Watertown City Council
Monday, February 14, 2022
7:00 p.m.

WORK SESSION AGENDA

The City Council meeting is open to the public.

Discussion Items:

1. YMCA
   - Dave Zembiec, CEO of JCIDA
   - Denise Young, CEO of YMCA

2. DPW Facility
   - Patrick Keenan, Superintendent of Public Works

3. Single-Stream Recycling
   - Patrick Keenan, Superintendent of Public Works

Jefferson County Industrial Development Agency

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DATE: February 10, 2022

TO: Watertown City Council

FROM: David J. Zembiec, CEO
Jefferson County Industrial Development Agency

The JCIDA asks that the City of Watertown partner with us to support one of the most significant capital investments in its downtown that the city has seen, and will see, in in the long-term. The YMCA Community and Aquatics Center will transform 89,000 square feet of vacant space into a visually attractive hub of human activity that will clearly generate a significant economic impact for the city and its downtown business community.

Currently, the $27.5 million project includes $1.96 million of infrastructure to set the stage for the YMCA project to proceed by relocating exterior infrastructure and restoring internal infrastructure the JCIDA was required to remove for the PCB remediation project. We request the city provide the maximum amount possible to assist the JCIDA to address that infrastructure. We would then ask the county to consider at least matching the city's commitment.

Although this is a significant request, please keep in mind the $27.5 million investment enabled by your support, and the return on investment to the city's tax base and business community generated by its impact. City and county support would also demonstrate local government support that would help the state commit to a pending funding request through the CFA process.

This is an investment in infrastructure to support economic development;

1. The size of the project at $27.5 Million provides construction jobs and economic activity;
2. The positive impact of the project in attracting human activity and commerce to downtown to support existing businesses and attract new businesses;
3. The avoidance of glutting the downtown real estate market with 89,000 sq. feet of vacant space that would drive down real estate values;
4. Bringing additional jobs to downtown Watertown; and
5. Strengthening the community's value to Fort Drum, and thereby the Department of Defense by following through on DOD's $9 million commitment to improve military family quality of life.

The need:

The JCIDA is requesting the city assist with exterior infrastructure costs and with restoration of internal infrastructure as described below.

Exterior Sitework Infrastructure - $450,000 up to $585,000

Storm Drain, Sanitary Sewer and Water Main Relocation, National Grid Line Relocation

Interior Infrastructure - $1,480,000

Prior to the discovery of PCBs in the building's cement floor, the YMCA had planned to utilize existing walls, studio rooms, and bathrooms—all of which were demolished in order for the PCB remediation to proceed. In addition, the lower portion of the exterior walls had to be removed in order to remediate the cement slab. These must now be rebuilt

Restore Former Unimproved Area - Exterior Walls, Flooring, Lighting, Restroom, $280,000

Restore Studio B, Restrooms, Electrical and IDT Rooms and bottom 4' of exterior wall framing, $600,000

Required Fire and Security upgrades outside of YMCA space location, $600,000. Under city codes, the classification of the YMCA space as "Assembly" requires that the entire building be sprinklered and alarmed as "Assembly", adding an additional $600,000 in costs beyond that required for the space the YMCA will itself occupy.

We look forward to discussing this in further detail at the February 14th work session.

Respectfully yours,

David J. Zomkiw

February 9, 2022

To: The Honorable Mayor and City Council

From: Kenneth A. Mix, City Manager

Subject: DPW Facility

We've realized for years that the Public Works facility on Newell Street needs to be upgraded. The Maintenance Garage and Bus Garage were built in 2004 and 2005, but not much else has been done.

C&S Companies was hired to analyze the spatial needs of Public Works and to study alternative sites. A copy of their study is enclosed. The other sites all have problems that make them less than suitable.

The current site is suitable for the long-term needs of the department if the adjacent National Grid manufactured gas plant site. A benefit of staying in place is that the newer garages can continue to be used. However, the Comprehensive Plan calls for the area to be redeveloped as a commercial and recreational district.

The main question is whether the long-term goal is to develop the commercial and recreational district as envisioned by the Comprehensive plan or continue with it being the site of the DPW Facility.

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Watertown, NY 13601
p: (315) 455-2000
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Department of Public Works

FACILITY SPATIAL NEEDS ASSESSMENT and SITE RECOMMENDATIONS

C&S Project No.: 129.015.001
Date Issue FINAL 02/08/2022

Prepared For:

City of Watertown Engineering Department
Attn: Michael Delaney
Address: 245 Washington Street
Watertown, New York

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SECTION 1

OVERVIEW: Existing Goals and Needs

OVERVIEW: Existing Goals and Needs

The City of Watertown Engineering Department has commissioned C&S Engineers, Inc. to provide a spatial needs assessment and site location recommendation for a new Department of Public Works (DPW) facility. This report is a tool for the City of Watertown to evaluate the operational and mechanical inefficiencies associated with most of the aged structures coupled with the space limitations of the existing site. This report provides recommendations regarding:

- Facility size requirements based upon current and projected operations.
- Viable sites within the City of Watertown boundary that would be suitable for this facility.
- Preliminary cost estimates for construction of a new facility.

The City Department of Public Works is currently located on Newell Street and Engine Street. The DPW has been operating from this location for over 75 years. They currently occupy (9) nine buildings on approximately 8.8 acres (see Exhibit A-Site Plan). The site is very congested and not conducive to current day operations.

The existing DPW facility provides a base for the following operations:

- CitiBus
- Parks and Recreation
- Municipal Electric (Traffic Signals, Lighting, & Sign Maintenance)
- Street Maintenance
- Snow Removal
- Storm and Sanitary Sewer system maintenance
- Solid Waste (residential garbage pickup)
- Buildings and Grounds Maintenance

SITE – A key component of this assessment is the site of the DPW facility. The City must ensure that the site they select has adequate space for near-term and potential expanded future uses, appropriate utilities, compatibility with surrounding land uses, and availability. In addition to allowing space for all the expected and potential uses at the site,

The information in this document provides a foundation for City of Watertown to identify necessary steps in the planning, design, and construction management of a new or renovated facility. This spatial needs assessment report provides a listing the project-critical elements of the facility planning process, as well as necessary components.

As part of this study, four (4) City owned sites were reviewed. A summary of the information for these sites is included in Section 4. The assessment of these City-owned sites revealed potential issues related to available area, environmental impacts, or site grading. This determination led the study to look into two (2) additional potential sites for consideration.

EXISTING BUILDING AT NEWELL STREET - The buildings vary in construction from masonry to pre-engineered rigid frame structures. The earliest building (the Administration Building) is a four story masonry building which was constructed circa 1900. The aging sub-standard buildings no longer meet today's operational needs. The most recent is the Central Garage (Fleet Building) is a pre-engineered steel building constructed in 2004. Eight of the nine buildings have well exceeded their useful lives. All of

the buildings (other than the Central Garage) are very energy inefficient and do not meet the current NYS Energy Code. The main administration building has many inefficiencies including but not limited to functionality, layout of spaces and accessibility.

DOCUMENTATION REVIEW and INTERVIEWS- A document review and interviews were performed to augment the walk-through survey and assist in the understanding of the existing property and its possible physical deficiencies. These interviews were not independently verified, as this information was used for background information, and not the basis of any noted insufficiencies of the existing facility.

WALK THROUGH -A walk-through was performed to visually observe the existing property so as to obtain information on material systems and components for the purposes of providing a brief description, identifying physical deficiencies to the extent that they are easily visible and readily accessible. Multiple visits were made to the property to make a visual observation of material systems and components, physical deficiencies and unusual features. The walk –through survey was conducted by Patrick Currier. Mr. Currier has a well-rounded knowledge and experience in evaluating pertinent building systems, equipment and components, supported by a team of system subspecialists in order to provide increased detail in reporting and insight their respective systems' conditions,

OPINION of PROBABLE COSTS - Based on the documentation review, interviews and walk-through conducted, C&S has developed a narrative of the proposed site and building components. This narrative was developed as a basis of design and tool for estimating the probable cost of a new facility. Cost estimating was not provided for the existing property at Newell Street, since that parcel has recently been designated as part of the waterfront revitalization initiative and it is questionable as to whether National Grid would be willing to sell the adjacent site.

Opinions of probable cost should only be construed as preliminary, order of magnitude budgets. Actual costs will likely vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested facility, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, quality of the contractor, quality of the project management exercised, and market conditions.

SECTION 2

Site Matrix and Review of Sites

City of Watertown - Department of Public Works September 14, 2020

DPW - FACILITY SPATIAL NEEDS ASSESSMENT and SITE RECOMMENDATIONS

SITE MATRIX:

Site	Address	Tax Map #	Size	Environmental Information	Additional Information
#1 Existing DPW Facility	Newell Street	7-08-214.000 7-08-214.001 7-08-301.000 7-08-303.000 7-08-304.000 7-08-305.000 7-08-307.000 7-16-112.000 7-16-112.002	8.78 Acres	This site is bounded to the North by the Black River. Additionally, there is an adjacent site to the west at Engine Street that is reputedly owned by Niagara Mohawk Power Corporation (National Grid). This adjacent 3.5 acre site is currently under remediation as part of the State Superfund Program.	These nine Parcels encompass the current DPW Facility. DPW Site owns around 3 sides of the parcel at 500 Newell Street.
#2 Watertown Springs Site	200 Howk Street	7-10-102.000	4.49 Acres	Soil Survey Notes Urban Land, - consider reviewing soil conditions as per Pert 360 of the New York State Rules and Regulations as it relates to imported fill material. Consider a Phase 1A Environmental Assesment.	This parcel is reputedly owned by David Puccia, and is currently assessed for $ 365,600. Item to review further: Site concern as it relates to size of the parcel.
#3 Industrial Park Site	Roundhouse Drive	9-43-101.210	65.03 Acres	Site is wooded. Of the 65.03 total acres, 31.29 acres of the site has been identified as wetlands via satellite imagery. Wetlands have not been delineated via site walk-over.	Actual area of the wetlands to be delineated at this site, to confirm that the site can be developed outside the wetlands and 100' buffer.
#4 Water Street Site	15 Water Street	4-15-101.00 4-24-201.00 4-16-101.000 4-22-203.000 4-22-202.001 4-22-202.000	Approx. 32 acres	This parcel to the Northwest has been remediated (General Signal - SPX Corp). To the East: City Owned Landfill parcel at 1109 Rear Water Street and 840 Pearl Street. Site will have potential environmental concerns.	Overall environmental concerns to be addressed at this parcel. The parcel at 15 Water Street is contiguous to the City Owned Landfill parcel at 1109 Rear Water Street and 840 Pearl Street, identified as Tax Map # 4-21-101.000 (19.00 Acres); and TM# 4-20-101.000 (56.80 Acres) respectively. Site has significant changes in elevation.

Site	Address	Tax Map #	Size	Environmental Information	Additional Information
#5 VanDuzzee Street Site	424 VanDuzzee St	1-18-102.000 1-18-102.004 1-18-102.003	10.74 Acres	The City of Watertown real property files report that a major fire that destroyed the old warehouses on site in November 2015. Per NYSDEC Environmental Resource mapper the site is in the vicinity of bats listed as endagered or threatened.	As shown on the Site #5 map there are two parcels at the Southeast corner of the property (424A and 424 rear VanDuzzee) that are owned by JSJ NNY LLC. These parcels could be considered for purchase and merged with the City property.
#6 West Main Street Site	570 West Main Street	1-01-129.000 1-01-128.000 1-01-201.000	13.31 Acres	All three parcels that would make up this site have old buildings that would require demolition in order to prepare the site. (Haz Waste Screening required). Per NYSDEC Environmental Resource mapper the site is in the vicinity of bats listed as endagered or threatened.	The three parcels are currently owned by three different reputed owners.

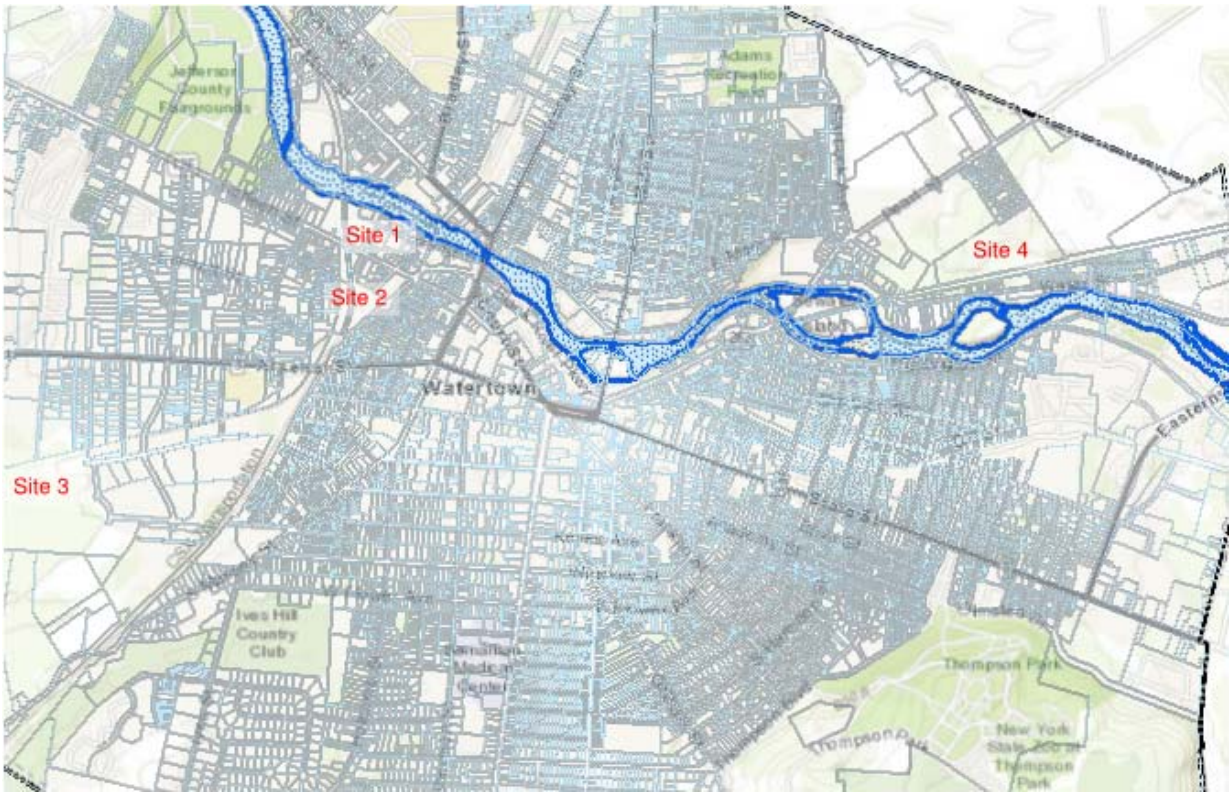
4.0 Review of Potential Sites

The City of Watertown will need to ensure that the selected site will have adequate space for both the short term and potential future uses, has appropriate utilities, and is compatible with the surrounding land uses. In order to provide sufficient area for administration, work areas, tempered storage, cold storage, salt storage, a fuel facility, as well as outside storage and employee / visitor parking, a site area with 6.5 to 7.0 acres of useable land should be considered. This area is to be used a general guide, as the actual area required will depend on the specific characteristics of the site.

As noted in the Site Matrix, there are four (4) potential sites for a consolidated DPW Facility. These sites are as follows:

- 4.1 Site #1, utilize the existing DPW Site at Newell Street, with the potential to acquire an additional 3.5 acres that is adjacent to the site.
- 4.2 Site #2, Watertown Springs Site at 200 Howk Street.
- 4.3 Site #3 Industrial Park Site, located at Roadhouse Drive.
- 4.4 Site #4, Water Street Site.
- 4.5 Site #5, Former NYSDOT Maintenance at VanDuzze Street (high level review only).
- 4.6 Site #6, West Main Street (high level review only).

A brief description of each of these sites is provided on the pages below, with additional backup information provided in the Appendices.



General Location of Potential Sites (image from City of Watertown GIS)

4.1 Site #1, Existing DPW Site at Newell Street.

Aerial View of Site #1 (image from City of Watertown GIS)

Site #1 is the existing DPW facility at the intersection of Newell Street / Engine Street, and is approximately 8.78 acres in size. This site borders a 3.5 acre site that is owned by National Grid, and the City has had preliminary initial discussions with National Grid to see if this parcel could be purchased by the City after the clean-up is completed. If the DPW Facility is to be consolidated to this site, the additional area would allow ample area for material and equipment storage.

The portion of the site that is immediately adjacent to the Black River is within the floodplain, (i.e special flood hazard area that will be inundated by a 100 year flood, copy of FEMA Map included in Appendix A).

Additional Information of Site #1 is as follows:

- Consists of nine (9) separate parcels; Tax Map # 7-08-214.000; 7-08-214.001; 7-08-301.000; 7-08-303.000; 7-08-304.000; 7-08-305.000; 7-08-307.000; 7-16-112.000; 7-16-112.002.

- The adjacent parcel that is owned by National Grid (Tax Map # 7-16-113.100) is currently under remediation as part of the State Superfrund Program. This 3.50 acre parcel is currently assessed for $ 277,826.
- The site is located in an archeological sensitive area, with two eligible buildings at or near the site (building at 550 Coffeen Street, and the former Carriage Factory that currently serves as a DPW Storage building at Site #1). Additional information regarding these historic buildings is included in Appendix A.

