topsoil is being replaced on the affected site now that Phase 1 deep ripping of the compressed subsoil is complete.

Fig. 13. The same deep, angled-leg subsoiler shown in Fig. 7 is engaged at maximum depth for Phase 2, decompaction (deep soiling), of the replaced topsoil and the upper subsoil materials.

Corridors
In long corridors of limited width and less maneuverability than larger sites, e.g.: along compacted areas used as temporary construction access, a modified series of pattern passes are used.

- First, apply the same initial lengthwise, parallel series of passes described above.

- A second series of passes makes a broad "S" shaped pattern of rips, continually and gradually alternating the "S" curves between opposite edges inside the compacted corridor.

- The third and final series again uses the broad, alternating S pattern, but it is "flip-flopped" to continually cross the previous S pattern along the corridor's centerline. This final series of the S pattern curves back along the edge areas skipped by the second series.

Maintenance and Cost

Once the two-phase practice of Deep Ripping and Decompation is completed, two items are essential for maintaining a site's soil porosity and permeability for infiltration. They are: planting and maintaining the appropriate ground cover with deep roots to maintain the soil structure (see Figure 15); and keeping the site free of traffic or other weight loads.

Note that site-specific choice of an appropriate vegetative ground-cover seed mix, including the proper seeding ratio of one or more perennial species with a deep taproot system and the proper amount of lime and soil nutrients (fertilizer mix) adapted to the soil-needs, are basic to the final practice of landscaping, i.e: surface tillage, seeding/planting/fertilizing and culti-packing or mulching is applied. The "maintenance" of an effectively deep-ripped and decompacted area is generally limited to the successful perennial (long-term) landscape ground cover; as long as no weight-bearing force of soil compaction is applied.

Fig. 14. The severely compacted soil of a temporary construction yard used daily by heavy equipment for four months; shown before deep ripping, topsoil replacement, and decompaction.

Fig. 15. The same site as Fig. 14 after deep ripping of the exposed subsoil, topsoil replacement, decompaction through the topsoil and upper subsoil and final surface tillage and revegetation to maintain soil permeability and infiltration.

The Deep Ripping and Decompaction practice is, by necessity, more extensive than periodic subsoiling of farmland.The cost of deep ripping and decompacting (deep subsoiling), will vary according to the depth and severity of soil-material compression and the relative amount of tractor and implement time that is required. In some instances, depending on open maneuverability, two-to-three acres of compacted project area may be deep-ripped in one day. In other situations of more severe compaction and - or less maneuverability, as little as one acre may be fully ripped in a day. Generally, if the Phase 1) Deep Ripping is fully effective, the Phase 2) Decompaction should be completed in 2/3 to 3/4 of the time required for Phase 1.

Using the example of two acres of Phase 1) Deep Ripping in one day, at $1800 per day, the net cost is $900 per acre. If the Phase 2) Decompacting or deep subsoiling takes 3/4 the time as Phase 1, it costs $675 per acre for a combined total of $1575 per acre to complete the practice (these figures do not include the cost of the separate practice of topsoil stripping and replacement). Due to the many variables, it must be recognized that cost will be determined by the specific conditions or constraints of the site and the availability of proper equipment.

Resources

Publications:

- American Society of Agricultural Engineers. 1971. *Compaction of Agricultural Soils.* ASAE.
- Brady, N.C., and R.R. Weil. 2002. *The Nature and Properties of Soils. 13th ed.* Pearson Education, Inc.
- Baver, L.D. 1948. *Soil Physics.* John Wiley & Sons.
- Carpachi, N. 1987 (1995 fifth printing). *Excavation and Grading Handbook, Revised. 2nd ed.* Craftsman Book Company
- Ellis, B. (Editor). 1997. Safe & Easy Lawn Care: The Complete Guide to Organic Low Maintenance Lawn. Houghton Mifflin.
- Harpstead, M.I., T.J. Sauer, and W.F. Bennett. 2001. *Soil Science Simplified. 4th ed.* Iowa State University Press.
- Magdoff, F., and H. van Es. 2000. *Building Soils for Better Crops. 2nd ed.* Sustainable Agricultural Networks
- McCarthy, D.F. 1993. *Essentials of Soil Mechanics and Foundations, Basic Geotechnics 4th ed.* Regents/Prentice Hall.
- Plaster, E.J. 1992. *Soil Science & Management. 3rd ed.* Delmar Publishers.
- Union Gas Limited, Ontario, Canada. 1984. *Rehabilitation of Agricultural Lands, Dawn-Kerwood Loop Pipeline; Technical Report.* Ecological Services for Planning, Ltd.; Robinson, Merritt & Devries, Ltd. and Smith, Hoffman Associates, Ltd.
- US Department of Agriculture in cooperation with Cornell University Agricultural Experiment Station. Various years. *Soil Survey of (various names) County, New York.* USDA.

Internet Access:

- Examples of implements:

V-Rippers. Access by internet search of *John Deere Ag -New Equipment for 915* (larger-frame model) *V-Rippe*; and, *for 913* (smaller-frame model) *V-Ripper*. Deep, angled-leg subsoiler. Access by internet search of: B*igham Brothers Shear Bolt Paratill-Subsoiler.* http://salesmanual.deere.com/sales/salesmanual/en_NA/primary_tillage/2008/feature/rippers/915v_pattern_frame.html?sbu=ag&link=prodcat Last visited March 08.

- Soils data of USDA Natural Resources Conservation Service. *NRCS Web Soil Survey.* http://websoilsurvey.nrcs.usda.gov/app/ and *USDA-NRCS Official Soil Series Descriptions; View by Name.* http://ortho.ftw.nrcs.usda.gov/cgi-bin/osd/osdname.cgi . *Last visited Jan. 08.*
- Soil penetrometer information. Access by internet searches of: *Diagnosing Soil Compaction using a Penetrometer (soil compaction tester), PSU Extension;* as well as *Dickey-john Soil Compaction Tester.* http://www.dickey-johnproducts.com/pdf/SoilCompactionTest.pdf and http://cropsoil.psu.edu/Extension/Facts/uc178pdf Last visited Sept. 07

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APPENDIX I:
LABELLA CERTIFYING PROFESSIONALS LETTER

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February 17, 2022

RE: LaBella Certifying Professionals for NYSDEC SPDES GP-20-001

To Whom it May Concern:

In accordance with the NYSDEC SPDES General Permit GP 0-20-001, part VII.H.2, the New York State licensed Professional Engineers employed by LaBella Associates and listed on the attachment to this letter are duly authorized to sign and seal Stormwater Pollution Prevention Plans (SWPPPs), NOIs, and NOTs prepared under their direct supervision.

Respectfully submitted,

LaBella Associates

Steven P. Metzger, PE
Chief Executive Officer

300 State Street, Suite 201 | Rochester, NY 14614 | p (585) 454-6110 | f (585) 454-3066
www.labellapc.com

LaBella Professional Engineers duly authorized to sign and seal SWPPPs, NOIs, and NOTs:

Name:	Title:	Signature:	Date:
Kyle Ahearn, PE	Senior Civil Engineer		2/9/22
Jody Allen, PE	Senior Civil Engineer		2/24/2022
Anthony Bernardi, PE	Senior Civil Engineer		
Brendan Bystrak, PE	Vice President		
Steven Calocerinos, PE	Senior Civil Engineer		2/9/2022
Jason Ebbs, PE	Municipal Group Leader		
Michael Flanagan, PE	Senior Civil Engineer		2/10/22
Don Hoefler, PE	Senior Project Engineer		
Reuben Hull, PE	Senior Civil Engineer		2/9/2002
Eric Johnson, PE	Senior Civil Engineer		2/9/2002
Roger Keating, PE	Senior Civil Engineer		2/9/2022
Walter Kubow, PE	Senior Civil Engineer		2/9/2022
Christopher Lapine, PE	Senior Civil Engineer		2/9/22
Joseph Lanaro, PE	Vice President		2/9/2022
Michael Mishook, PE	Vice President		2/10/22
Lauren Rodriquez, PE	Civil Engineer		2/9/2022
Jonathan Spurr, PE	Civil Engineer		2/10/22
Mary Steblein, PE	Senior Civil Engineer		2/9/2022
Robert Steehler, PE	Vice President		2/9/2022
Timothy Webber, PE	Vice President		2/9/2022
Kristopher Winkler, PE	Senior Civil Engineer		2/14/2022

APPENDIX J:
NYSDEC SPDES GENERAL PERMIT GP-0-20-001

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NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP- 0-20-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70

of the Environmental Conservation Law

Effective Date: January 29, 2020 Expiration Date: January 28, 2025

John J. Ferguson

Chief Permit Administrator

1-23-20

Authorized Signature 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 administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7, 8 and Article 70.

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 ECL section 17-0505 and 17-0701, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. The *owner or operator* 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

Table of Contents

Part 1. 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

*Discharge*s 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 November 2016, 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 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 discharge*s;

   (ii) Control stormwater *discharge*s, including both peak flowrates and total stormwater volume, 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 *discharge*s from the site;

   (vi) Provide and maintain *natural buffer*s around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharge*s, 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;

   (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and

   (ix) *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of pollutants that could be discharged from the site.

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**. *Discharge*s from *dewatering* activities, including *discharge*s 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, hazardous and toxic 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 *Discharge*s.** The following *discharge*s 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 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 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 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 *discharge*s 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 *discharge*s 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 *discharge*s 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

(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.

(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 *discharge*s 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 *discharge*s 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 *discharge*s authorized by this permit are causing or contributing to a violation of *water quality standards*, or if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharge*s 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 *discharge*s; including stormwater runoff, snowmelt runoff, and surface runoff and drainage, from *construction activities*.

3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater discharges are authorized by this permit: those listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: "Discharges from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned"; waters to which other components have not been added that are used to control dust in accordance with the SWPPP; and uncontaminated *discharge*s from *construction site* de-watering operations. All non-stormwater 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:

1. *Discharge*s after *construction activities* have been completed and the site has undergone *final stabilization*;

2. *Discharge*s 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.D.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 *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which are undertaken on land with no existing *impervious cover*; and

   c. Which disturb one (1) or more acres of land designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

7. *Construction activities* for linear transportation projects and linear utility projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which are undertaken on land with no existing *impervious cover*; and

   c. Which disturb two (2) or more acres of land designated on the current USDA Soil Survey as Soil Slope Phase "D" (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

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.D.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
      (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.

Part II. PERMIT COVERAGE

A. How to Obtain Coverage

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 Notice of Intent (NOI) to the Department to be authorized to discharge under this permit.

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 the 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.

3. The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *regulated, traditional land use control 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.F. (Change of *Owner or Operator*) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4* . This exemption does not apply to *construction activities* subject to the New York City Administrative Code.

B. Notice of Intent (NOI) Submittal

1. Prior to December 21, 2020, 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, 4th Floor
   Albany, New York 12233-3505

2. Beginning December 21, 2020 and in accordance with EPA's 2015 NPDES Electronic Reporting Rule (40 CFR Part 127), the *owner or operator* must submit the NOI electronically using the *Department's* online NOI.

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.

C. 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), or the equivalent from another New York State agency, have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *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.C.2 above 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. 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.C. of this permit.

D. 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-0-20-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, responsible contractor's or subcontractor's certification statement (see Part III.A.6.), 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 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 November 2016.

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 or consistent with Part VII.K..

5. 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*.

6. 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.

E. Permit Coverage for Discharges Authorized Under GP-0-15-002

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-15-002), an *owner or operator* of *a construction activity* with coverage under GP-0-15-002, as of the effective date of GP- 0-20-001, shall be authorized to *discharge* in accordance with GP- 0-20-001, 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-0-20-001.

F. Change of Owner or Operator

1. 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. For *construction activities* subject to the requirements of a *regulated, traditional land use control MS4,* the original *owner or operator* must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.

2. 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.B.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.

3. 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. 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, including construction drawings:

   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*;

c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* the Department or other regulatory authority; and

d. to document the final construction conditions.

5. The Department may notify the *owner or operator* at any time that the 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.D.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 *discharge*s 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 *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 November 2016. 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 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 November 2016, 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 November 2016;

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 November 2016. Include the reason for the deviation or alternative design 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 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. 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

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),
- New York State Erosion and Sediment Control Certificate Program holder
- 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 the *owner or operator* has received authorization in accordance with Part II.D.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.B.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 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;

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.D.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

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.B.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.

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.F. 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.

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.

Part VI. REPORTING AND RETENTION 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.B.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. 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.

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 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 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 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.

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.

APPENDIX A – Acronyms and Definitions

Acronyms

APO – Agency Preservation Officer
BMP – Best Management Practice
CPESC – Certified Professional in Erosion and Sediment Control
Cpv – Channel Protection Volume
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)
DOW – Division of Water
EAF – Environmental Assessment Form
ECL - Environmental Conservation Law
EPA – U. S. Environmental Protection Agency
HSG – Hydrologic Soil Group
MS4 – Municipal Separate Storm Sewer System
NOI – Notice of Intent
NOT – Notice of Termination
NPDES – National Pollutant Discharge Elimination System
OPRHP – Office of Parks, Recreation and Historic Places
Qf – Extreme Flood
Qp – Overbank Flood
RRv – Runoff Reduction Volume
RWE – Regional Water Engineer
SEQR – State Environmental Quality Review
SEQRA - State Environmental Quality Review Act
SHPA – State Historic Preservation Act
SPDES – State Pollutant Discharge Elimination System
SWPPP – Stormwater Pollution Prevention Plan
TMDL – Total Maximum Daily Load
UPA – Uniform Procedures Act
USDA – United States Department of Agriculture
WQv – Water Quality Volume

Definitions

All definitions in this section are solely for the purposes of this permit.