Site #1: Existing DPW Building at 521 Newell Street (former Carriage Factory)

Site #1: DPW Facility at Newell Street / Engine Street

4.2 Site #2 Watertown Springs

Aerial View of Site #2 (image from City of Watertown GIS)

Site #2 is located at 200 Howk Street, and is a privately owned parcel that is approximately 4.49 acres in size. Although this site currently serves as a base for a fleet of trucks, with close access to Coffeen Street. There is concern that this site is that it does not have sufficient area to provide a combined DPW facility.

Additional Information:

- Tax Map # 7-10-102.000
- Parcel is reputedly owned by Anthony Pucci, and is assessed for $ 365,000.
- This parcel is located in an archeological sensitive area.
- The USDA Soil Survey notes the presence of “Urban Land” at this site, indicating that a substantial amount of soil fill material was imported to this site at some point in the past.

Based on the above information, a Phase 1 Environmental Assessment would be recommended for this site.

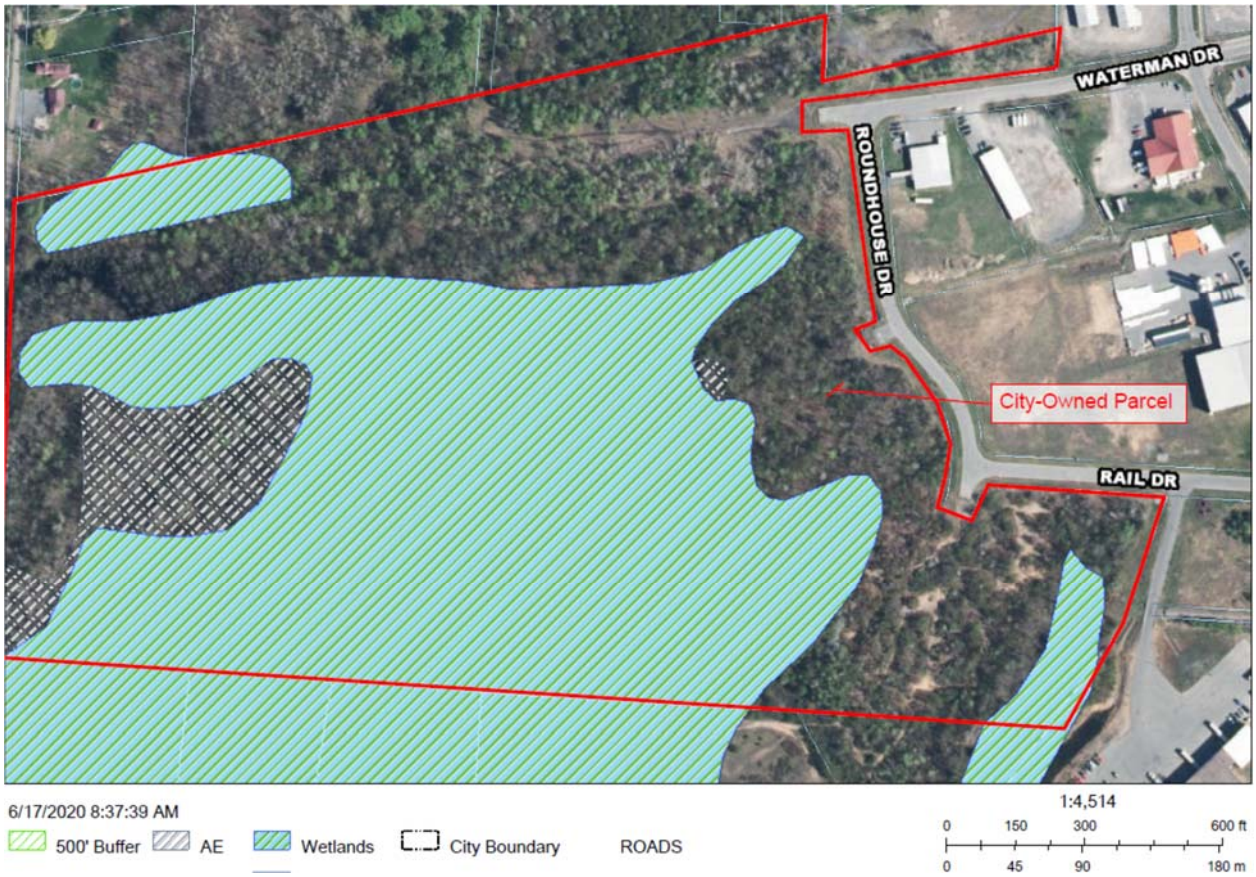
Photographs of Site #2, 200 Howk Street:

Site #2 Looking South

Site #2 Looking West

Site #2 Looking North from the South end of the Site

4.3 Site #3 Industrial Park



Aerial View of Site #3 (image from City of Watertown GIS)

Site #3 is located at Roundhouse Drive, and is a City owned parcel. Although the overall parcel is approximately 65 acres in size, approximately half of the parcel consists of wetlands. The largest contiguous available area for consolidated development at this site is the northern and eastern portion of the site (direct access from the intersection of Waterman Drive and Roundhouse Road), with appears to have approximately 8.5 acres available for development (depending on actual wetlands areas, as noted below). While the site itself is wooded and undeveloped, there is water, electric, storm sewer, and sanitary sewer utilities (circa 2000) available at this potential site.

Additional Information:

- Tax Map # 9-43-101.210
- This parcel is located in an archeological sensitive area. However, a phase 1A Archeological Assessment has previously been performed at this site, as it was performed for the overall Industrial Park. The Phase 1A Report is on file with the State Historic Preservation Office (SHPO) as Survey # 99SR50215.
- The wetland that dominates this parcel is freshwater forested/shrub wetland classified as PF01E as per the National Wetlands Inventory. This wetland is also classified as a New York State Regulated Wetland (Wetland ID S-4).

It is important to note that the image above shows the approximate location of the wetland, as the current wetland boundary was delineated by use of satellite imagery. In order to determine the actual wetland boundary, a field delineation would need to be performed. Due to the fact that this is a state regulated wetland, a NYS Freshwater Wetlands Permit would be required for any soil disturbance within the wetland boundary, or within the 100 ft buffer zone around the delineated wetland boundary.

For these reasons, coordination with NYS DEC and a field delineation of the wetland boundary on the north and east sides of this parcel is recommended prior to advancing any preliminary layouts at this site.

Photograph of Site #3, taken at intersection of Waterman Drive & Roundhouse Drive:

4.3 Site #4 Water Street Site

Aerial View of Site #4 (image from City of Watertown GIS)

The parcel at Site #4 (15 Water Street) is located off Flower Street / Pearl Street, and was purchased by the City of Watertown in 2000. To the east it borders the City Landfill property, while to the west it borders property known as the General Signal – SPX property.
The site is generally wooded, with significant changes in site elevation. Any development will need to take these elevation changes into serious consideration, as the underlying soils will be impacted.

The following factors will need to be further considered with this site:

- Site is primarily Tax Map # 4-15-101.000, (25.0 acres), but also includes the City owned parcels identified as 4-24-201.00, 4-22-202.00, 4-22-203.00, 4-22-202.001, and 4-16-101.000, for a total size of 32 acres.
- Environmental concerns, a phase 1 environmental assessment is recommended. Any soil contamination found could be a major factor in the cost of site development, as a significant amount of earthwork would be anticipated at this site.
- This site is located at an area identified by NYSDEC as a Potential Environmental Justice Area, and Environmental Justice concerns will need to part of a SEQR process for this parcel. Recommend

that any development looks at ways to create synergy with adjacent landfill parcel and brownfield development.

- Information regarding parcel to the west of this site (750 Pearl Street, Tax Map 4-15-102.000):
    - This parcel at Tax Map 4-15-102.000 is a 27.38 Acres Brownfield is reputedly owned by General Signal Corp - SPX Corp, and is currently assessed for $ 328,500.
    - The SPX site at 750 Pearl Street has been remediated, with 2018 sampling indicating soil and groundwater contamination that will need to be addressed before any proposed build.

- Information regarding parcel to the east of this site (City Owned Landfill at 1109 Rear Water Street & 840 Pearl Street, Tax Map 4-20-101.000): 56.80 acres in size, contiguous to the City owned parcel at 15 Water Street.

Photograph taken from Water Street (site in background):

4.5 Site #5, 424 VanDuzzee Street.

- 10.74 acres on three (3) separate tax parcels, with one of these parcels privately owned. Refer to Site Matrix and Appendix E for additional information.
- Site currently provides fishing access to Black River with scenic views (see photos below).

Photograph taken from Water Street (site in background):

Above Photograph: Fishing area that is accessible From VanDuzzee Street Site

Above Photograph: One of Two entrances to the VanDuzzee Street Site, (fishing access driveway in foreground)

4.6 Site #6, 570 West Main Street.

- 13.31 acres on three (3) separate tax parcels, with each parcel privately owned by a different owner. Refer to Site Matrix and Appendix F for additional information.

Photographs below are of the three adjoining parcels (taken from West Main Street):

SECTION 3

Narrative of Proposed Site & Buildings

NARRATIVE OF PROPOSED SITE and BUILDINGS

PROJECT DESCRIPTION

10 Project Description

1010 Project Summary

A. Preliminary scoping and programming determined the need for a 14,000 s.f. **Administrative Building**. Building shall meet current codes rules and regulations as well as the NYS Energy Conservation Code (see attached spatial analyses)
B. Preliminary scoping and programming defined need for a 24,000 s.f. **Tempered (55 degrees) Storage Building.** Building shall meet current codes rules and regulations as well as the NYS Energy Conservation Code (see attached spatial analyses)
C. Preliminary scoping and programming also defined need for a 10,000 s.f. **Cold Storage Building** (see attached spatial analyses)
D. Preliminary scoping and programming determined the need for a 10,000 s.f. **Salt Storage** facility.
E. Preliminary scoping and programming determined the need for a **Fueling Facility** with storage capacity for 3,000 gallons of gasoline and 7,000 gallons for diesel.

1020 Project Program

A. The facility is comprised of the following spaces:
    a. **Administrative Building**: Occupancy (B) Business / Construction Type II b
        i. Offices and work spaces
        ii. Locker / Toilet Rooms
        iii. Break Room
        iv. Training Multi-Purpose and Meeting Rooms
        v. Equipment Storage, Carpenter Shop, Sign Shop and Electrical Shop
    b. **Tempered Storage Building**: Occupancy (S-2) Low Haz. Storage / Const. Type II b
        i. Concrete Forms
        ii. Plows, Garbage Trucks etc.
        iii. Vehicles, bobcats, equipment etc.
    c. Cold Storage Building: Occupancy (S-2) Low Hazard Storage / Construction Type IIb
        i. Sweepers, Pavers, rollers, etc.
        ii. Bulldozers, Diggers, Excavators, etc.
        iii. Tire Storage, Generator, etc.
        iv. Trash Containers, Barricades, etc.
        v. Sewer Rod Machine, Tac Coat Trailer, Deicer Dump Truck etc.
B. Ancillary buildings include:
    a. **Salt Storage Building**
    b. **Fueling Facility**

NARRATIVE OF PROPOSED SITE and BUILDINGS

1050.1 Funding Source

A. To be determined.

A SUBSTRUCTURE

A10 Foundations

A1010 Standard Foundations

A. Foundation System ***(Administrative Building and Tempered Storage Building***): The final foundation requirements will be based on the geotechnical investigation and recommendations by a geotechnical engineer. Standard reinforced concrete strip footings with 12" reinforced foundation walls at the exterior and reinforced concrete spread footings at steel column location is the preferred foundation system. Spread foundation systems are to be constructed on undisturbed soil with structural fill underlayment. Foundation drains are to be installed at the perimeter of the building if ground water issues are determined to be present during the geotechnical investigation. Provide 2" rigid insulation on inner side of foundation wall.

B. Foundation System (***Salt Storage Building***): The final foundation requirements will be based on the geotechnical investigation and recommendations by a geotechnical engineer. Standard reinforced concrete spread footings at steel column/truss locations is the preferred foundation system. Spread foundation systems are to be constructed on undisturbed soil with structural fill underlayment. Footings for exterior/retaining walls may be required depending on the type of building selected.

C. Foundation System (***Cold Storage Building*****):** The final foundation requirements will be based on the geotechnical investigation and recommendations by a geotechnical engineer. Standard reinforced concrete haunch (monolithic slab) at the exterior wall and reinforced concrete spread footings at steel column location is the preferred foundation system. Spread foundation systems are to be constructed on undisturbed soil with structural fill underlayment. Foundation drains are to be installed at the perimeter of the building if ground water issues are determined to be present during the geotechnical investigation.

A1030 Slab on Grade

A. Slab System (***Administrative Building and Tempered Storage Building***): Reinforced concrete slab on grade with vapor barrier and structural fill underlayment on undisturbed subgrade soil or engineered fill will be utilized. Slab on grade thicknesses will be designed based on anticipated loadings using soil parameters determined by the geotechnical engineer. Sealed construction joints as required and expansion joints where slab intersects walls or other foundations. Extruded polystyrene board insulation (25 psi) is to be installed below slabs to achieve an R-value of R-10 at the Administrative Building. Provide 24" square catch basins in all vehicle storage areas.

B. Slab System (***Cold Storage Building***): Reinforced concrete slab on grade with vapor barrier and structural fill underlayment on undisturbed subgrade soil or engineered fill will be

utilized. Slab on grade thicknesses will be designed based on anticipated loadings using soil parameters determined by the geotechnical engineer. Sealed construction joints as required and expansion joints where slab intersects walls or other foundations.

B SHELL

B10 Superstructure

B1010 Structure

A. Provide a pre-engineered steel structure for each of the buildings.
B. Provide a 3,300 s.f. storage mezzanine for Christmas decorations, trash containers and barricades in the ***Cold Storage Building***. The Mezzanine shall be structural steel with metal deck and 4" concrete slab. Provide concrete hardener and sealer.
C. The Salt Storage building is recommended to have dimensions of 100 ft x 100 ft in order to meet the City's need to store at least 3,000 ton of salt at any given time. For this size structure, a building system that utilizes cast-in-place reinforced concrete walls, with a roof system that is composed of pre-engineered steel trusses with horizontal bracing to support a fabric roof structure. The Salt Storage building will need to be located at the site to facilitate delivery and truck loading operations. Ideally, the open end of the structures should face the east, to counteract the impact of the prevailing winds.
The Salt Storage building will also need to account for a Salt Brine Structure for the storage of liquid ant-ice compounds. The recommended amount of storage is two 3,000 gallon tanks. Approximate structure size would be 8' x 18'. The structure materials would be concrete walls and a single slope steel roof. The site design should look at options to have this structure be single standing, or incorporated into a corner of the Salt Storage or Cold Storage Buildings. Final placement of a Salt Brine structure will be dependent on the circulation of site traffic, such that trucks intuitive access to the salt storage and salt brine structures during snow removal operations.

B1020 Roof Construction

D. Roof System (***Administrative Building and Tempered Storage Building***): The high roof area will be comprised of pre-engineered rigid steel portal frames supporting roof purlins, metal roof deck, and any mechanical equipment. Horizontal and vertical braces will be utilized to brace this area. Lower roof structures will be framed with structural steel columns, beams, steel roof joists, and metal roof deck.
E. Roof System (***Salt Storage Building***): The roof will be comprised of pre-engineered steel trusses with horizontal bracing to support a fabric roof structure.
F. Roof System (***Cold Storage Building***): The roof will consist of pre-engineered rigid steel portal frames with horizontal and vertical bracing to support roof purlins and a metal roof deck.

B20 Exterior Enclosure (*Administrative Building and Tempered Storage Building*)

B2010 Exterior Walls

A. Wall System: Pre-engineered metal building rigid clear span frame with bypass girts.
B. Lower eight feet of exterior wall will be double wythe concrete masonry units (cmu's) for durability concerns. Interior shall be 6" cmu with 2" rigid insulation, 1" cavity and 4" split face cmu on exterior.
C. Upper wall to be clad in insulated core concealed-fastener metal wall panels and accessory trim. Upper wall at ***Cold Storage*** shall be uninsulated metal girts and metal siding.
D. Eave height of the ***Administration Building*** shall be 12'-0".
E. Eave height of the ***Tempered Storage and Cold Storage Buildings*** shall be (single slope) 18'-0" at the front and 16'-0" at the back.

B2020 Exterior Doors

A. Aluminum framed entrance doors and storefront framing with fluoropolymer finish.
B. Hollow metal doors and frames for all other passage doors of insulated, seamless construction. Factory finished with vision glass.
C. Provide access control devices.
D. Sectional insulated doors for garage and storage area doors with vision glass shall range from 14'-0" to 18'-0" wide and shall be 14'-0" tall. Provide automatic door operators.

B2030 Exterior Windows

A. Aluminum Storefront Windows: Fixed storefront window units with operable casement infills at lower levels.
B. Garage bays and vehicle storage areas to have clerestory level insulated translucent panel windows along back wall.

B30 ROOFING

B3010 ROOF COVERINGS

A. Vertical rib, standing seam metal roof panels with fluoropolymer finish.
B. Building insulation system with integral vapor barrier.
C. Ceiling liner panels throughout garage bays and vehicle storage areas.

C INTERIORS (***Administrative Building and Tempered Storage Building***)

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

C1010.10 Fixed Partitions

A. Eight inch Concrete Masonry Unit partitions for garage areas. Metal framing and 5/8" GWB finish for interior demising partitions at office areas. Furring and 5/8" GWB finish to be provided where offices abut garage areas.
B. Interior partitions to be filed with sound attenuation fiberglass batt where indicated to reduce the transmission of sounds between spaces.

C1010.20 Interior Windows

A. Hollow metal framed, tempered, and insulated glazed partitions.

C1010.30 Interior Partition Firestopping

A. Through penetration firestopping system to be installed in cavities, pipe penetrations, and other openings in partitions to prevent the spread of smoke and fire.
B. Acoustical sealant to be installed at all walls designated and at perimeter of acoustical tile ceilings to prevent the spread of noise between spaces.

C1020 INTERIOR DOORS

A. Heavy-duty hollow metal doors and frames with vision glass.
B. Fire rated assemblies to be provided where required.

C1030 FURNISHINGS AND SPECIALTIES

C1030.20 Fabricated Compartments and Cubicles

A. Floor mounted overhead braced metal toilet partitions and urinal screens.

C1030.30 Interior Identifying Devices

A. Interior curved face aluminum ADA compliant room signage.

C1030.40 Lockers and Benches

A. Single tier, metallic coated sheet steel lockers set on 4” concrete bases. 12” wide wood bench on painted steel pedestals.

C1030.50 Toilet, Bath, and Laundry Accessories

A. Grab Bars: 42 inch, 36 inch, and 18 inch 1-1/2 inch diameter stainless steel horizontal and vertical grab bars.
B. Combination Folded Paper Towel Dispenser and Waste Receptacle: 750 folded paper towel capacity recessed dispenser and 2.6 gallon projecting waste receptacle with liner. Stainless steel finish.
C. Liquid Soap Dispenser: 40 fluid ounce capacity liquid soap dispenser, stainless steel finish.
D. Toilet Tissue Dispenser: recessed, multi-roll dispenser, stainless steel finish.
E. Stainless steel double prong robe hook to be provided in shower room.
F. 34 inch long by 8 inch deep stainless steel utility shelving to be provided in Janitors closet.

C1030.60 Casework

A. Plastic laminate casework with pvc edge-bands. Provide preformed plastic laminate countertops.

C1030.70 Fire Extinguishers

A. Provide fire extinguishers and cabinets where required.

C1030.80 Floor Mats

A. Provide roll up track off mat with low profile aluminum frames at main entry to ***Administration Building***.

C30 INTERIOR FINISHES

C3010 WALL FINISHES

C3010.10 Gypsum Board Wall Finishes

A. 5/8 inch type-x tapered edge gypsum wall board to be used in office and break room areas.
B. Water and mold resistant panels to be used in toilet rooms and other wet locations.
C. 48" high ceramic wainscot in toilet and locker rooms

C3010.20 Interior Wall Painting

A. Concrete, Concrete Block:
   1. One coat of Pro-Mar block filler, B25W1.
   2. Two coats of Pro-Mar Alkyd Egg-Shell Enamel, B33
B. Ferrous Metals:
   1. One coat of Kem-Kromik Metal Primer, B50N2/B50W1 (Items not factory primed.)
   2. Three coats of Pro-Mar Alkyd Semi-Gloss, B34
C. Gypsum Board Walls:
   1. One coat of alkyd primer sealer.
   2. Two coats of latex enamel, eggshell
D. Steel - Unprimed:
   1. One coat of Kromik Metal primer, E41N1.
   2. Three coats of Metalatex Semi-Gloss Enamel.
E. Steel - Shop Primed:
   1. Touch-up with Kromik Metal primer, E41N1.
   2. Three coats of Metalatex Semi-Gloss Enamel

C3020 FLOOR FINISHES

C3020.10 Concrete Floor Finishes

A. Public spaces including corridors, offices and meeting rooms shall be vinyl composite tile (VCT) or luxury vinyl tile (LVT) with 4" rubber base.
B. Garage spaces as well as shop areas and vehicle storage to be exposed concrete with hardener/sealer applied
C. Toilet Rooms and Locker Rooms shall be ceramic mosaic tile.

C3030 CEILING FINISHES

C3030.10 Acoustical Ceiling Treatment

A. 2 foot by 2 foot acoustical ceiling panels in exposed 15/16 inch grid to be provided in office and break room.
B. 5/8" moisture resistant gypsum board in toilet and locker rooms.
C. Metal liner panel in garage, shops and vehicle storage areas

D SERVICES

D20 PLUMBING

D2010 PLUMBING FIXTURES – Admin building

A. Water closets will be flush tank style and shall be 1.6 gallon flush type. Urinal shall be 1 gallon flush. Lavatory faucets shall be self-closing with 0.5 gpm flow rate. All flush valves and lavatory faucets shall be battery powered. Break room sinks shall have low flow aerators. Employee showers will have low flow showerheads. Maintenance areas will have large wash sinks for heavy hand cleaning.
B. Janitor rooms will have floor mounted mop basins. Wall mounted electric water coolers will be provided.
C. There will be emergency shower/ eyewash station located thru out the maintenance areas.

D2020 DOMESTIC WATER DISTRIBUTION – Admin building

A. 2" domestic water service with meter and backflow preventer is anticipated.
B. ¾" hose bib connections are desired by the owner for vehicle wash down both inside and outside the wash bay (a larger 1 ½" hose connection is being investigated for use at a proposed truck wash-down area).
C. Domestic hot water will be generated from a gas fired tank style water heater.

D2030 SANITARY WASTE – Admin Building

A. The plumbing fixtures will drain by gravity and discharging to the municipal sanitary system.
B. The maintenance bay waste system will route through an oil water separator.

D2090 NATURAL GAS – Admin Building and Tempered Storage Building

A. The facility will be equipped with natural gas. The gas will supply the heating system with fuel.

D2095 COMPRESSED AIR – Admin building

A. The owner has requested a rotary screw style air compressor and air dryer system. The system to have a 120 gallon receiver tank and compressed air will be routed to all maintenance air outlets.

D30 HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)

D3010 UTILITIES – Admin and Tempered Storage building

A. Natural Gas will be the main source for heating the building.
B. A 3-phase electric service will be confirmed to be available at site.

D3020 Water heating plant – Admin Building

A. Provide a hot water boiler heating plan sized at roughly 750 MBH. Provide (2) boilers for redundancy. Heating plant shall include inline boiler and building pumps. Hot water shall serve a central VAV AHU along with baseboard perimeter heating.

D3030 HEATING AND AIR CONDITIONING - Admin

A. Main heating and Cooling will be provided via a central AHU with a heating water coil and DX condenser. AHU shall be roughly 13000 CFM.
B. VAV boxes shall be provided for adequate zone coverage.
C. Hot water cabinet unit heaters will heat vestibules and corridor.
D. Perimeter baseboard heating shall be provided zoned to each VAV unit.
E. Shop Area will utilize a combination of infloor heating and hydronic unit heaters.

D3031 HEATING AND AIR CONDITIONING – Tempered Storage

A. Provide sufficient gas fired unit heaters to keep the space above at 50 degrees F.

D3040 VENTILATION AND EXHAUST - Admin

A. Ventilation and exhaust shall be provided via an energy recovery unit.

D3041 VENTILATION AND EXHAUST – Tempered Storage

A. Provide a 16,500 CFM exhaust fan connected to a CO2/NOX detection system that will enable when it senses CO2/NOX exhaust.

D3050 HVAC INSTRUMENTATION AND CONTROLS

A. There will be a Building Management System (BMS).

D40 FIRE PROTECTION

D4010 Sprinklers – Admin Building and Tempered Storage Building

A. An automatic wet-pipe sprinkler system will be provided throughout the entire building. The minimum design requirements for corridors, offices, lounges, and similar spaces shall be light hazard (LH) 0.10 GPM/ ft^2 over the most remote 1,500 ft^2, with a total hose stream demand of 100 gpm. The minimum design requirements for storage, mechanical, electrical, and similar spaces shall be ordinary hazard group I (OH-1), 0.15 GPM/ft^2 over the most remote 1,500 ft^2, with a total hose stream demand of 250 gpm.
B. Areas with finished ceiling will be provided with semi-recessed pendent sprinklers and areas with unfinished ceiling will be provided with pendent or upright sprinklers.

C. A double check backflow preventer assembly and alarm check valve will be provided at the incoming fire service.
D. Schedule 40 black steel pipe will be utilized for piping 1”-2”, and schedule 10 black steel piping will be utilized for piping 2-1/2” and larger.

D4020 Sprinklers – Cold Storage Building

E. An automatic dry-pipe sprinkler system will be provided throughout the entire building. The minimum design requirements for corridors, offices, lounges, and similar spaces shall be light hazard (LH) 0.10 GPM/ ft^2 over the most remote 1,950 ft^2, with a total hose stream demand of 100 gpm. The minimum design requirements for storage, mechanical, electrical, and similar spaces shall be ordinary hazard group I (OH-1), 0.15 GPM/ft^2 over the most remote 1,950 ft^2, with a total hose stream demand of 250 gpm.
F. Areas with finished ceiling will be provided with semi-recessed dry-pendent sprinklers and areas with unfinished ceiling will be provided with upright sprinklers.
G. A double check backflow preventer assembly and dry-pipe valve will be provided at the incoming fire service.
H. System will utilize compressed air or nitrogen.
I. Schedule 40 galvanized black steel pipe will be utilized for all sprinkler piping.

D50 ELECTRICAL

D5010 ELECTRICAL SERVICE AND DISTRIBUTION

A. The DPW facility shall have a 1200A, 208Y/120V, 3 phase, 4 wire electric service. This service will be utilized to feed the new admin building, Salt Storage building, and Tempered Storage building.
B. The Admin building will receive a new 400A, 208Y/120V, 3 phase, 4 wire service from nearest utility pole.
C. The Salt Storage and Tempered Storage buildings will each receive 100A, 208Y/120V, 3 phase, 4 wire services from the admin building.
D. Note: Service sizes are estimates. Actual service sizes shall be determined via electrical load calculation.
E. The Admin building will have its own Main Distribution Panelboard (MDP). The Main Distribution Panelboard will be 208Y/120V, Three Phase, Four Wire, with a 400A Main Circuit Breaker Disconnect. The MDP will feed large mechanical loads, and a 100A panelboard used for lighting/branch circuit loads within the Admin Building.
F. The Salt Storage and Tempered Storage buildings will each have one main panelboard (208Y/120V, Three Phase, Four Wire, with a 100A Main Circuit Breaker Disconnect). These panelboards will feed all loads within their respective buildings.
G. The electrical needs of the Salt Brine Storage structure is anticipated to 30A/230V single phase, or 30A/208-230V 3 phase.

H. Panelboards will have copper bussing, bolt-on molded case breakers, dead front door-in-door construction with a door for access to the panel breakers as well as a hinged door for access to panel wire way and terminals.
I. The electrical feeds for the Admin, Salt Storage and Tempered Storage buildings will be copper conductors in conduit installed underground.
J. Provide a new 230 kW generator that will feed all buildings within the facility.
K. All motors shall have Heavy Duty disconnect switches per NEC requirements.
L. Heavy Duty grade GFCI duplex receptacles will be provided in Tempered Storage and Salt Storage for general power and GFCI weatherproof receptacles will be provided at building exterior locations. GFCI receptacles shall also be located within six feet of any sink and within mechanical rooms. Ground wire shall be pulled with all receptacle circuits. Special purpose outlets will be provided as required by the building equipment layouts.
M. Branch circuits of the appropriate sizes shall be provided for all mechanical equipment including, but not limited to heating/ventilating equipment, exhaust fans and pumps.

D5020 LIGHTING AND BRANCH WIRING

A. Lighting for each building will consist of high efficiency LED fixtures. LED fixtures will require little maintenance and are the most energy efficient light source available. Tempered Storage and Salt Storage buildings will be provided with vapor tight LED fixtures. High bay fixtures will be provided as required. The Admin Building will be outfitted with recessed troffer type LED fixtures. Area Lighting will be LED weatherproof fixtures, dark sky compliant. Parking areas will be lit via pole mounted fixtures. All lighting will be designed to be compliant with applicable code requirements.
B. Automatic lighting controls will be utilized within the Admin Building. Lighting will be individually controlled in office spaces / break rooms. All lighting will be 'automatic off' in individual spaces by use of occupancy control devices. Lighting within the storage buildings will be controlled via standard lighting switches.
C. Emergency and Night Lighting will be provided to light both the path of egress to a minimum of 1fc, and the path of exit discharge to a minimum of 1fc. In lieu of backup generator system, lights within Salt Storage and Tempered Storage can be specified with battery back-ups for egress purposes. Exit signs will be provided to mark the path of exit discharge. Lighting will be generally served with 120Volts, and Voltage drop will be limited to 3% on all circuits. There will be no shared neutrals for lighting circuits. Spare ballasts, lamps, and various other baffles, lenses, and appurtenances will be provided as spares for the owners use.
D. Branch wiring will be provided for all electrical equipment in accordance with NEC requirements. All wiring will be secured in conduit. All circuits will consist of #12 conductors in ¾" C, unless otherwise noted. Light fixture wiring will be in flexible conduit, and will be a maximum length of 6'. All wiring will be concealed in walls where possible. Surface mount RGS conduits will be used in areas where wall interior is inaccessible.

D5030 COMMUNICATIONS AND SECURITY

Fire Alarm

A. A manual fire alarm system will be provided throughout each building. The system will be designed in accordance with NFPA 72 2013 ED to incorporate manual pull stations, sprinkler system activation, and automatic smoke detection for activation.
B. Notification shall be via horn/strobes and strobes located throughout the building.
C. The system shall be monitored by a 3rd party monitoring station.

Communications

A. A complete communications system for the Admin building shall be provided, including all voice/data cabling, data outlets, wireless access points and required hardware. All cabling shall be Cat6 terminated in a new patch panel in a data closet within the Admin building. Communications design will be completed to provide adequate data/voice cabling/jacks for computers, offices, workstations, etc. Cable tray and J Hooks will be utilized for above ceiling distribution, conduit shall be utilized for any cable run in a non-conditioned space. The data closet shall consist of a full height floor mount data rack, a telecommunications ground bar, cable runway and floor to ceiling fire retardant plywood. It is our understanding that network switches, servers, UPS, phone system, etc. shall be provided by the owner.
B. An incoming fiber connection shall be provided from a utility pole to the site via an underground conduit. The incoming fiber connection shall be terminated in the building Admin Building data closet. It is our understanding the Owner will contract with a provider for voice and data services.
C. A complete Access Control system shall be provided including card access to all exterior doors and interior doors as required, camera coverage and intrusion detection.

E EQUIPMENT AND FURNISHINGS

Not Used

F SPECIAL CONSTRUCTION AND DEMOLITION

F1010 FUELING FACILITY

A. The City of Watertown has determined that the required capacity of the Fuel Facility is for 7,000 gallons of diesel fuel (Class II combustible liquid), and 3,000 gallons of unleaded gasoline (Class I flammable liquid). The Fuel Facility should also consider the placement of a tank for diesel exhaust fluid (DEF), with capacity up to 500 gallons. These would be outdoor, above ground storage tanks (AST's), unattended self-service for fleet vehicle motor fuel dispensing.
B. Applicable Codes for the Fuel Facility are as follows:
    a. Fire Code and Building Code of NYS

b. NFPA 30, 70 (NEC)
c. 6 NYCRR Part 613 (Petroleum Bulk Storage)
d. 40 CFR Part 112 (Oil Pollution Prevention Rule)

C. The above ground tanks shall be double wall steel with concrete filled interstice, each tank labeled appropriately, and a 20% internal overflow compartment as required by the NYS DEC for secondary containment. In addition to mechanical clock gauges at the tanks, an electronic monitoring system with leak detection sensors (including local and remote alarms) would also be included.

D. During design of the Fuel Facility, the following items will need to be confirmed by the City of Watertown:
   a. Fuel Management System (operation by cards, keys, proximity fobs, employee badges, etc).
   b. Software facilities for accounting, especially if used by multiple departments within the DPW.
   c. Type of Fuel Dispenser and addition of remote dispensers: For unleaded gasoline, consider a dispenser rated at 22 gpm. For diesel fuel, consider at least one high capacity dispenser rated at 50 gpm.
   d. Determine if a canopy will be included as part of the Fuel Facility, or if it should be considered for future construction, or as an alternate bid item in the contract documents. The pre-engineered canopy structure would have the following features:
      i. Two steel support columns
      ii. 24'-0" x 40'-0" steel framed canopy with metal deck, recovery board and EPDM rubber membrane roofing.
      iii. Two roof drains and down spouts.

G BUILDING SITEWORK

G10 SITE PREPARATION

G1010 SITE CLEARING

A. The selected site shall provide a minimum area of 6.5 to 7 acres that is clear and traversable for the siting of buildings, storage of equipment and materials, employee / visitor parking, and movement of vehicles and equipment traffic on the site. Existing trees, scrub material, and vegetation will need to be cleared and grubbed in the area of the building, driveways, parking areas, and stormwater areas. Efforts should be made to preserve as much of the existing natural vegetation as possible, including tree protection measures where feasible. As part of the SEQR process, an environmental investigation might be needed to confirm that the project will not adversely affect habitat, wetlands or other resources.

G1020 SITE DEMOLITION

A. If any building demolition is required, an assessment of the structure will need to be conducted to ensure that the building is clear of asbestos containing materials, hazardous material, or any universal waste material. Items that are considered universal waste

material include, but are not limited to: non-adhered lead-based paint; PCB-containing items (e.g. fluorescent lamp ballasts); mercury-containing items (e.g., fluorescent lamps, thermostats, thermometers, etc.); automotive products (e.g., oil, antifreeze, hydraulic fluid, etc.), and electronic equipment (e.g., televisions, computers, etc.).