Agricultural Building – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

Agricultural Property –means the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" prepared by the Department in cooperation with agencies of New York Nonpoint Source Coordinating Committee (dated June 2007).

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.

Construction Site – means the land area where *construction activity(ies)* will occur. See definition for "*Commence (Commencement of) Construction Activities"* and "*Larger Common Plan of Development or Sale" also.*

Dewatering – means the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

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*.

Embankment –means an earthen or rock slope that supports a road/highway.

Endangered or Threatened Species – see 6 NYCRR Part 182 of the Department's rules and regulations for definition of terms and requirements.

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).

Natural Buffer –means an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

New Development – means any land disturbance that does not meet the definition of Redevelopment Activity included in this appendix.

New York State Erosion and Sediment Control Certificate Program – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

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.*

Nonpoint Source - means any source of water pollution or pollutants which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

Overbank –means flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

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.

Point Source - means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be discharged.

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, New York State Erosion and Sediment Control Certificate Program holder 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 authorized to discharge under New York State DEC's

SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

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,
- 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 stabilizes 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 designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%) , or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

Streambank – as used in this permit, means the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

Stormwater Pollution Prevention Plan (SWPPP) – means a project specific report, including construction drawings, that among other things: describes the construction activity(ies), identifies the potential sources of pollution at the *construction site*; describes and shows the stormwater controls that will be used to control the pollutants (i.e. erosion and sediment controls; for many projects, includes post-construction stormwater management controls); and identifies procedures the *owner or operator* will implement to comply with the terms and conditions of the permit. See Part III of the permit for a complete description of the information that must be included in the SWPPP.

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 source*s. 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 standard*s, 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 source*s, 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, New York State Erosion and Sediment Control Certificate Program holder, 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.

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

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres: • Single family home not located in one of the watersheds listed in Appendix C or not *directly discharging* to one of the 303(d) segments listed in Appendix E • Single family residential subdivisions with 25% or less impervious cover at total site build-out and 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 • Construction of a barn or other *agricultural building*, silo, stock yard or pen.
The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land: 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.
The following construction activities that involve soil disturbances of one (1) or more acres of land: • Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains • Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects • Pond construction • Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover • Cross-country ski trails and walking/hiking trails • Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development; • Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path or walking path. • Slope stabilization projects • Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics

Table 1 (Continued) CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Spoil areas that will be covered with vegetation
- Vegetated open space projects (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) excluding projects that *alter hydrology from pre to post development* conditions,
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre to post development* conditions
- Demolition project where vegetation will be established, and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- 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 greater than five acres and construction activities that include the construction or reconstruction of impervious area
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary impervious areas that will be restored to pre-construction conditions once the construction activity is complete

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 home that disturbs five (5) or more acres of land
- 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 duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Breweries, cideries, and wineries, including establishments constructed on agricultural land
- 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 development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's, water treatment plants, and water storage tanks
- Office complexes
- Playgrounds that include the construction or reconstruction of impervious area
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surface
- Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1

Table 2 (Continued)

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:

- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- 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
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a residential, commercial or institutional development
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a highway construction or reconstruction 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 Requiring Enhanced Phosphorus Removal