G1030 SITE EARTHWORK

A. The site will be graded to accommodate any access roads, parking areas, building pads, and stormwater areas. To the best extent possible, the grading should balance cut and fill on site and minimize grading impacts on existing vegetation to remain to the maximum extent possible.

G1040 HAZARDOUS WASTE REMEDIATION

A. Any existing buildings and the overall site will be investigated for the presence of hazardous material. This process must occur early during the site selection process, so the impacts and costs of any potential remediation can be understood. In addition to identifying universal wastes as noted above, the selected site might dictate the need to investigate for asbestos containing materials, mold contamination and mold growth, as well as contaminated soils.

G20 SITE IMPROVEMENTS

A. Site improvements will include a location for a fuel facility, an outside material stockpile / storage area, a storm water control system and access lanes to accommodate two-way traffic around the proposed DPW garage, an outside cold storage equipment building, and a salt storage building.

G2010 ROADWAYS

A. The new access driveway is recommended to have 36’ wide asphalt pavement (two 12’ lanes with 6’ wide heavy duty shoulders), to enter the site. The site design shall include turning templates and vehicle routing of the design vehicle. The recommended design vehicle for this site is an ASSHTO WB-63 (tractor-trailer with a tandem axle road tractor with a 19.5 ft wheelbase, combined with a 53’ trailer). The circulation of the selected site should look at providing defined access for employees, visitors, deliveries, and the daily work flow of DPW trucks, busses and equipment.

B. The asphalt pavement section should consist of a 12” to 16” stone base course, a 4” asphalt base course, 3” of asphalt binder course and a 1.5” asphalt top course. NYSDOT Standard Specifications should be the reference for all paving materials. The asphalt pavement section is to be confirmed after the geotechnical investigation is performed.

G2020 PARKING LOTS

A. The initial layout of the parking areas should look at 90 to 100 spaces (4 to 5 ADA accessible) for employee and visitor parking), as well as 25 spaces within the facility to accommodate DPW fleet vehicles.

G30 SITE CIVIL/MECHANICAL UTILITIES

G3010 WATER SUPPLY

A. Municipal water will be supplied from City's waterline for the general purposes of the facility. This service will be sized to accommodate fire flow needs of the facility. At a minimum, water will need to be provided to the Administration building, Tempered Storage Building, Cold Storage building, and Salt Brine Structure. Fire hydrants are to be provided as per the 2020 New York State Fire Code.

G3020 SANITARY SEWER

A. The new facility will connect to the City's Sewer system via minimum 6" diameter SDR-35 pvc sanitary pipe, ideally to a manhole. During the planning and design stage, the City's Waste Water Treatment Plant will need to be consulted to determine if the plant is able to accept the anticipated type of discharge from the proposed oil-water separator.

G3030 STORM SEWER

A. Stormwater will be conveyed away from the buildings and roadways through grading and swales and will be attenuated and treated through infiltration through stormwater treatment areas. Depending on the site, the stormwater treatment could consist of dry swales, bioretention areas and planters, infiltration basins, underground storage, or a combination of these features.

G3040 GAS SERVICE

A. It is anticipated that Natural Gas is available to the site, with service size to be based on the expected demand.

G40 SITE ELECTRICAL UTILITIES

G4010 ELECTRICAL DISTRIBUTION

A. The building electric utility service shall be the National Grid Electric.
B. The electrical service is recommended to be 3 phase. The service to the building shall be underground from nearest utility pole.
C. The service voltage to the buildings is anticipated to be 277/480 volts, three phase, four wire.
D. Utility metering will be located at the location of the pad mounted transformer.

G4020 SITE LIGHTING

NARRATIVE OF PROPOSED SITE and BUILDINGS

A. The design intent at this point in the project is to design a Site Lighting plan which uses LEDs for illumination. The site lighting will be designed to the Illuminating Engineering Society (IES) recommended levels of a minimum average of .2 foot-candles (fc), and a uniformity ratio of 4:1. Poles will be approximately 20' mounting height, and will be Full Cutoff / Dark Sky compliant. Pole foundations will be a standard depth and material.

SECTION 4

Summary

SUMMARY

SUMMARY:

C&S has worked closely over the past year (2020) with the key personnel of the Department of Public Works to determine the current and future needs of the Department. We took into consideration the current number and projected number of employees as well as equipment needs over the next ten years. The general consensus was that each of the available sites would not fully meet the goals and needs of the Department as noted in "Section 4 -Review of Site and Site Matrix".

1. The existing site would work well if the City could acquire the adjacent land from National Grid, but it has not been confirmed if they will sell the property. If the City is able to negotiate the purchase of land from National Grid this would be the best of the sites as it would maintain proximity to the 2004 Central (Maintenance) Garage. The only remaining negative would be that this parcel was scoped out recently as part of a proposed Waterfront Revitalization Program.
2. The Watertown Springs Site is long and narrow and size is a definite issue as well as availability and cost.
3. The Industrial Park Site is a nice location and currently owned by the City. Unfortunately, over half the property is designated wetland and the layout of buildings / site amenities may be a struggle.
4. The Water Street Site is in an acceptable location and has enough acreage but has significant variations in site elevation and needs further environmental analyses.
5. C&S performed a high level review of two additional sites, 424 Vanduzee Street, and 570 West Main Street.
    a. The Vanduzee Street location has potential to meet the needs of a DPW Facility. The site currently provides fishing and recreational access to the Black River, any development considered will need to coordinate with the overall City plans for development of recreational areas. Additionally, there is one parcel at this site that is privately owned.
    b. The West Main Street Site has ample area, in a location were the parcels are in need of revitalization. However, the three parcels that make up this site are owned by three separate owners. Furthermore, there is significant demolition at this site that will need to take place, which would also increase project costs.

The aging sub-standard buildings no longer meet today's operational needs. The most recent, the Central Garage (Fleet Building) is a pre-engineered steel building constructed in 2004. Eight of the nine buildings have well exceeded their useful lives. All of the buildings (other than the Central Garage) are very energy inefficient and do not meet the current NYS Energy Code. The main administration building has many inefficiencies including but not limited to functionality, layout of spaces and accessibility.

We shifted our thoughts to keying specifically on the overall requirements for the size of the site and building in hopes that a viable (available and affordable) piece of land may become available in the future. These items are based on the City selecting a new site at some point in the future.

- Site (in the city limits) that is at least 6.5 to7 acres and hopefully fairly flat with minimal environmental concerns.
- 14,000 square foot Administration Building
- 22,000 square foot Tempered Storage Building
- 10,000 square foot Cold Storage Building with a 3,300 s.f. mezzanine
- 6,000 square foot Salt Storage Facility

SUMMARY

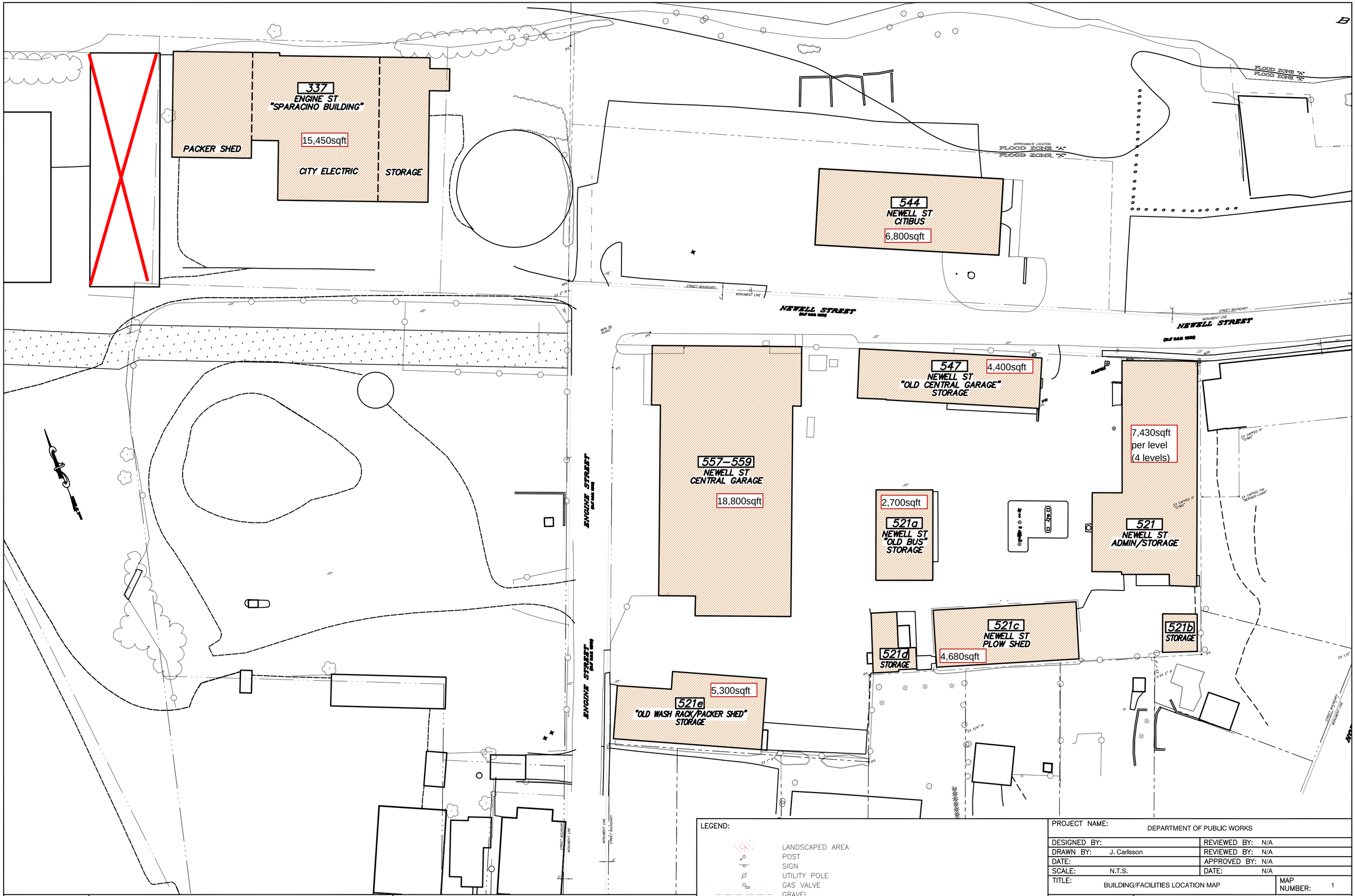
- Outside Storage Areas
- Fueling Facility

Section 6 “Estimate of Probable Cost” provides an estimate based upon the information gathered and documented in Section 5 “Narrative of Proposed Site and Buildings”. This estimate was performed by a third party that specializes in such construction cost estimating. This scope and cost is intended to help the City budget for the future Department of Public Works Facility exclusive of land acquisition costs.

Next Steps …….
Review w/ Pat, Franciska, and Pete

APPENDIX A

EXISTING DPW SITE PLAN



LEGEND:

- LANDSCAPED AREA
- POST
- SIGN
- UTILITY POLE
- GV GAS VALVE
- GRAVEL
- FENCE LINE
- GAS UNDERGROUND GAS

REVISION:	DESCRIPTION OF REVISION:	DATE:	BY:

PROJECT NAME:	DEPARTMENT OF PUBLIC WORKS		
DESIGNED BY:		REVIEWED BY:	N/A
DRAWN BY:	J. Carlsson	REVIEWED BY:	N/A
DATE:		APPROVED BY:	N/A
SCALE:	N.T.S.	DATE:	N/A
TITLE:	BUILDING/FACILITIES LOCATION MAP	MAP NUMBER:	1

MAP NUMBER:	PROJECT NAME:	TITLE:
1	CITY OF WATERTOWN DEPARTMENT OF PUBLIC WORKS WATERTOWN, NEW YORK 13601	DEPARTMENT OF PUBLIC WORKS BUILDINGS/FACILITIES LOCATION MAP

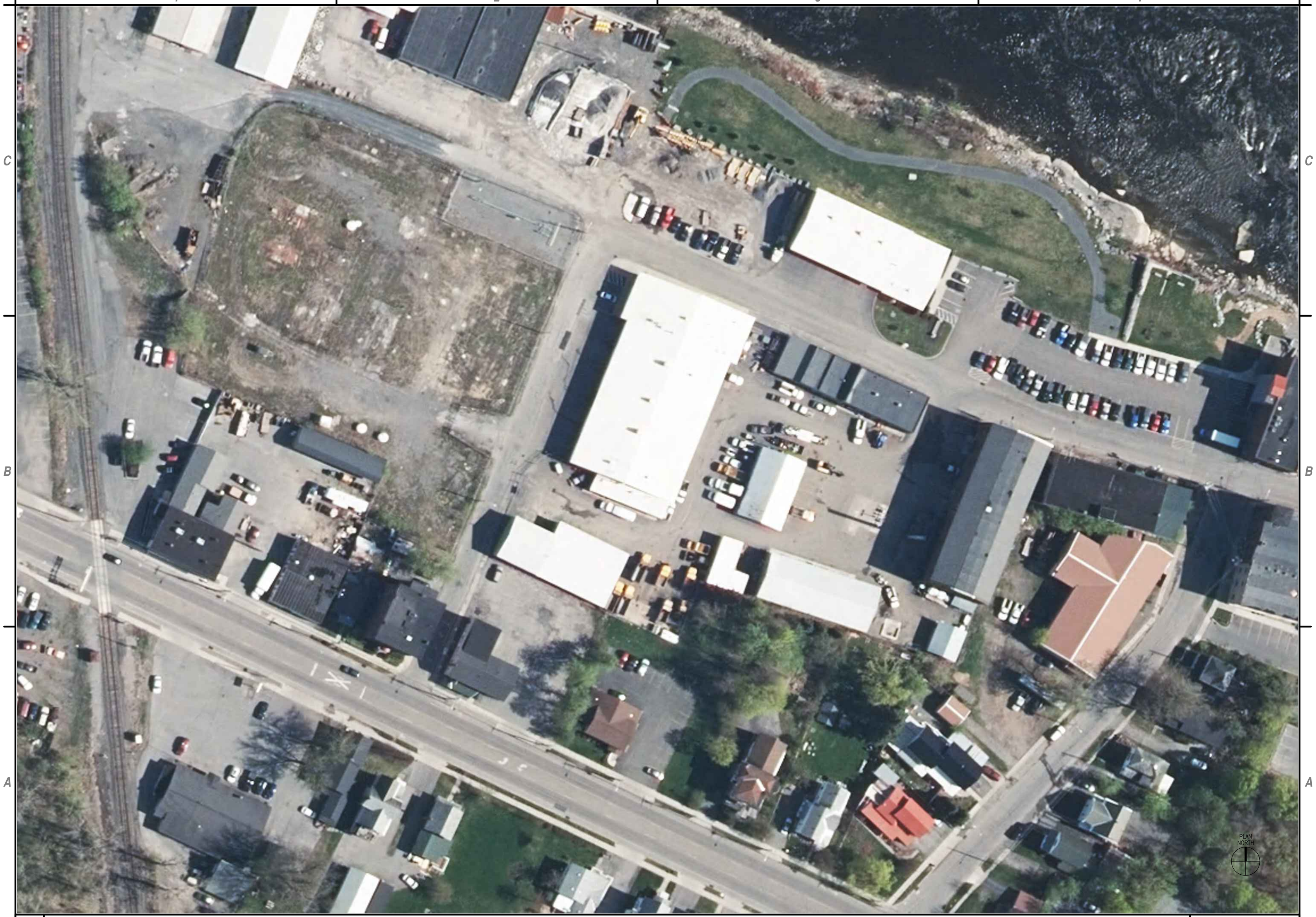
CITY OF WATERTOWN, NEW YORK
DEPARTMENT OF PUBLIC WORKS
ROOM 206, MUNICIPAL BUILDING
245 WASHINGTON STREET
WATERTOWN, NEW YORK 13601

TEL: (315) 785-7770 FAX: (315) 785-7752

J:\Carlsson\DPW Buildings.dwg, printed on 1/30/07.

APPENDIX B

AERIAL VIEW OF EXISTING SITE



A1 NEWELL STREET SITE
SCALE: 1" = 40'-0"

0 40' 80'

Jun 16, 2020 - 2:31pm
F:\Project\129 - City of Watertown\129015001 - Facility Spatial Needs Assessment\Design\CADD\Sheet Files\129015 Site Fig.dwg

C&S COMPANIES
C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

PRELIMINARY
NOT FOR CONSTRUCTION

CITY OF WATERTOWN
DEPARTMENT OF PUBLIC WORKS
SITE REVIEW

MARK	DATE	DESCRIPTION

REVISIONS

PROJECT NO: 129.015.001
DATE: JUNE, 2020
DRAWN BY:
DESIGNED BY:
CHECKED BY:

ORTHIMAGERY
SITE
PLAN

C-1

SECTION 2

Existing Building Photos

Sign Shop – 2nd Floor (Admin Bldg)

Sign Shop – 2nd Floor (Admin Bldg)

Sign Shop Office – 2nd Floor (Admin Bldg)

Sign Shop Office – 2nd Floor (Admin Bldg)

Carpentry Shop – 2nd Floor

Carpentry Shop – 2nd Floor (Admin Bldg)

Carpentry Shop – 2nd Floor (Admin Bldg)

Storage – 2nd Floor (Admin Bldg)

Record Storage – 3rd Floor

Tote Storage – 3rd Floor (Admin Bldg)

Tote Parts Storage – 3rd Floor (Admin Bldg)

Tote/Barricade Storage – 3rd Floor (Admin Bldg)

3rd Floor (Admin Bldg)

Barricade Storage – 3rd Floor (Admin Bldg)

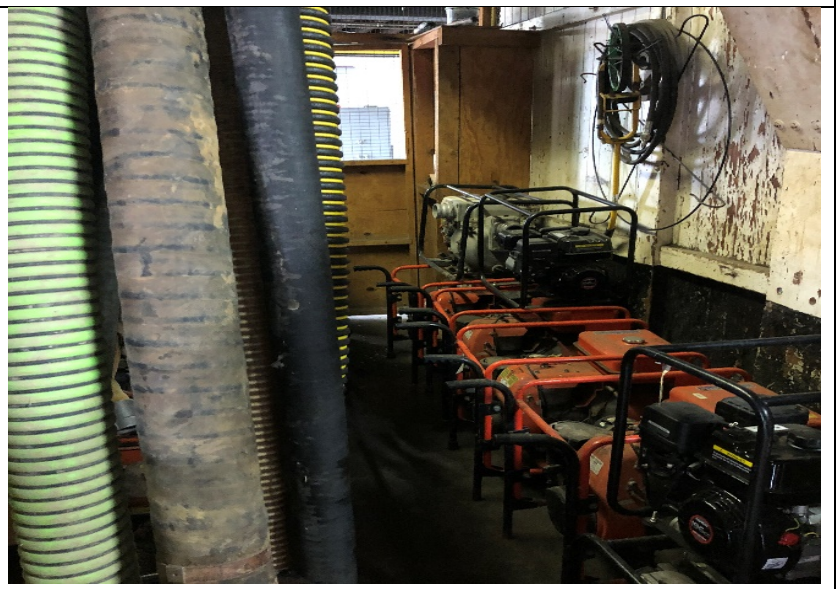
Sign Storage – 3rd Floor (Admin Bldg)

Sign Storage – 3rd Floor (Admin Bldg)

Christmas Decoration – 4th Floor (Admin Bldg)

Christmas Decoration – 4th Floor (Admin Bldg)

Pumps – 1st Floor (Admin Bldg)

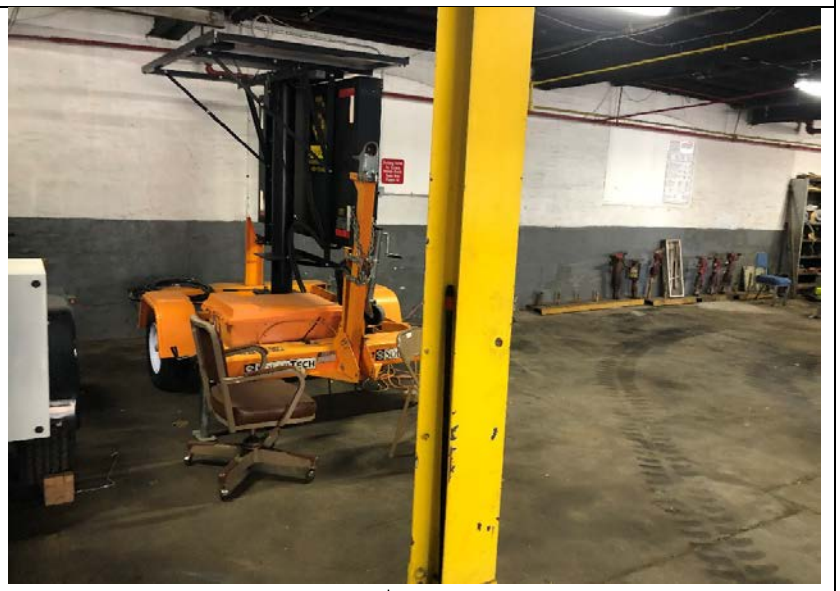


Generators – 1st Floor (Admin Bldg)

Break Room – 1st Floor (Admin Bldg)

Break Room – 1st Floor (Admin Bldg)

Jetter Trailer – 1st Floor (Admin Bldg)



Road Signs – 1st Floor (Admin Bldg)

1st Floor (Admin Bldg)

Old Central Garage 544

Old Central Garage 547

Old Central Garage 547

John Deere Tractor (Old Central Garage) 547

Bob Cat & Attachments (Old Bus Storage) 521A 2,700 sf

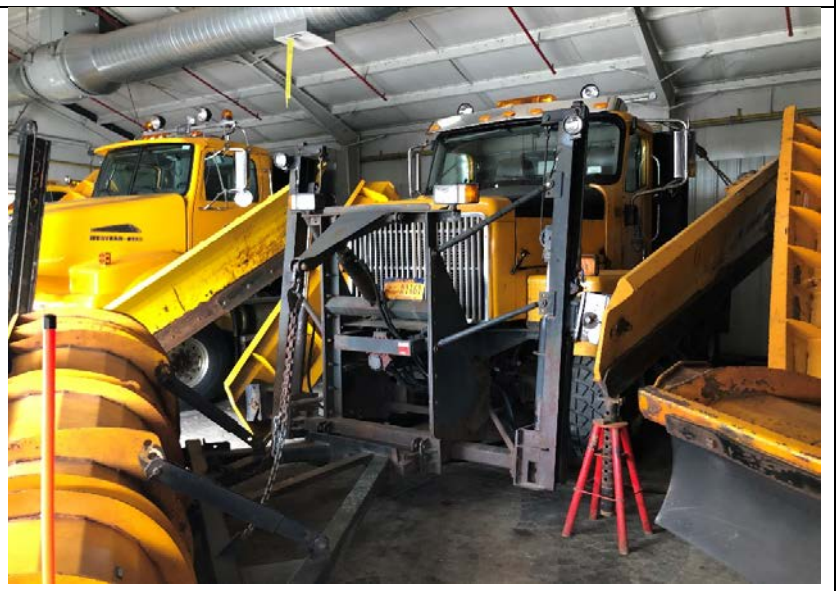
Tanker Truck (Old Bus Storage) 521a

Tanker Truck (Old Bus Storage) 521a

Fueling Station

Old Central Garage 547

Plow Shed 521c



Plow Shed 521c

Plow Shed 521c

Risers & Manhole Cover
Outside Stora

Packer Shed 521e

Packer Shed 521e

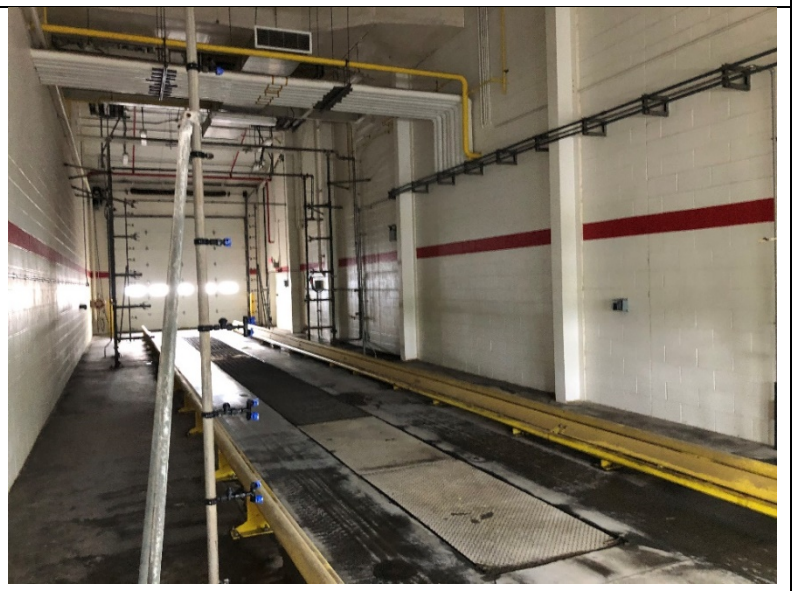
Packer Shed 521e

Packer Shed 521e

Crack Filler (Packer Shed) 521e

Brine Truck (Packer Shed) 521e

Pressure Wash (Packer Shed) 521e



Wash Bay 557-559

Fleet Building 557-559

Fleet Building 557-559

Fleet Building 557-559

Fleet Building 557-559

Sander Boxes

Generator Plant/Tire Storage 547

Generator Plant/Tire Storage 547

Generator Plant/Tire Storage 547

Generator Plant/Tire Storage 547

Fleet Building 557-559

Fleet Building 557-559

Fleet Building 557-559

Fleet Building 557-559

Fleet Building 557-559

Fleet Building 557-559

Fleet Building 557-559

Fleet Building 557-559

Fleet Building 557-559

Fleet Building 557-559

Outside Storage Along River

Sparacino Bldg 337

Pipe Storage (Sparacino Bldg) 337

Storage (Sparacino Bldg) 337

City Electric 337

City Electric 337

City Electric 337

Break Room (City Electric) 337

City Electric 337

City Electric 337

Shop - City Electric 337

Shop - City Electric 337

City Electric 337

Packer Shed 337

Packer Shed 337

Packer Shed 337

SECTION 3

Spatial Analyses

City of Watertown - Department of Public Works

DPW -FACILITY SPATIAL NEEDS ASSESSMENT and SITE RECOMMENDATIONS

Room / Space	Qty	Occupants	Size	S.F.	Remarks
ADMINISTRATIVE BUILDING					
Superintendent	1	1	14x16	224	
Sr. Account Clerk	1	1	10x12	120	
Account Clerk (part time)	1	1	10x10	100	
Sr. Eng Tech	1	1	12x14	168	
Stock Room	1	1	8x10	80	
Copy / Mail	1	2 to 3	10x12	120	
Vestibule / Waiting	1	2	8x10	80	
Reception	1	3-Feb	10x12	120	
Corridors	~	~	~	700	
Workstaions	8	8	12x14	168	
Mens Locker Room	1	42	10x30	130	
Mens Gang Toilet/Shower	1	42	10x15	150	1-Toilet 2-Urinals 2-Lavs 2-Sh
Womens Locker Room	1	8	10x10	100	
Womens Gang Toilet / Shower	1	8	10x15	150	3-Toilet 2-Lavs 2-Showers
Janitors Closet	1	1	7x8	56	
Mechanical Room	1		10x14	140	
Electrical Service Room	1		10x10	100	
Sprinkler Room	1		8x10	80	
Break Rm w/ Kitchenette / Vend	1	50	15x50	750	
Training / Multi-Prpose	1	30	14x32	448	
Small Meeting/ File	1	4	10x12	120	
ADMINISTRATION AREA				**4,104**	
Equipment Storage				600	
(pumps,generators, grass seed)					
Carpenter Shop	1	4-Feb	20x48	960	
Sign Maintenance / Fabrication	1	2 to 4	17x58	986	
Office with comp/plotter	1	2 to 4	12x14	168	
Traffic Signal /Lighting Maint.	1	2 to 4	50x100	5,000	
Electrical Office	1	2 to 4	10x14	140	
Elect. Work Shop	1	2 to 4	50x25	1,250	
				9,104	
ADMINISTRATION BUILDING			**TOTAL**	**13,208**	
			SAY	**14,000**	

City of Watertown - Department of Public Works

DPW -FACILITY SPATIAL NEEDS ASSESSMENT and SITE RECOMMENDATIONS

Room / Space	Qty	Occupants	Size	S.F.	Remarks
TEMPERED STORAGE (55 Degrees)					
Concrete Form Work	1		20x20	400	
Plow Trucks	7		20x45	6,300	
Tandem Dump Trucks	4		20x45	3,600	
Bob Cats	4		5'x9'	180	
Sander Dump Truck (single axle)	5		20x45	4,500	
Pick Up Trucks	15		7x20	2,100	
Front End Loaders	4		7x26	728	
Garbage Trucks	6		7x30	1,260	
Elec. Small Bucket	1		7x28	196	
Elec. Pick Ups	2		6'x16'	192	
Sewer Cleaner	1		7x40	280	
Pumps & Hoses	4			1,200	
Message Boards	6		7x10	420	
Portable Jetter	1		25x10	250	
Double Auger Snow Blower	2		30x10	600	
John Deere Tractor w/ Attach.	1		6x15	90	
Workshop	1		12x16	192	
Hot Box	1		7x16	112	
Crack Sealer	1		7x16	112	
Cold Patch (storage area)	1		10x10	100	
Welding Area	1				
Heated Pressure Washer	1		10x10	100	
				22,912	
			SAY	**24,000**	

City of Watertown - Department of Public Works

DPW -FACILITY SPATIAL NEEDS ASSESSMENT and SITE RECOMMENDATIONS

Room / Space	Qty	Occupants	Size	S.F.	Remarks
COLD STORAGE					
Sweepers	2		25x30	1,500	
Pavers	1		10x24	240	
Roller	3		7x30	630	
Water Truck	1		7x25	175	
Backhoes	3		7x24	504	
Mowers / Equipment			50x50	2,500	
Excavators	2		7x24	336	
Bulldozer	1		12x26	312	
Garbage Truck	2		7x30	420	
Dump Truck (single axle)	5		8x21	840	
Elec. Big Bucket Truck	1		8x21	168	
Elec. Digger	1		8x21	168	
Tire Storage	1		20x30	600	
Genearator	1		10x20	200	235kw
Sidewalk Forms	1		10x15	150	
Sewer Rod Machine	1		22x10	220	
Tack Coater	1		6x12	72	trailer
Deicer Dump Truck	1		8x21	168	
GROSS FLOOR AREA				**9,203**	
			SAY	**10,000**	
Christmas Decorations (Storage)	1			1,800	(mezzanine)
Trash Containers	150		2x4	1,200	(mezzanine)
Barricades	200			300	200 ends 100 rails (mezz.)
MEZZANINE				**3,300**	

City of Watertown - Department of Public Works

DPW -FACILITY SPATIAL NEEDS ASSESSMENT and SITE RECOMMENDATIONS

Room / Space	Qty	Occupants	Size	S.F.	Remarks
OUTSIDE STORAGE					
Buckets	~	~	~	500	
Attachments	~	~	~	500	
Road Tractor Trailer	1	~	7x60	420	power to plug in
Flat Bed Utility Trailers	8	~	7x16	896	
Manhole Rims and Covers	1	~	~	200	
Air Compressors	3	~	10x16	480	
Sander Boxes	5	~	7x14	490	
Shoring Boxes	5	~	7x20	700	
Beet Heat	1	~	~	100	900 gal
Beet Heat	1	~	~	100	1800 gal
Beet Heat	1	~	~	100	2000 gal
Liquid Sodium Chlorine	1	~	~	100	1800 gal
Salt Storage Facility	1			6,000	2,000 tons
Fueling Facility	1	~	100x100	10,000	
Gas					3,000 gal
Diesel					7,000 gal
TOTAL (exclusive of parking / circulation)				**20,586**	

EXHIBIT E

Estimate of Probable Cost

FEASIBILITY ESTIMATE

FACILITY SPACIAL NEEDS ASSESSMENT AND SITE RECOMMENDATIONS
CITY OF WATERTOWN DEPARTMENT OF PUBLIC WORKS

WATERTOWN, NY

PREPARED FOR:
C&S COMPANIES

PROJECT NO: 20-0046a-0254

March 11, 2021
(Revision 1)

Trophy Point, LLC
Construction Services & Consulting

4588 South Park Avenue
Blasdell, NY 14219
Phone: (716) 823-0006
Fax: (716) 831-0001

787 Pine Valley Drive, Suite A
Pittsburgh, PA 15239
Phone: (716) 436-5571
Fax: (716) 831-0001

WWW.TROPHYPOINT.COM

PROJECT SUMMARY	TOTAL COST
DPW SITE	**$ 14,143,840**

ESTIMATE NOTES / ASSUMPTIONS / CLARIFICATIONS

- BASED ON C&S COMPANIES FEASIBILITY DOCUMENTS DATED 02/05/2021.
- NEW YORK STATE PREVAILING WAGE RATES FOR JEFFERSON COUNTY.
- ESTIMATE PRICED IN TODAY'S DOLLAR VALUES
- NORMAL WORKING HOURS AND CONDITIONS; EXCLUDES ANY PREMIUMS FOR A CONDENSED CONSTRUCTION SCHEDULE.
- COMPETITIVE BIDDING SCENARIO.
- PREMISES TO BE VACANT DURING CONSTRUCTION.