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

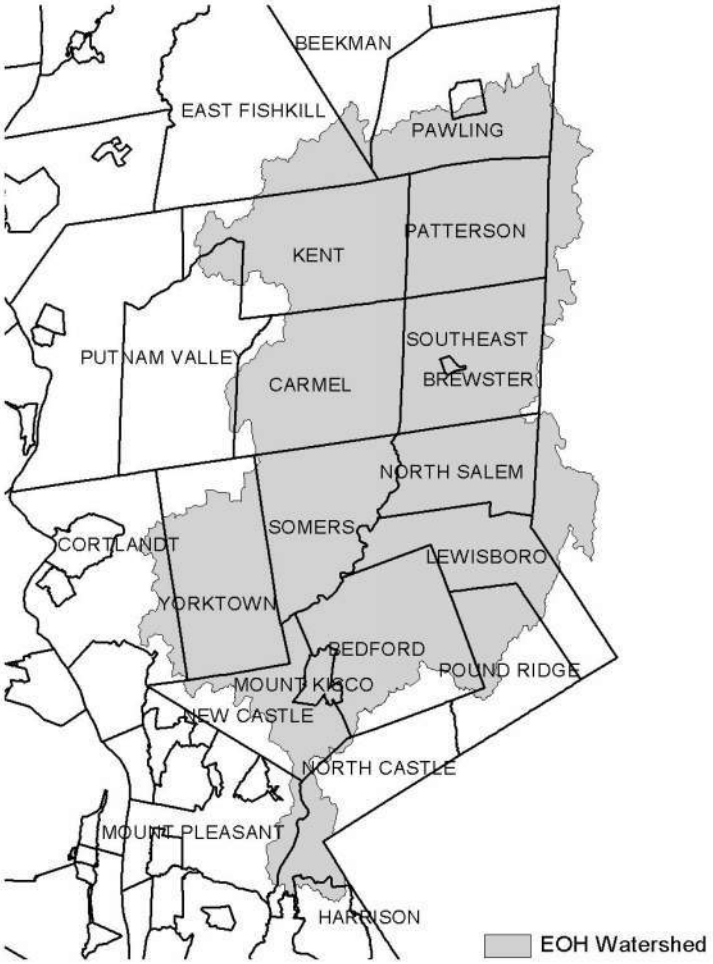


Figure 2 - Onondaga Lake Watershed

Figure 3 - Greenwood Lake Watershed

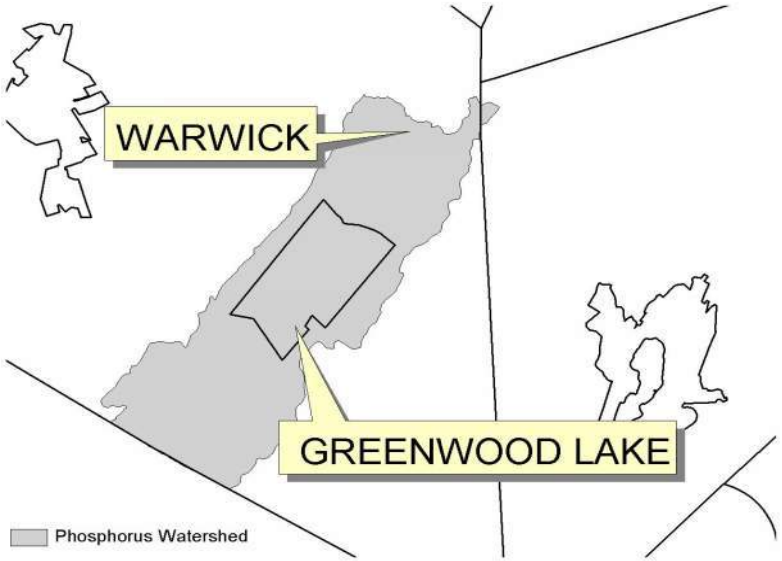


Figure 4 - Oscawana Lake Watershed

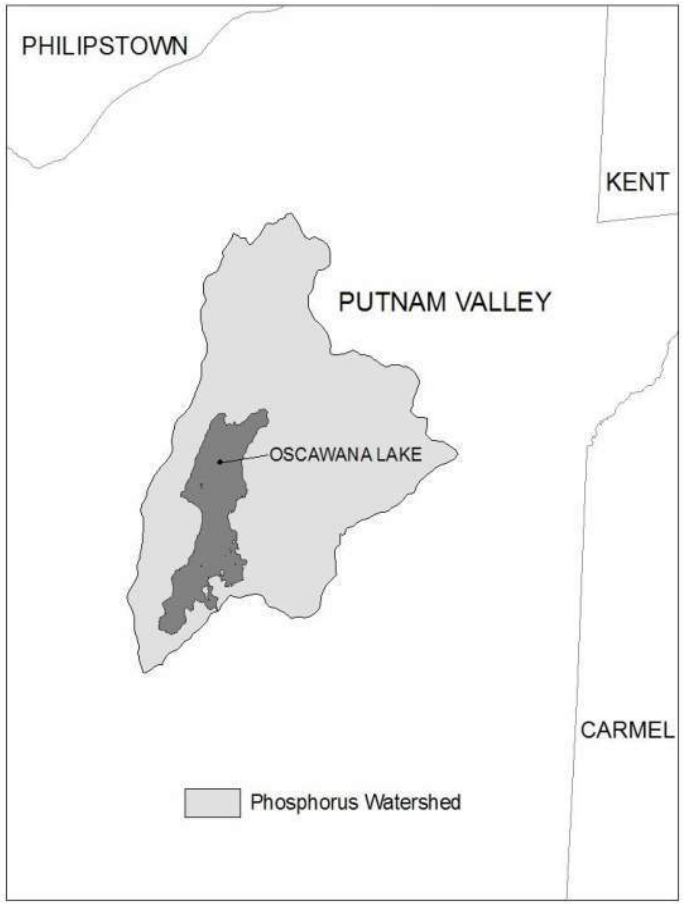
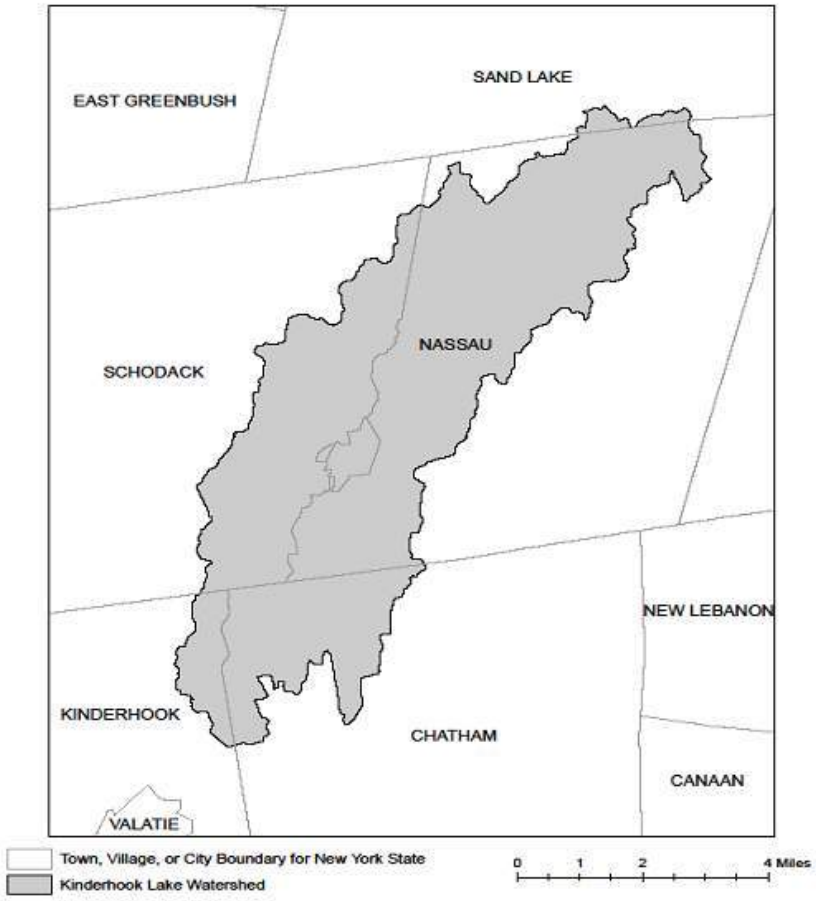


Figure 5 - Kinderhook Lake Watershed



APPENDIX D – Watersheds with Lower Disturbance Threshold

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

APPENDIX E – 303(d) Segments Impaired by Construction Related Pollutant(s)

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). The list was developed using "The Final New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy" dated November 2016. *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	POLLUTANT
Albany	Ann Lee (Shakers) Pond, Stump Pond	Nutrients
Albany	Basic Creek Reservoir	Nutrients
Allegany	Amity Lake, Saunders Pond	Nutrients
Bronx	Long Island Sound, Bronx	Nutrients
Bronx	Van Cortlandt Lake	Nutrients
Broome	Fly Pond, Deer Lake, Sky Lake	Nutrients
Broome	Minor Tribs to Lower Susquehanna (north)	Nutrients
Broome	Whitney Point Lake/Reservoir	Nutrients
Cattaraugus	Allegheny River/Reservoir	Nutrients
Cattaraugus	Beaver (Alma) Lake	Nutrients
Cattaraugus	Case Lake	Nutrients
Cattaraugus	Linlyco/Club Pond	Nutrients
Cayuga	Duck Lake	Nutrients
Cayuga	Little Sodus Bay	Nutrients
Chautauqua	Bear Lake	Nutrients
Chautauqua	Chadakoin River and tribs	Nutrients
Chautauqua	Chautauqua Lake, North	Nutrients
Chautauqua	Chautauqua Lake, South	Nutrients
Chautauqua	Findley Lake	Nutrients
Chautauqua	Hulburt/Clymer Pond	Nutrients
Clinton	Great Chazy River, Lower, Main Stem	Silt/Sediment
Clinton	Lake Champlain, Main Lake, Middle	Nutrients
Clinton	Lake Champlain, Main Lake, North	Nutrients
Columbia	Kinderhook Lake	Nutrients
Columbia	Robinson Pond	Nutrients
Cortland	Dean Pond	Nutrients

Dutchess	Fall Kill and tribs	Nutrients
Dutchess	Hillside Lake	Nutrients
Dutchess	Wappingers Lake	Nutrients
Dutchess	Wappingers Lake	Silt/Sediment
Erie	Beeman Creek and tribs	Nutrients
Erie	Ellicott Creek, Lower, and tribs	Silt/Sediment
Erie	Ellicott Creek, Lower, and tribs	Nutrients
Erie	Green Lake	Nutrients
Erie	Little Sister Creek, Lower, and tribs	Nutrients
Erie	Murder Creek, Lower, and tribs	Nutrients
Erie	Rush Creek and tribs	Nutrients
Erie	Scajaquada Creek, Lower, and tribs	Nutrients
Erie	Scajaquada Creek, Middle, and tribs	Nutrients
Erie	Scajaquada Creek, Upper, and tribs	Nutrients
Erie	South Branch Smoke Cr, Lower, and tribs	Silt/Sediment
Erie	South Branch Smoke Cr, Lower, and tribs	Nutrients
Essex	Lake Champlain, Main Lake, South	Nutrients
Essex	Lake Champlain, South Lake	Nutrients
Essex	Willsboro Bay	Nutrients
Genesee	Bigelow Creek and tribs	Nutrients
Genesee	Black Creek, Middle, and minor tribs	Nutrients
Genesee	Black Creek, Upper, and minor tribs	Nutrients
Genesee	Bowen Brook and tribs	Nutrients
Genesee	LeRoy Reservoir	Nutrients
Genesee	Oak Orchard Cr, Upper, and tribs	Nutrients
Genesee	Tonawanda Creek, Middle, Main Stem	Nutrients
Greene	Schoharie Reservoir	Silt/Sediment
Greene	Sleepy Hollow Lake	Silt/Sediment
Herkimer	Steele Creek tribs	Silt/Sediment
Herkimer	Steele Creek tribs	Nutrients
Jefferson	Moon Lake	Nutrients
Kings	Hendrix Creek	Nutrients
Kings	Prospect Park Lake	Nutrients
Lewis	Mill Creek/South Branch, and tribs	Nutrients
Livingston	Christie Creek and tribs	Nutrients
Livingston	Conesus Lake	Nutrients
Livingston	Mill Creek and minor tribs	Silt/Sediment
Monroe	Black Creek, Lower, and minor tribs	Nutrients
Monroe	Buck Pond	Nutrients
Monroe	Cranberry Pond	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Monroe	Lake Ontario Shoreline, Western	Nutrients
Monroe	Long Pond	Nutrients
Monroe	Mill Creek and tribs	Nutrients
Monroe	Mill Creek/Blue Pond Outlet and tribs	Nutrients
Monroe	Minor Tribs to Irondequoit Bay	Nutrients
Monroe	Rochester Embayment - East	Nutrients
Monroe	Rochester Embayment - West	Nutrients
Monroe	Shipbuilders Creek and tribs	Nutrients
Monroe	Thomas Creek/White Brook and tribs	Nutrients
Nassau	Beaver Lake	Nutrients
Nassau	Camaans Pond	Nutrients
Nassau	East Meadow Brook, Upper, and tribs	Silt/Sediment
Nassau	East Rockaway Channel	Nutrients
Nassau	Grant Park Pond	Nutrients
Nassau	Hempstead Bay	Nutrients
Nassau	Hempstead Lake	Nutrients
Nassau	Hewlett Bay	Nutrients
Nassau	Hog Island Channel	Nutrients
Nassau	Long Island Sound, Nassau County Waters	Nutrients
Nassau	Massapequa Creek and tribs	Nutrients
Nassau	Milburn/Parsonage Creeks, Upp, and tribs	Nutrients
Nassau	Reynolds Channel, west	Nutrients
Nassau	Tidal Tribs to Hempstead Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Silt/Sediment
Nassau	Tribs to Smith/Halls Ponds	Nutrients
Nassau	Woodmere Channel	Nutrients
New York	Harlem Meer	Nutrients
New York	The Lake in Central Park	Nutrients
Niagara	Bergholtz Creek and tribs	Nutrients
Niagara	Hyde Park Lake	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Oneida	Ballou, Nail Creeks and tribs	Nutrients
Onondaga	Harbor Brook, Lower, and tribs	Nutrients
Onondaga	Ley Creek and tribs	Nutrients
Onondaga	Minor Tribs to Onondaga Lake	Nutrients
Onondaga	Ninemile Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Middle, and tribs	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Onondaga	Onondaga Lake, northern end	Nutrients
Onondaga	Onondaga Lake, southern end	Nutrients
Ontario	Great Brook and minor tribs	Silt/Sediment
Ontario	Great Brook and minor tribs	Nutrients
Ontario	Hemlock Lake Outlet and minor tribs	Nutrients
Ontario	Honeoye Lake	Nutrients
Orange	Greenwood Lake	Nutrients
Orange	Monhagen Brook and tribs	Nutrients
Orange	Orange Lake	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Oswego	Lake Neatahwanta	Nutrients
Oswego	Pleasant Lake	Nutrients
Putnam	Bog Brook Reservoir	Nutrients
Putnam	Boyd Corners Reservoir	Nutrients
Putnam	Croton Falls Reservoir	Nutrients
Putnam	Diverting Reservoir	Nutrients
Putnam	East Branch Reservoir	Nutrients
Putnam	Lake Carmel	Nutrients
Putnam	Middle Branch Reservoir	Nutrients
Putnam	Oscawana Lake	Nutrients
Putnam	Palmer Lake	Nutrients
Putnam	West Branch Reservoir	Nutrients
Queens	Bergen Basin	Nutrients
Queens	Flushing Creek/Bay	Nutrients
Queens	Jamaica Bay, Eastern, and tribs (Queens)	Nutrients
Queens	Kissena Lake	Nutrients
Queens	Meadow Lake	Nutrients
Queens	Willow Lake	Nutrients
Rensselaer	Nassau Lake	Nutrients
Rensselaer	Snyders Lake	Nutrients
Richmond	Grasmere Lake/Bradys Pond	Nutrients
Rockland	Congers Lake, Swartout Lake	Nutrients
Rockland	Rockland Lake	Nutrients
Saratoga	Ballston Lake	Nutrients
Saratoga	Dwaas Kill and tribs	Silt/Sediment
Saratoga	Dwaas Kill and tribs	Nutrients
Saratoga	Lake Lonely	Nutrients
Saratoga	Round Lake	Nutrients
Saratoga	Tribs to Lake Lonely	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