EXCLUSIONS:

- ESCALATION RATE
- SOFT COSTS (DESIGN FEES, ETC.)
- CONSTRUCTION CONTINGENCY (OWNER CHANGE ORDER RESERVE)
- CONSTRUCTION MANAGER FEES, MARKUPS OR GENERAL CONDITIONS
- PROJECT LABOR AGREEMENTS
- ROCK EXCAVATION (IF ENCOUNTERED)
- POOR / UNSUITABLE SOILS (IF ENCOUNTERED)
- SOIL REMEDIATION (IF SUSPECT SOILS ARE ENCOUNTERED)
- EXISTING BUILDING DEMOLITION
- FF&E

Note: This estimate represents a reasonable opinion of cost based on several public and proprietary sources of information. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack of surplus bidders, perception of risk, and so on. Consequently, this estimate is expected to fall within the range of bids from multiple competitive contractors or subcontractors. However, we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

DPW SUMMARY

ADMINISTRATIVE BUILDING	14,000	SF	X	$320	/SF	$ 4,480,000
TEMPERED STORAGE BUILDING	24,000	SF	X	$200	/SF	$ 4,800,000
COLD STORAGE BUILDING	13,300	SF	X	$150	/SF	$ 1,995,000
SALT STORAGE BUILDINGS	10,144	SF	X	$110	/SF	$ 1,115,840
FUELING FACILITY	1,000	SF	X	$330	/SF	$ 330,000
SITE CLEARING	7	ACRES	X	$9,500	/ACRE	$ 66,500
SITE GRADING	7	ACRES	X	$9,500	/ACRE	$ 66,500
SITE PAVING AND PARKING	10,000	SY	X	$50	/SY	$ 500,000
SITE AMENITIES	1	ALLOW				$ 150,000
WATER SERVICE	1	ALLOW				$ 75,000
SANITARY SERVICE	1	ALLOW				$ 90,000
STORM SERVICE	1	ALLOW				$ 150,000
GAS SERVICE	1	ALLOW				$ 50,000
ELECTRICAL SERVICE	1	ALLOW				$ 75,000
EMERGENCY GENERATOR	1	ALLOW				$ 125,000
COMMUNICATION SERVICE	1	ALLOW				$ 25,000
SITE LIGHTING	1	ALLOW				$ 50,000
TOTAL PROJECT COST						**$ 14,143,840**

ADMINISTRATIVE BUILDING			TOTAL COST
DIVISION 3 - CONCRETE			$20.00
DIVISION 4 - MASONRY			$10.00
DIVISION 5 - METALS			$10.00
DIVISION 6 - WOOD AND PLASTICS			$5.00
DIVISION 7 - THERMAL & MOISTURE PROTECTION			$10.00
DIVISION 8 - OPENINGS			$15.00
DIVISION 9 - FINISHES			$20.00
DIVISION 10 - SPECIALTIES			$2.50
DIVISION 11 - EQUIPMENT			$5.00
DIVISION 12 - FURNISHINGS			$5.00
DIVISION 13 - SPECIAL CONSTRUCTION			$40.00
DIVISION 21 - FIRE PROTECTION			$5.00
DIVISION 22 - PLUMBING			$20.00
DIVISION 23 - HVAC			$35.00
DIVISION 26 - ELECTRICAL			$25.00
			$227.50
GENERAL CONDITIONS	8.0%		$18.20
OVERHEAD & PROFIT	8.0%		$19.66
DESIGN CONTINGENCY	15.0%		$39.80
BID CONTINGENCY	5.0%		$15.26
			$320.42
		SAY	**$320.00**

TEMPERED STORAGE BUILDING			TOTAL COST
DIVISION 3 - CONCRETE			$20.00
DIVISION 4 - MASONRY			$7.50
DIVISION 5 - METALS			$7.50
DIVISION 6 - WOOD AND PLASTICS			$2.50
DIVISION 7 - THERMAL & MOISTURE PROTECTION			$10.00
DIVISION 8 - OPENINGS			$10.00
DIVISION 9 - FINISHES			$10.00
DIVISION 10 - SPECIALTIES			$2.50
DIVISION 11 - EQUIPMENT			$2.50
DIVISION 12 - FURNISHINGS			$2.50
DIVISION 13 - SPECIAL CONSTRUCTION			$40.00
DIVISION 21 - FIRE PROTECTION			$4.00
DIVISION 22 - PLUMBING			$4.00
DIVISION 23 - HVAC			$3.50
DIVISION 26 - ELECTRICAL			$15.00
			$141.50
GENERAL CONDITIONS	8.0%		$11.32
OVERHEAD & PROFIT	8.0%		$12.23
DESIGN CONTINGENCY	15.0%		$24.76
BID CONTINGENCY	5.0%		$9.49
			$199.29
		SAY	**$200.00**

COLD STORAGE BUILDING			TOTAL COST
DIVISION 3 - CONCRETE			$20.00
DIVISION 4 - MASONRY			$5.00
DIVISION 5 - METALS			$10.00
DIVISION 6 - WOOD AND PLASTICS			$2.50
DIVISION 7 - THERMAL & MOISTURE PROTECTION			$5.00
DIVISION 8 - OPENINGS			$5.00
DIVISION 9 - FINISHES			$5.00
DIVISION 10 - SPECIALTIES			$2.50
DIVISION 11 - EQUIPMENT			$2.50
DIVISION 13 - SPECIAL CONSTRUCTION			$30.00
DIVISION 21 - FIRE PROTECTION			$5.50
DIVISION 26 - ELECTRICAL			$12.50
			$105.50
GENERAL CONDITIONS	8.0%		$8.44
OVERHEAD & PROFIT	8.0%		$9.12
DESIGN CONTINGENCY	15.0%		$18.46
BID CONTINGENCY	5.0%		$7.08
			$148.59
		SAY	**$150.00**

SALT STORAGE BUILDING			TOTAL COST
DIVISION 3 - CONCRETE			$30.00
DIVISION 5 - METALS			$7.50
DIVISION 7 - THERMAL & MOISTURE PROTECTION			$5.00
DIVISION 9 - FINISHES			$2.50
DIVISION 13 - SPECIAL CONSTRUCTION			$25.00
DIVISION 26 - ELECTRICAL			$7.50
			$77.50
GENERAL CONDITIONS	8.0%		$6.20
OVERHEAD & PROFIT	8.0%		$6.70
DESIGN CONTINGENCY	15.0%		$13.56
BID CONTINGENCY	5.0%		$5.20
			$109.15
		SAY	**$110.00**

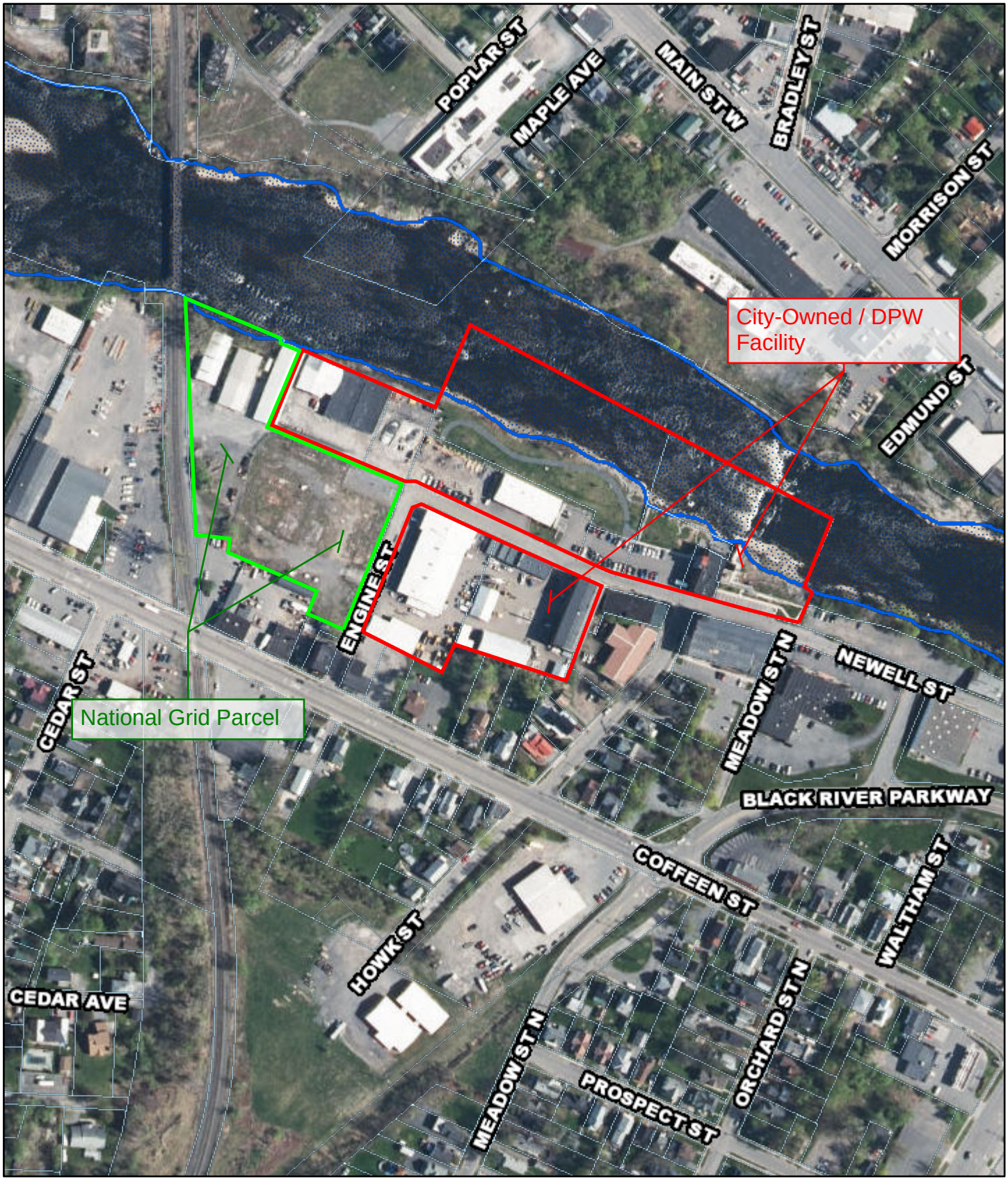
FUELING FACILITY			TOTAL COST
DIVISION 3 - CONCRETE			$15.00
DIVISION 5 - METALS			$30.00
DIVISION 7 - THERMAL & MOISTURE PROTECTION			$15.00
DIVISION 9 - FINISHES			$5.00
DIVISION 10 - SPECIALTIES			$5.00
DIVISION 11 - EQUIPMENT			$75.00
DIVISION 22 - PLUMBING			$70.00
DIVISION 26 - ELECTRICAL			$20.00
			$235.00
GENERAL CONDITIONS	8.0%		$18.80
OVERHEAD & PROFIT	8.0%		$20.30
DESIGN CONTINGENCY	15.0%		$41.12
BID CONTINGENCY	5.0%		$15.76
			$330.98
		SAY	**$330.00**

Appendix A

- Site Location (from City of Watertown GIS)
- Blank SEQR Environmental Form with partially filled-in Data
- FEMA Mapping Information
- Information from the State Historic Preservation Office
- USDA Soil Report for the Site

Site #1: Existing DPW Site

ArcGIS Web Map



6/17/2020 8:27:00 AM

1:4,514

0 150 300 600 ft

0 45 90 180 m

Black River

City Boundary

Parcels

ROADS

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Web AppBuilder for ArcGIS
New York State, Maxar |

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:		
Project Location (describe, and attach a location map):		
Brief Description of Proposed Action:		
Name of Applicant or Sponsor:	Telephone: E-Mail:	
Address:		
City/PO: q	State:	Zip Code:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☐ Wetland ☐ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Indiana Bat, Northern Long-...	☐	☑
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: _____ _____		
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: _____ _____	☐	☐
~~1~~9. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____	☐	☐
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____	☐	☑

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

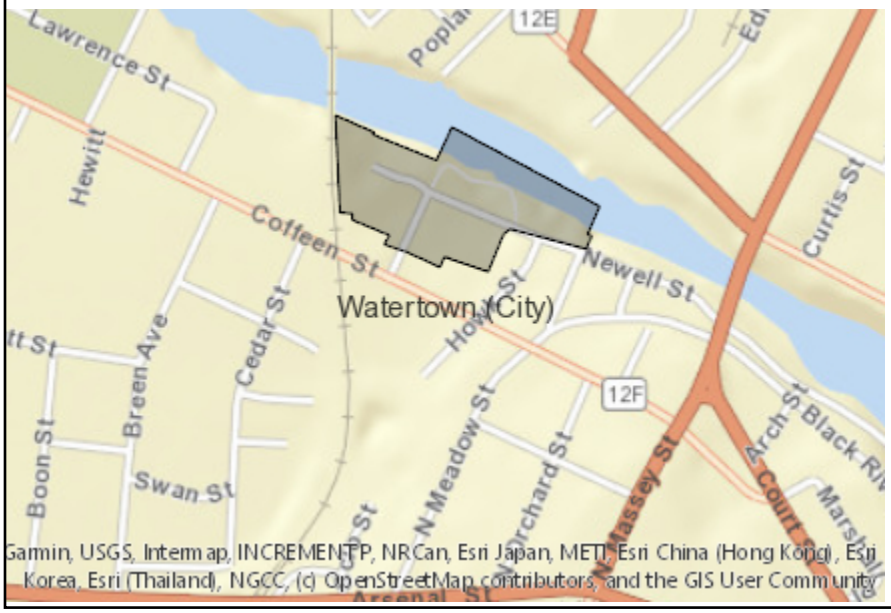
Applicant/sponsor/name: _____ Date: _____

Signature: _____ Title: _____

PRINT FORM

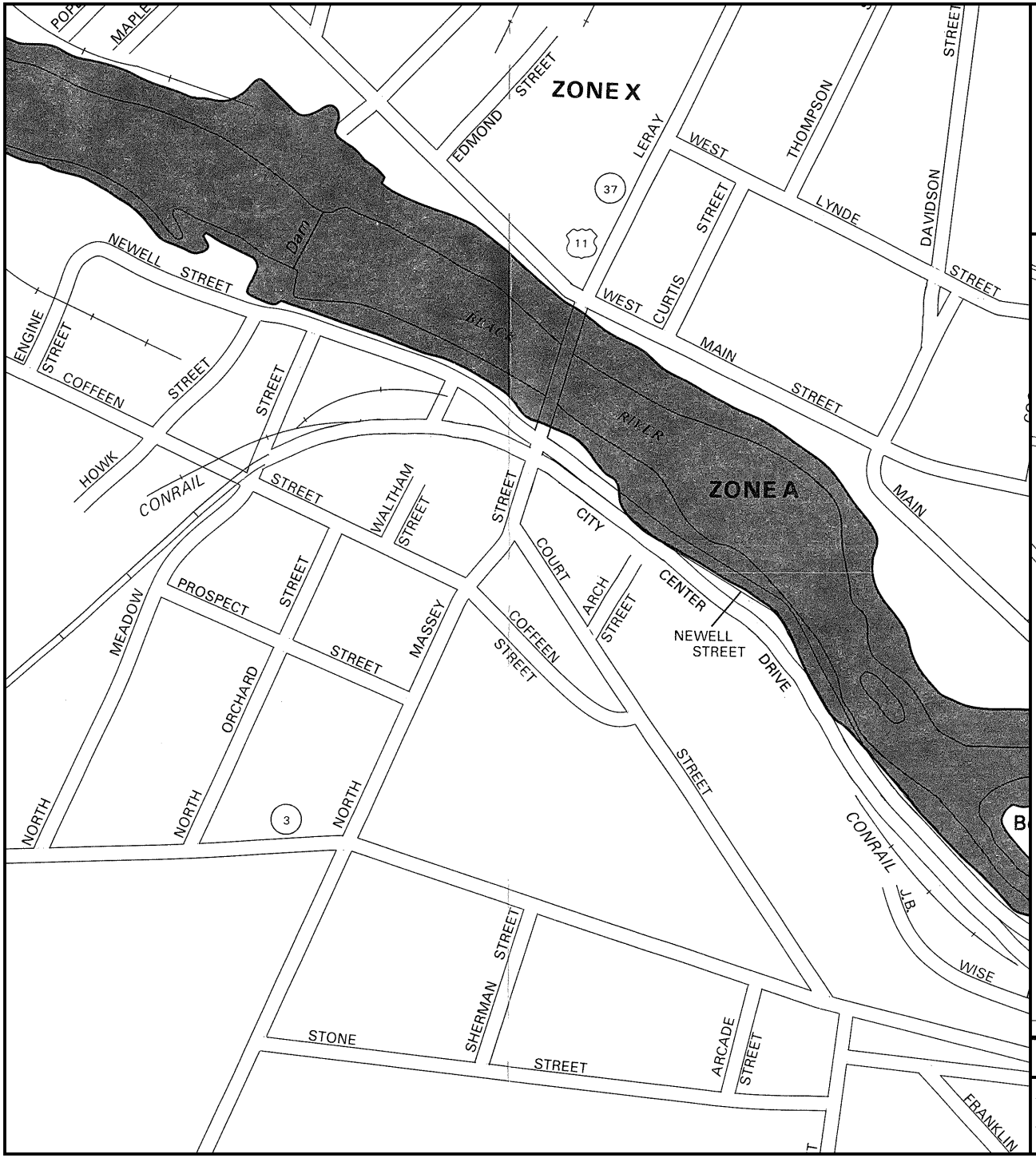
EAF Mapper Summary Report

Wednesday, July 8, 2020 3:43 PM



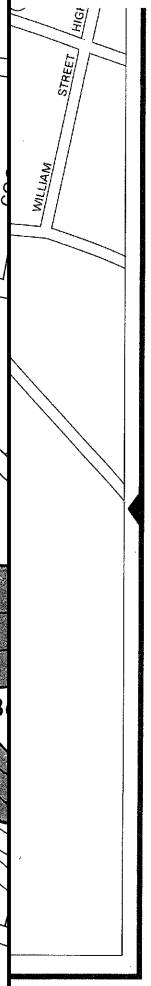
Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the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

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	Yes
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	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



APPROXIMATE SCALE

500 0 500 FEET



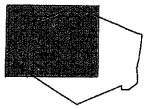
NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