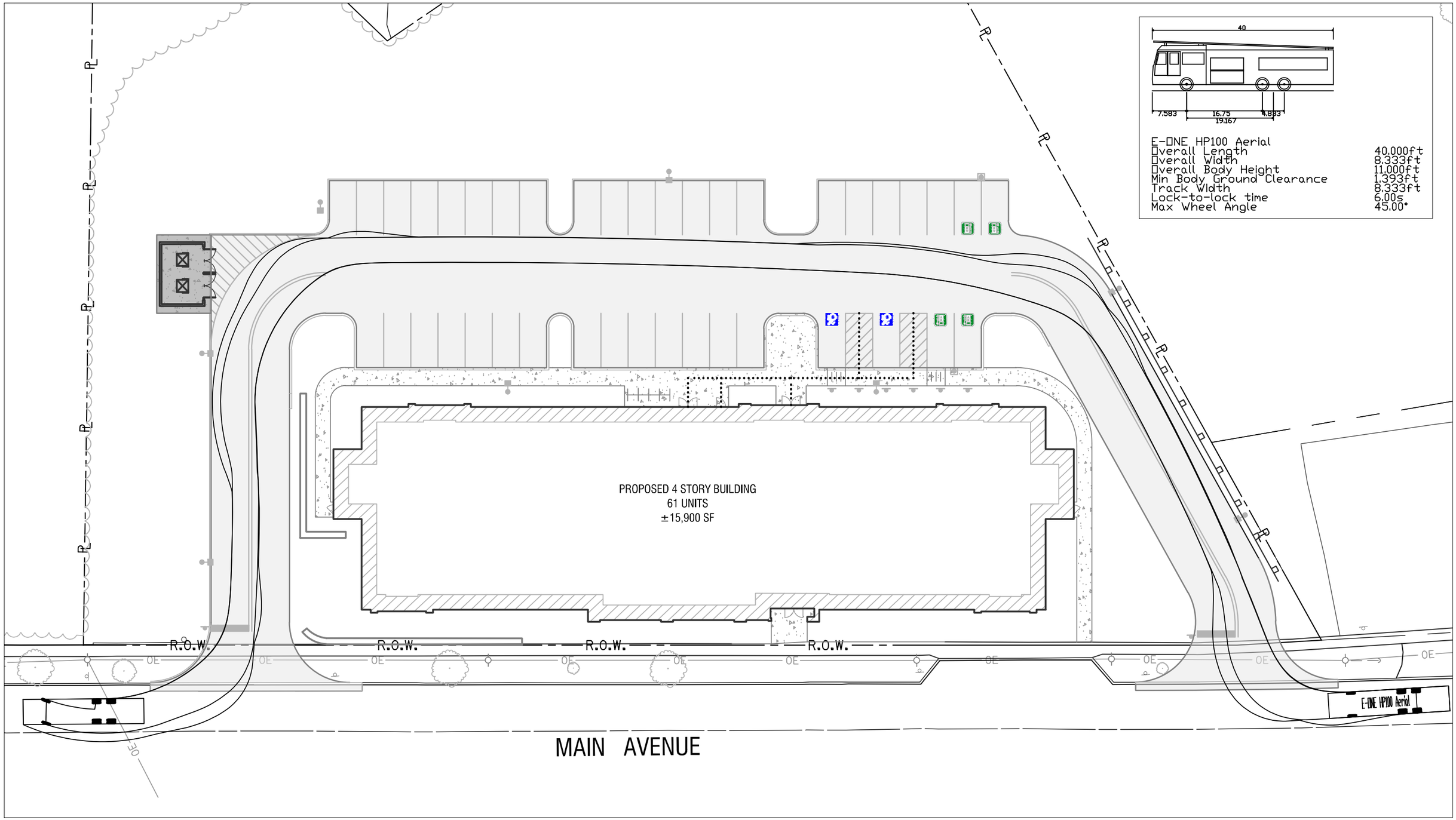
Schenectady	Collins Lake	Nutrients
Schenectady	Duane Lake	Nutrients
Schenectady	Mariaville Lake	Nutrients
Schoharie	Engleville Pond	Nutrients
Schoharie	Summit Lake	Nutrients
Seneca	Reeder Creek and tribs	Nutrients
St.Lawrence	Black Lake Outlet/Black Lake	Nutrients
St.Lawrence	Fish Creek and minor tribs	Nutrients
Steuben	Smith Pond	Nutrients
Suffolk	Agawam Lake	Nutrients
Suffolk	Big/Little Fresh Ponds	Nutrients
Suffolk	Canaan Lake	Silt/Sediment
Suffolk	Canaan Lake	Nutrients
Suffolk	Flanders Bay, West/Lower Sawmill Creek	Nutrients
Suffolk	Fresh Pond	Nutrients
Suffolk	Great South Bay, East	Nutrients
Suffolk	Great South Bay, Middle	Nutrients
Suffolk	Great South Bay, West	Nutrients
Suffolk	Lake Ronkonkoma	Nutrients
Suffolk	Long Island Sound, Suffolk County, West	Nutrients
Suffolk	Mattituck (Marratooka) Pond	Nutrients
Suffolk	Meetinghouse/Terrys Creeks and tribs	Nutrients
Suffolk	Mill and Seven Ponds	Nutrients
Suffolk	Millers Pond	Nutrients
Suffolk	Moriches Bay, East	Nutrients
Suffolk	Moriches Bay, West	Nutrients
Suffolk	Peconic River, Lower, and tidal tribs	Nutrients
Suffolk	Quantuck Bay	Nutrients
Suffolk	Shinnecock Bay and Inlet	Nutrients
Suffolk	Tidal tribs to West Moriches Bay	Nutrients
Sullivan	Bodine, Montgomery Lakes	Nutrients
Sullivan	Davies Lake	Nutrients
Sullivan	Evens Lake	Nutrients
Sullivan	Pleasure Lake	Nutrients
Tompkins	Cayuga Lake, Southern End	Nutrients
Tompkins	Cayuga Lake, Southern End	Silt/Sediment
Tompkins	Owasco Inlet, Upper, and tribs	Nutrients
Ulster	Ashokan Reservoir	Silt/Sediment
Ulster	Esopus Creek, Upper, and minor tribs	Silt/Sediment
Warren	Hague Brook and tribs	Silt/Sediment

303(d) Segments Impaired by Construction Related Pollutant(s)

Warren	Huddle/Finkle Brooks and tribs	Silt/Sediment
Warren	Indian Brook and tribs	Silt/Sediment
Warren	Lake George	Silt/Sediment
Warren	Tribs to L.George, Village of L George	Silt/Sediment
Washington	Cossayuna Lake	Nutrients
Washington	Lake Champlain, South Bay	Nutrients
Washington	Tribs to L.George, East Shore	Silt/Sediment
Washington	Wood Cr/Champlain Canal and minor tribs	Nutrients
Wayne	Port Bay	Nutrients
Westchester	Amawalk Reservoir	Nutrients
Westchester	Blind Brook, Upper, and tribs	Silt/Sediment
Westchester	Cross River Reservoir	Nutrients
Westchester	Lake Katonah	Nutrients
Westchester	Lake Lincolndale	Nutrients
Westchester	Lake Meahagh	Nutrients
Westchester	Lake Mohegan	Nutrients
Westchester	Lake Shenorock	Nutrients
Westchester	Long Island Sound, Westchester (East)	Nutrients
Westchester	Mamaroneck River, Lower	Silt/Sediment
Westchester	Mamaroneck River, Upper, and minor tribs	Silt/Sediment
Westchester	Muscoot/Upper New Croton Reservoir	Nutrients
Westchester	New Croton Reservoir	Nutrients
Westchester	Peach Lake	Nutrients
Westchester	Reservoir No.1 (Lake Isle)	Nutrients
Westchester	Saw Mill River, Lower, and tribs	Nutrients
Westchester	Saw Mill River, Middle, and tribs	Nutrients
Westchester	Sheldrake River and tribs	Silt/Sediment
Westchester	Sheldrake River and tribs	Nutrients
Westchester	Silver Lake	Nutrients
Westchester	Teatown Lake	Nutrients
Westchester	Titicus Reservoir	Nutrients
Westchester	Truesdale Lake	Nutrients
Westchester	Wallace Pond	Nutrients
Wyoming	Java Lake	Nutrients
Wyoming	Silver Lake	Nutrients

APPENDIX F – List of NYS DEC Regional Offices

Region	Covering the following counties:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) Permit Administrators	DIVISION OF WATER (DOW) Water (SPDES) Program
1	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
2	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
3	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
4	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
5	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
6	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
7	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
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7070



LaBella
Powered by partnership.

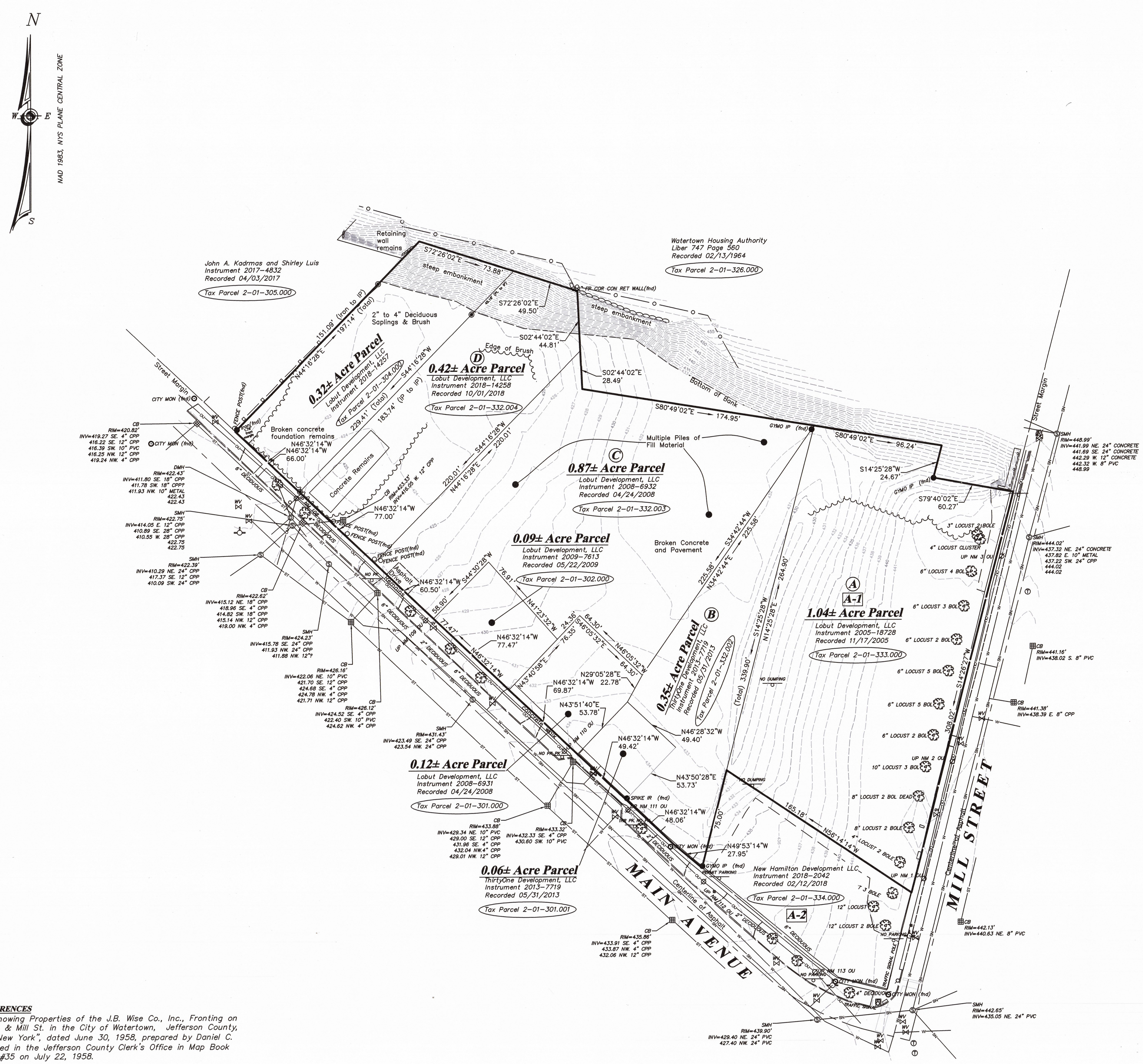
NEIGHBORS OF WATERTOWN

EMERGENCY VEHICLE AND PEDESTRIAN CIRCULATION

DATE: 7/18/2023

SCALE: 1" = 30'