CITY OF
WATERTOWN,
NEW YORK
JEFFERSON COUNTY

PANEL 1 OF 4
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

COMMUNITY-PANEL NUMBER
360354 0001 E

MAP REVISED:
JANUARY 17, 1990

BEST AVAILABLE COPY AT THIS TIME

Federal Emergency Management Agency

CRIS NYS Cultural Resource Information System

HOME SUBMIT SEARCH COMMUNICATE

Criteria | Spatial | Results

Lookup | USN | Survey | National Register | Library

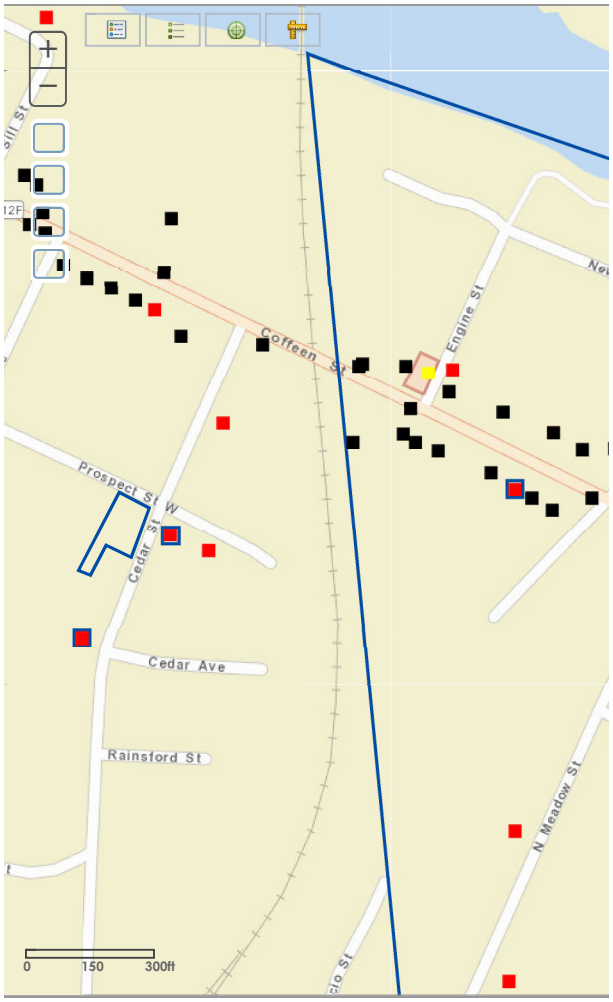
USN Number: ex: 00101.001001

National Register Number: ex: 94NR00710

Survey Number: ex: 14SR00001

Submission Token: ex: ABCDEF012345

Search Reset



NRE

BUILDING-STRUCTURE INVENTORY FORM

NYS OFFICE OF PARKS, RECREATION
& HISTORIC PRESERVATION
DIVISION FOR HISTORIC PRESERVATION
(518) 474-0479

FOR OFFICE USE ONLY
UNIQUE SITE NO. 04540.000932
QUAD
SERIES
NEG. NO.

I

YOUR NAME: Sheldon S. Williams DATE:
P.O. Box 304
YOUR ADDRESS: Sackets Harbor, NY 13685 TELEPHONE: 315-646-3712

ORGANIZATION (if any):

* *

IDENTIFICATION

1. BUILDING NAME(S): Union Carriage and Gear Co. (Department of Public Works headquarters)
2. COUNTY: Jefferson ~~TOWN~~/CITY: Watertown VILLAGE:
3. STREET LOCATION: 521 Newell Street
4. OWNERSHIP: a. public ☑ b. private ☐
5. PRESENT OWNER: City of Watertown ADDRESS:
6. USE: Original: Carriage factory Present: D.P.W.
7. ACCESSIBILITY TO PUBLIC: Exterior visible from public road: Yes ☑ No ☐
   Interior accessible: Explain By appointment

DESCRIPTION

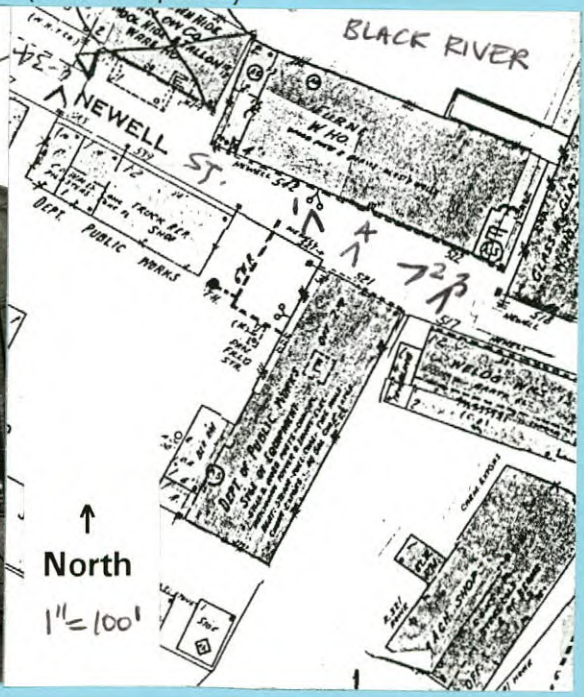
8. BUILDING MATERIAL: a. clapboard ☐ b. stone ☐ c. brick ☑ d. board and batten ☐
   e. cobblestone ☐ f. shingles ☐ g. stucco ☐ other:

9. STRUCTURAL SYSTEM: (if known):
   a. wood frame with interlocking joints ☐
   b. wood frame with light members ☐
   c. masonry load bearing walls ☑
   d. metal (explain)
   e. other

10. CONDITION: a. excellent ☐ b. good ☐ c. fair ☑ d. deteriorated ☐
11. INTEGRITY: a. original site ☑ b. moved ☐ if so, when?
    c. list major alterations and dates (if known): Several openings have been bricked up, others have been widened to accommodate overhead doors, mid-20th Century. The gable parapets may have been shortened.

12. PHOTO:

13. MAP: (Sanborn Map No. 9)



14. THREATS TO BUILDING: a. none known ☑ b. zoning ☐ c. roads ☐
d. developers ☐ e. deterioration ☐
f. other: _____

15. RELATED OUTBUILDINGS AND PROPERTY:
a. barn ☐ b. carriage house ☐ c. garage ☐
d. privy ☐ e. shed ☐ f. greenhouse ☐
g. shop ☐ h. gardens ☐
i. landscape features: _____
j. other: Part of multi-building D.P.W. property

16. SURROUNDINGS OF THE BUILDING: (check more than one if necessary)
a. open land ☐ b. woodland ☐
c. scattered buildings ☐
d. densely built-up ☐ e. commercial ☐
f. industrial ☑ g. residential ☐
h. other: _____

17. INTERRELATIONSHIP OF BUILDING AND SURROUNDINGS:
(Indicate if building or structure is in an historic district)
This building is the headquarters of a compound of D.P.W. buildings, sheds and material yards. Its relationship to the street is similar to other 3-4 story brick mill buildings to the east and across the street. To the west is the balance of the D.P.W. compound.

18. OTHER NOTABLE FEATURES OF BUILDING AND SITE (including interior features if known):
This 3½ story brick building is notable for its parapetted gable street facade with stone brackets. The street facade is divided by brick pilasters into three bays with the side bays gabled and the center bay flat on top. The side facades are divided by brick pilasters into 10 bays. Double hung windows are arranged in pairs with 9 over 9 sash. Each window opening is spanned by a shallow brick arch. The sills are cast iron.

SIGNIFICANCE:

19. DATE OF INITIAL CONSTRUCTION: 1888

ARCHITECT: _____

BUILDER: _____

20. HISTORICAL AND ARCHITECTURAL IMPORTANCE:

The building is historically important as a part of Watertown's important carriage and wagon industry. The Union Carriage and Gear Co. was founded as the Maud S. Gear Co. in 1885 and built this new plant in 1888. Over the next decade the company expanded, but with the growing use of the automobile, the company, like other Watertown carriage makers, became insolvent by 1917. By the 1930's the building was being used by the City Department of Public Works.

The building is architecturally significant for its unique gable profile, the dignified massing of its elevations and the arrangement of the windows on its front facade.

21. SOURCES:

22. THEME:

12. Additional Photos

12.2 View from the northeast

12.3 View from the northeast

12. Additional Photos

12.4 View from the northeast, detail

NRE

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NYS OFFICE OF PARKS, RECREATION
& HISTORIC PRESERVATION
DIVISION FOR HISTORIC PRESERVATION
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FOR OFFICE USE ONLY
UNIQUE SITE NO. 04640.000929
QUAD _____
SERIES _____
NEG. NO.

YOUR NAME: Sheldon S. Williams DATE: _____
YOUR ADDRESS: P.O. Box 304 Sackets Harbor, NY 13685 TELEPHONE: 315-646-3712

ORGANIZATION (if any): _____

I

* *

IDENTIFICATION

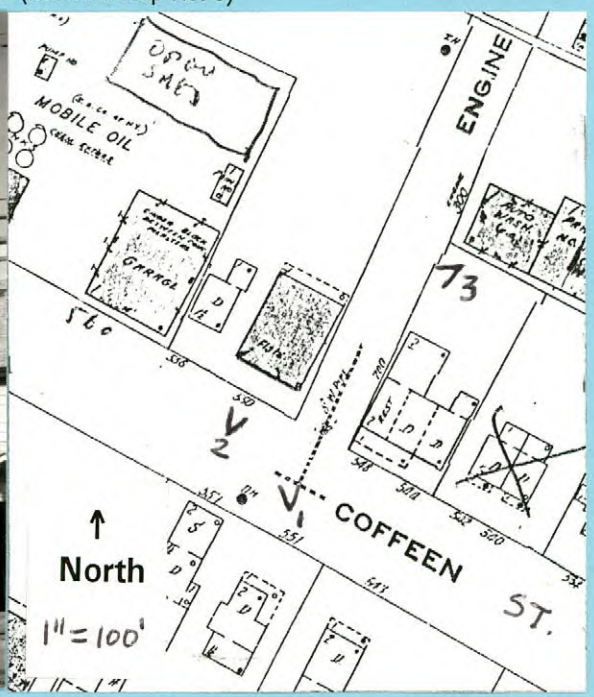
1. BUILDING NAME(S): _____
2. COUNTY: Jefferson ~~TOWN~~/CITY: Watertown VILLAGE: _____
3. STREET LOCATION: 550 Coffeen Street
4. OWNERSHIP: a. public ☐ b. private ☑
5. PRESENT OWNER: Watertown Redevelopment Co. ADDRESS: 309 Mill St., Watertown, NY 13601
6. USE: Original: residential flats Present: apartments
7. ACCESSIBILITY TO PUBLIC: Exterior visible from public road: Yes ☑ No ☐
   Interior accessible: Explain _____

DESCRIPTION

8. BUILDING MATERIAL: a. clapboard ☐ b. stone ☐ c. brick ☑ d. board and batten ☐
   e. cobblestone ☐ f. shingles ☐ g. stucco ☐ other: _____
9. STRUCTURAL SYSTEM: (if known):
   a. wood frame with interlocking joints ☐
   b. wood frame with light members ☐
   c. masonry load bearing walls ☑
   d. metal (explain) _____
   e. other _____
10. CONDITION: a. excellent ☑ b. good ☐ c. fair ☐ d. deteriorated ☐
11. INTEGRITY: a. original site ☑ b. moved ☐ if so, when? _____
    c. list major alterations and dates (if known): Window sash, entrance doorway and rear porches replaced, 1980's.

12. PHOTO:

13. MAP: (Sanborn Map No. 9)



14. THREATS TO BUILDING: a. none known ☑ b. zoning ☐ c. roads ☐
d. developers ☐ e. deterioration ☐
f. other: _____

15. RELATED OUTBUILDINGS AND PROPERTY:
a. barn ☐ b. carriage house ☐ c. garage ☐
d. privy ☐ e. shed ☐ f. greenhouse ☐
g. shop ☐ h. gardens ☐
i. landscape features: _____
j. other: N/A

16. SURROUNDINGS OF THE BUILDING: (check more than one if necessary)
a. open land ☐ b. woodland ☐
c. scattered buildings ☐
d. densely built-up ☐ e. commercial ☑
f. industrial ☐ g. residential ☑
h. other: _____

17. INTERRELATIONSHIP OF BUILDING AND SURROUNDINGS:
(Indicate if building or structure is in an historic district)
This 8-unit apartment building is located on a busy street with mixed detached residences and commercial buildings and parking lots. To the east across Engine St. is a tavern; across the street are several detached mid 19th Century residences; to the west is a small 1840's residence and beyond that several commercial buildings and the railroad. Most buildings in the area have been significantly altered.

18. OTHER NOTABLE FEATURES OF BUILDING AND SITE (including interior features if known):
This four story brick apartment building is notable for its cornice with modillions facing Coffeen Street; the cast stone lintels over the windows, with projecting keystones, in the front elevation; cast stone arches with keystones over the top story windows; and the rusticated stone foundation with dressed stone water table. The window sills are cast iron.

SIGNIFICANCE:

19. DATE OF INITIAL CONSTRUCTION: 1906

ARCHITECT: _____

BUILDER: _____

20. HISTORICAL AND ARCHITECTURAL IMPORTANCE:

This building is significant as a substantially intact early 20th Century apartment building built on what was by then a busy thoroughfare of mixed residential and commercial use. One block to the west and two blocks to the east were active rail lines, and nearby along the river were nearly a dozen busy mills. This apartment building probably represented an improved housing option for clerks and others employed nearby in comparison to the boarding and rooming houses otherwise available in the neighborhood. The architecture of the building with its mild classical elements reinforced the sense of prestige and propriety desired by the clientele of such a facility.

21. SOURCES:

22. THEME:

12. Additional Photos

12.2 View from south

12.3 View from northeast

United States Department of Agriculture

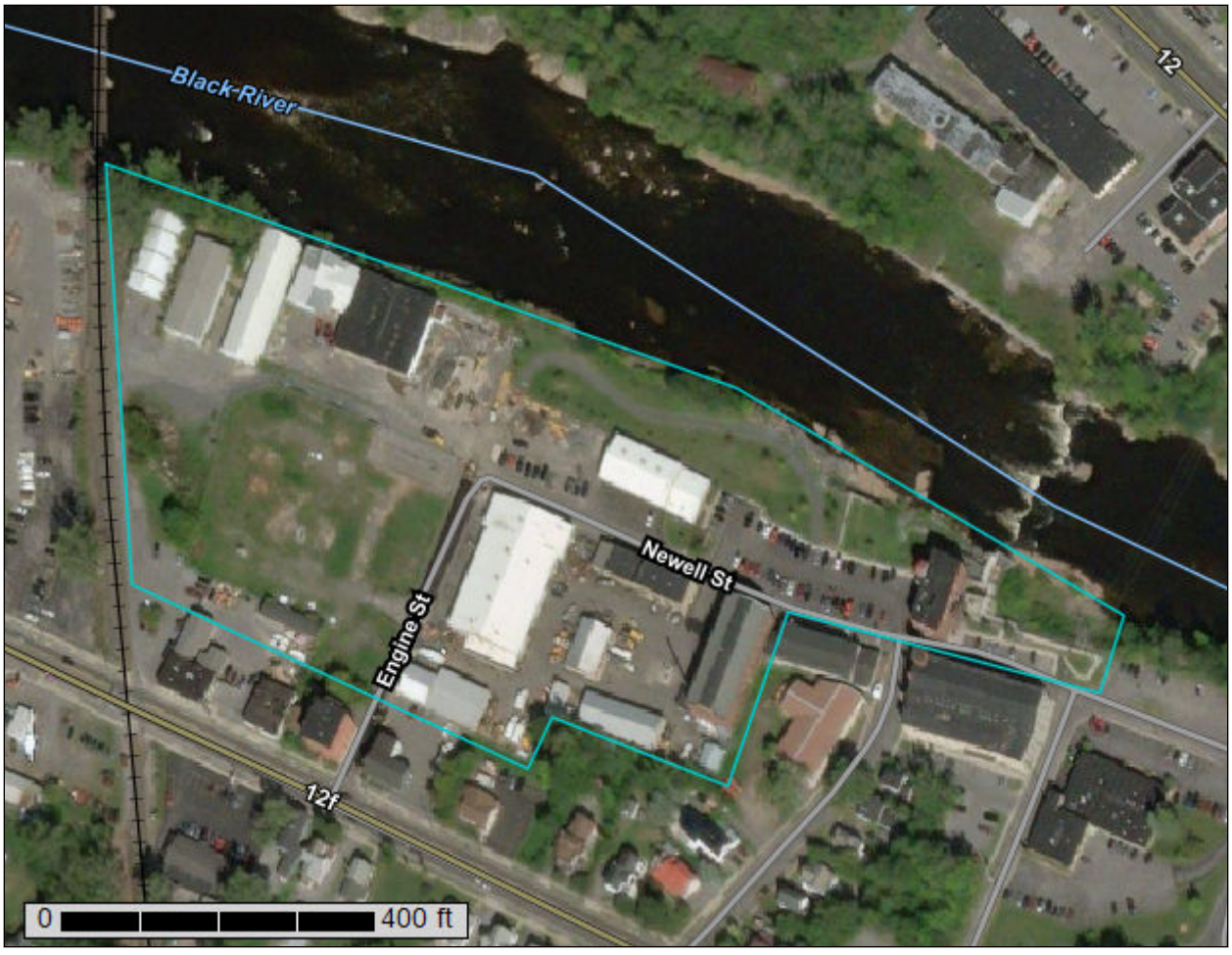
NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Jefferson County, New York