N



TOPOGRAPHIC MAP OF THE LANDS AT

144, 160, 160 REAR, 164, 202, 206, & VL MAIN AVENUE & VL-5 MILL STREET

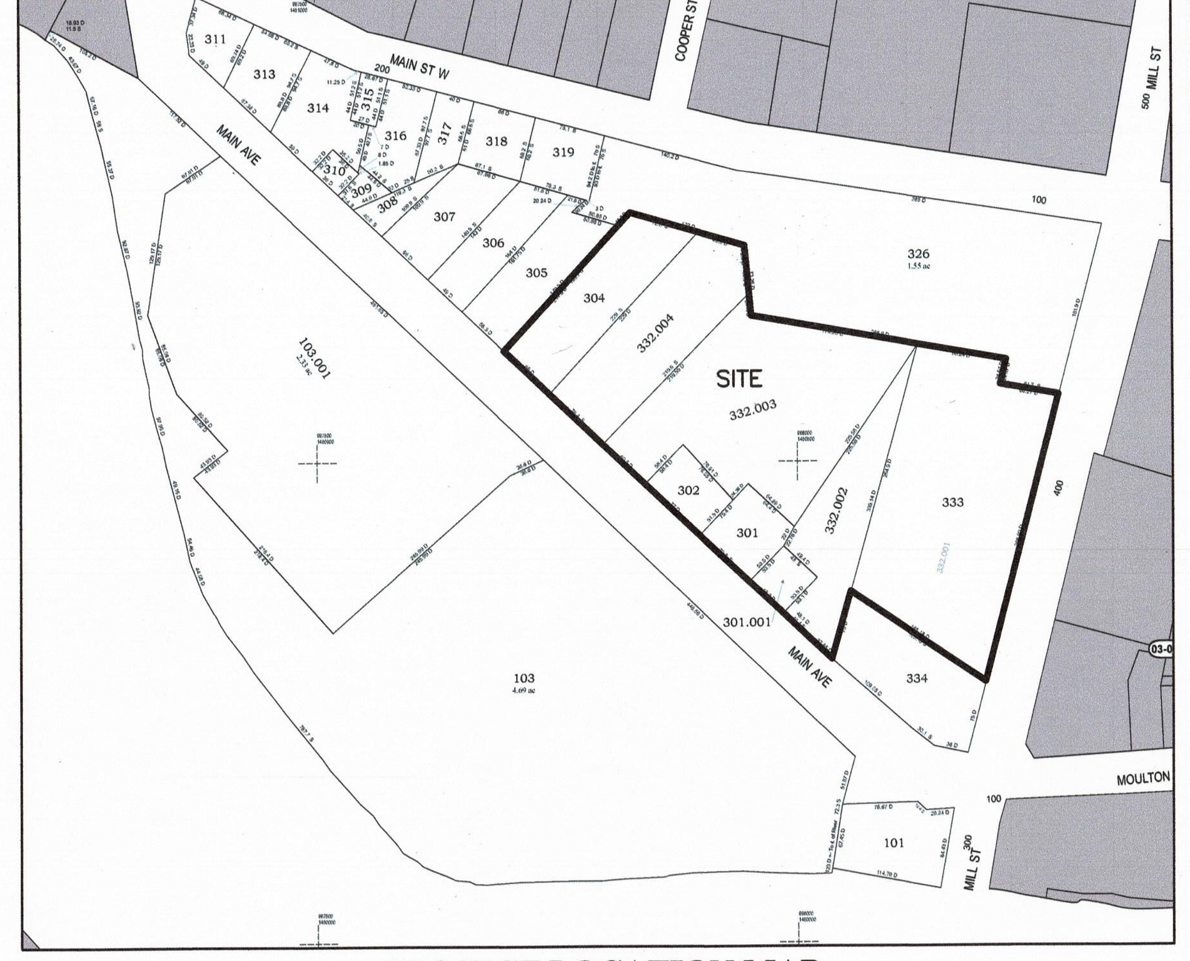
PREPARED FOR NEIGHBORS OF WATERTOWN, INC.

CITY OF WATERTOWN, COUNTY OF JEFFERSON, STATE OF NEW YORK

GYMO
Architecture
Engineering
Land Surveying
WWW.GYMODPC.COM
18969 US Route 11
Watertown, NY 13601
315.788.3900

SEAL: STATE OF NEW YORK · GREGORY FRED ASHLEY · 050257 · LICENSED LAND SURVEYOR

PROJECT NO:	80-157.07
SCALE:	1" = 20'
DRAWN BY:	A.S.K.
CHECKED BY:	Z.P.S.
DATE:	07/18/2023
DATE ISSUED:	N/A
DRAWING NO.	S101



PROJECT LOCATION MAP
NOT TO SCALE

LEGEND

- 1/2" IRON PIPE WITH CAP SET
- BURIED IRON MONUMENT FOUND (as noted)
- CATCH BASIN SQUARE
- HYDRANT
- SEWER MANHOLE
- STORM MANHOLE
- SIGN
- TREE (deciduous)
- UTILITY POLE
- WATER VALVE
- ASPHALT
- BRUSH/HEDGE
- CURB
- CHAIN LINK FENCE
- WOOD FENCE
- OVERHEAD UTILITIES

DEED REFERENCES

Richard C. Warner
to
Lobut Development, LLC
Instrument 2008-6931
Recorded 04/24/2008
Tax Parcel 2-01-301.000

Nehemiah Property Group
to
ThirtyOne Development, LLC
Instrument 2013-7719
Recorded 05/31/2013
Tax Parcel 2-01-301.001

The City of Watertown
to
Lobut Development, LLC
Instrument 2009-7613
Recorded 05/22/2009
Tax Parcel 2-01-302.000

Robert Sinclair
to
Lobut Development, LLC
Instrument 2018-14257
Recorded 10/01/2018
Tax Parcel 2-01-304.000

Nehemiah Property Group
to
ThirtyOne Development, LLC
Instrument 2013-7719
Recorded 05/31/2013
Tax Parcel 2-01-332.002

Richard C. Warner
to
Lobut Development, LLC
Instrument 2008-6932
Recorded 04/24/2008
Tax Parcel 2-01-332.003

Robert Sinclair
to
Lobut Development, LLC
Instrument 2018-14258
Recorded 10/01/2018
Tax Parcel 2-01-332.004

The City of Watertown
to
Lobut Development, LLC
Instrument 2005-18728
Recorded 11/17/2005
Tax Parcel 2-01-333.000

NOTES

1. Field location was last performed on May 8, 2023.
2. The horizontal datum referenced hereon is NAD 1983, New York State Plane, Central Zone based on the NYS CORS Network.
3. The vertical datum referenced hereon is NAVD 1988 based on the NYS CORS Network.
4. All adjoiners are per the City of Watertown Real Property Assessment Office.
5. Underground facilities, structures and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only.

   There may be underground facilities, structures and utilities, the existence of which is presently not known and therefore not shown on this map.

   Prior to construction contact Underground Facilities Protective Organization, (UFPO) at 1-800-962-7962 for exact location of all underground utilities.
6. This survey was prepared without the benefit of an Updated Abstract of Title and is subject to any changes which may occur as a result of a more complete title search.
7. Subject parcels are City of Watertown Assessment Parcel Numbers 2-01-301.000, 2-01-301.001, 2-01-302.000, 2-01-304.000, 2-01-332.002, 2-01-332.003, 2-01-332.004, 2-01-333.000.
8. The lands shown hereon are subject to any rights, restrictions, easements or covenants of record, expressed or implied by usage or custom.
9. Also including any rights, title or interest that may exist in Main Avenue and Mill Street.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

MAP REFERENCES

1. "Map Showing Properties of the J.B. Wise Co., Inc., Fronting on Main Ave., & Mill St. in the City of Watertown, Jefferson County, State of New York", dated June 30, 1958, prepared by Daniel C. Cooper, filed in the Jefferson County Clerk's Office in Map Book #2, Page #35 on July 22, 1958.

(A)(B)(C)(D) 2. "Subdivision Final Plat of Parcels A, B, C & D, Land of City of Watertown, Main Avenue & Mill Street, City of Watertown, County of Jefferson, State of New York", dated January 25, 2002, last revised March 14, 2002, prepared by GYMO, D.P.C., filed in the Jefferson County Clerk's Office as Map 2886 on March 26, 2002.

[A-1] [A-2] 3. "Subdivision Final Plat of the Lands of Lobut Development, LLC, 401 Mill Street, City of Watertown, County of Jefferson, State of New York", dated October 23, 2017, revised December 29, 2017 prepared by GYMO, D.P.C., filed in the Jefferson County Clerk's Office as Map 6927 on January 02, 2018.