Site #1, utilize existing DPW Site, with the potential to acquire add 3.5 acres



July 8, 2020

Preface

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

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

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

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

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

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

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Contents

How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

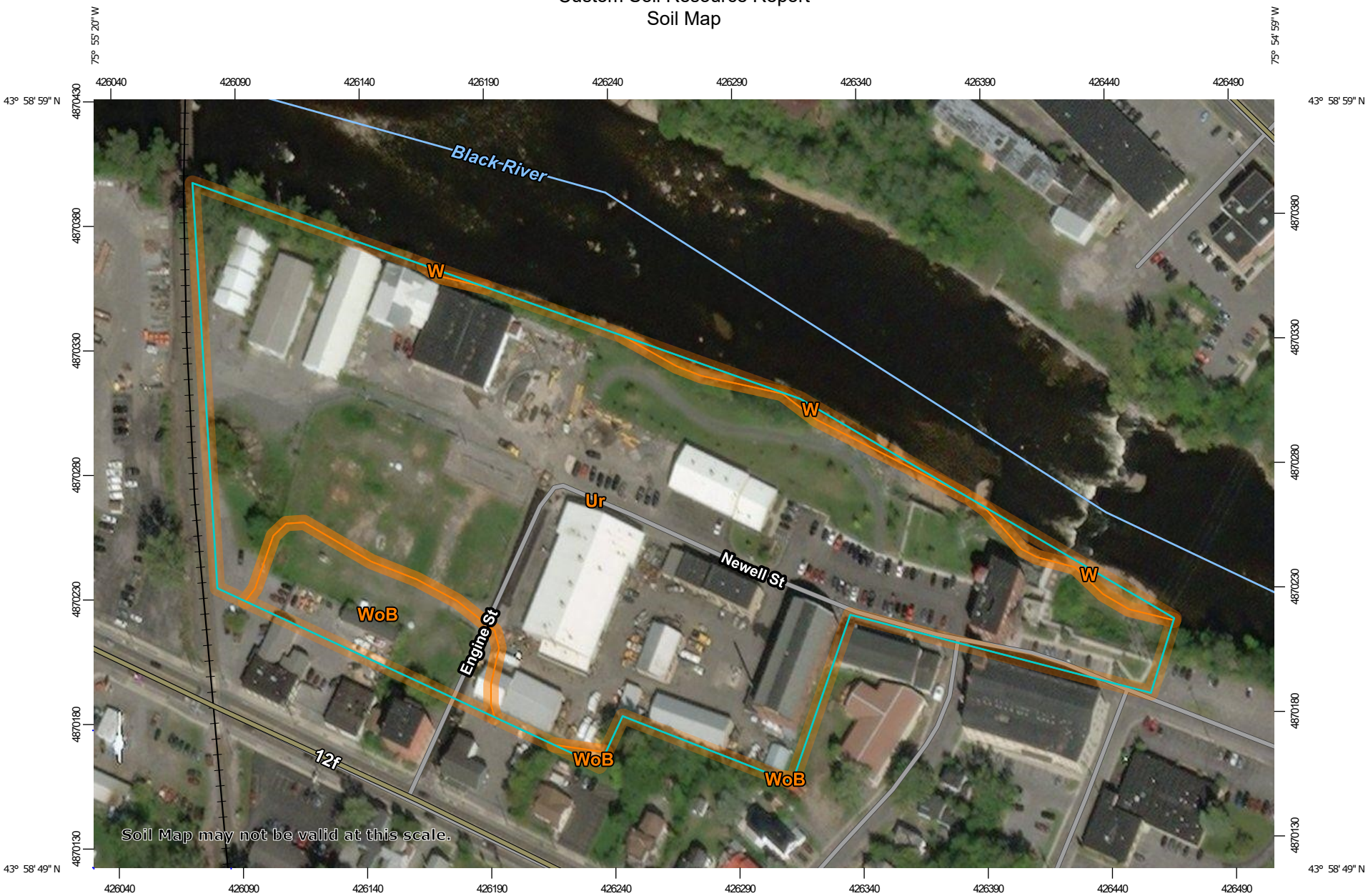
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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

Soil Map

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

Custom Soil Resource Report
Soil Map



Map Scale: 1:2,170 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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 20, Jun 11, 2020

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

Date(s) aerial images were photographed: Nov 3, 2013—Sep 27, 2016

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ur	Urban land	10.8	90.6%
W	Water	0.2	1.6%
WoB	Windsor loamy fine sand, 0 to 8 percent slopes	0.9	7.8%
Totals for Area of Interest		**12.0**	**100.0%**

Map Unit Descriptions

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

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

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Jefferson County, New York

Ur—Urban land

Map Unit Setting

National map unit symbol: 9srz
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Minor Components

Udorthents, smoothed

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

W—Water

Map Unit Setting

National map unit symbol: 9ss2
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

WoB—Windsor loamy fine sand, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9ssc
Elevation: 250 to 1,200 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

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

Description of Windsor

Setting

Landform: Outwash plains, deltas, terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

H1 - 0 to 5 inches: loamy fine sand
H2 - 5 to 28 inches: loamy fine sand
H3 - 28 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Pits, sand and gravel

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

Deerfield

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

Unnamed soils, blowout areas

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

Agawam

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

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix B

- Site Location (from City of Watertown GIS)
- Blank SEQR Environmental Form with partially filled-in Data
- USDA Soil Report for the Site

Site #2: Watertown Springs Site ArcGIS Web Map

6/17/2020 8:29:51 AM

1:4,514

0 150 300 600 ft

0 45 90 180 m

Black River

City Boundary

Parcels

ROADS

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Web AppBuilder for ArcGIS
New York State, Maxar |

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:		
Project Location (describe, and attach a location map):		
Brief Description of Proposed Action:		
Name of Applicant or Sponsor:	Telephone: E-Mail:	
Address:		
City/PO: q	State:	Zip Code:

	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:	NO ☐	YES ☐

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

4. Check all land uses that occur on, 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?	☐	☐	☐
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?		NO ☐	YES ☐
b. Are public transportation services available at or near the site of the proposed action?		☐	☐
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?		☐	☐
9. Does the proposed action meet or exceed the state energy code requirements? 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?		NO ☐	YES ☑
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?		☐	☑
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?		NO ☐	YES ☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?		☐	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____			

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

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

☐ Wetland ☐ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Indiana Bat, Northern Long-...	☐	☑
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: _____ _____		
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: _____ _____	☐	☐
~~1~~9. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____	☐	☐
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____	☐	☑

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

Applicant/sponsor/name: _____ Date: _____

Signature: _____ Title: _____

PRINT FORM

EAF Mapper Summary Report

Wednesday, July 8, 2020 3:49 PM

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

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	No
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	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

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Jefferson County, New York

Site #2, Watertown Springs site at 200 Howk Street

July 8, 2020

Preface

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

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

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

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

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

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

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Contents

How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

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

Soil Map

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

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,700 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 25 50 100 150

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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 20, Jun 11, 2020

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

Date(s) aerial images were photographed: Nov 3, 2013—Sep 27, 2016

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ub	Udorthents,smoothed	5.8	100.0%
Totals for Area of Interest		**5.8**	**100.0%**

Map Unit Descriptions

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

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

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

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

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

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

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

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

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

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

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

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

Jefferson County, New York

Ub—Udorthents,smoothed

Map Unit Setting

National map unit symbol: 9srx
Elevation: 250 to 1,330 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents, smoothed, and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents, Smoothed

Typical profile

H1 - 0 to 4 inches: channery loam
H2 - 4 to 70 inches: very gravelly sandy loam

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Urban land

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

Collamer

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

Dumps

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

Canandaigua

Percent of map unit: 5 percent

Landform: Depressions
Hydric soil rating: Yes

Bombay

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

Sun

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

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Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

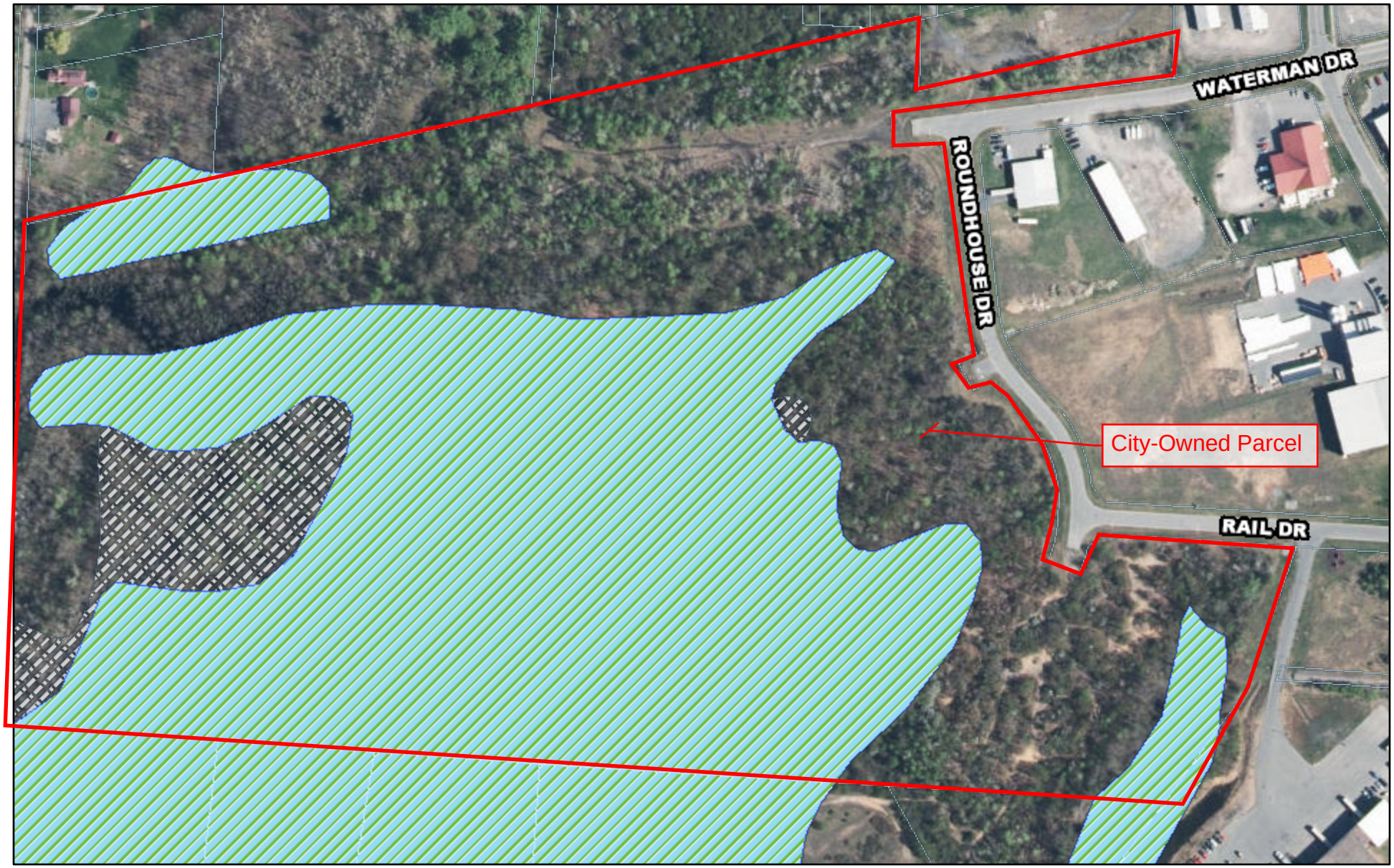
United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix C

- Site Location (from City of Watertown GIS)
- Blank SEQR Environmental Form with partially filled-in Data
- Wetland Mapping Information
- USDA Soil Report for the Site

Site #3: Industrial Park Site

ArcGIS Web Map



6/17/2020 8:37:39 AM

500' Buffer
AE
Wetlands
City Boundary
ROADS

FLOODPLN
X500
Black River
Parcels

A

1:4,514

0 150 300 600 ft

0 45 90 180 m

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS,

Web AppBuilder for ArcGIS

New York State, USDA FSA, GeoEye, Maxar |

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:		
Project Location (describe, and attach a location map):		
Brief Description of Proposed Action:		
Name of Applicant or Sponsor:	Telephone: E-Mail:	
Address:		
City/PO: q	State:	Zip Code:

	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:	NO ☐	YES ☐

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

4. Check all land uses that occur on, 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?	☐	☐	☐
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?		NO ☐	YES ☐
b. Are public transportation services available at or near the site of the proposed action?		☐	☐
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?		☐	☐
9. Does the proposed action meet or exceed the state energy code requirements? 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?		NO ☐	YES ☑
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?		☐	☑
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?		NO ☐	YES ☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?		☐	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____			

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

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

☐ Wetland ☐ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Indiana Bat, Northern Long-...	☐	☑
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: _____ _____		
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: _____ _____	☐	☐
~~1~~9. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____	☐	☐
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____	☐	☑

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

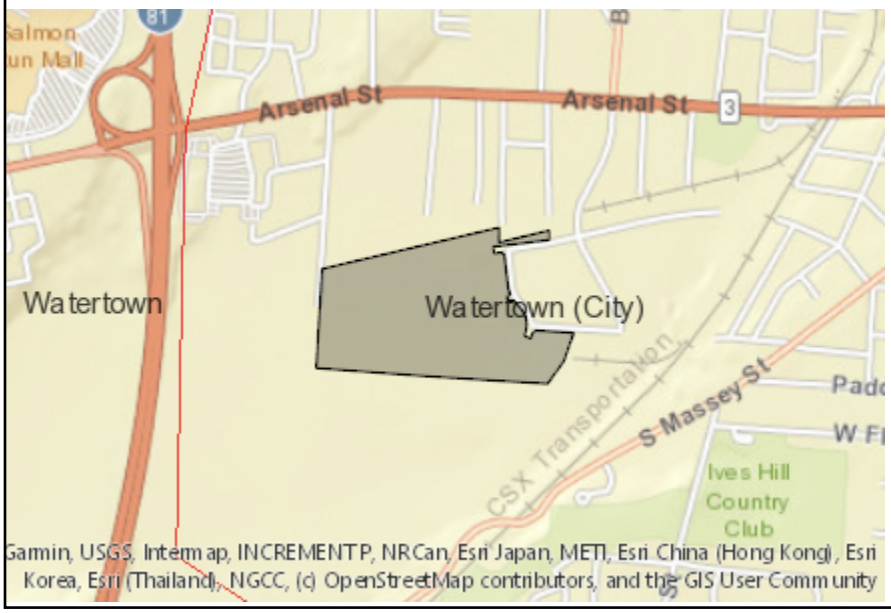
Applicant/sponsor/name: _____ Date: _____

Signature: _____ Title: _____

PRINT FORM

EAF Mapper Summary Report

Wednesday, July 8, 2020 3:53 PM



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

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	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

Environmental Resource Mapper

The coordinates of the point you clicked on are:

UTM 18	**Easting:**	424837.76856349496	**Northing:**	4869187.6030223975
Longitude/Latitude	**Longitude:**	-75.93704742327612	**Latitude:**	43.9719898672471

County: Jefferson
City: Watertown
USGS Quad: WATERTOWN

DEC Region

Region 6:
(Western Adirondacks/Eastern Lake Ontario) Herkimer, Jefferson, Lewis, Oneida and St. Lawrence counties. For more information visit **http://www.dec.ny.gov/about/613.html**.

Old or Potential Records (Not displayed on the map)

Common Name: Lake-cress
Scientific Name: Rorippa aquatica
Date Last Documented: no date
Location: Watertown
NYS Protected: Threatened

Common Name: Crawe's Sedge
Scientific Name: Carex crawei
Date Last Documented: 1865
Location: Watertown
NYS Protected: Threatened

Freshwater Wetlands Checkzone

This location is in the vicinity of one or more Regulated Freshwater Wetlands.

Rare Plants and Rare Animals

This location is in the vicinity of Bats Listed as Endangered or Threatened -- Contact NYSDEC Regional Office

National Wetands Inventory

Attribute: undefined
Type: undefined
Acres: undefined

For more information about the National Wetands Inventory wetlands visit **http://www.fws.gov/wetlands/**

If your project or action is within or near an area with a rare animal, a permit may be required if the species is listed as endangered or threatened and the department determines the action may be harmful to the species or its habitat.

If your project or action is within or near an area with rare plants and/or significant natural communities, the environmental impacts may need to be addressed.

The presence of a unique geological feature or landform near a project, unto itself, does not trigger a requirement for a NYS DEC permit. Readers are advised, however, that there is the chance that a unique feature may also show in another data layer (ie. a wetland) and thus be subject to permit jurisdiction.

Please refer to the "Need a Permit?" tab for permit information or other authorizations regarding these natural resources.

Disclaimer: If you are considering a project or action in, or near, a wetland or a stream, a NYS DEC permit may be required. The Environmental Resources Mapper does not show all natural resources which are regulated by NYS DEC, and for which permits from NYS DEC are required. For example, Regulated Tidal Wetlands, and Wild, Scenic, and Recreational Rivers, are currently not included on the maps.

Site #3 - Industrial Park

July 10, 2020

1:9,028

0 0.07 0.15 0.3 mi

0 0.13 0.25 0.5 km

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, NYS ITS GIS Program Office, Esri, HERE, Garmin, (c) OpenStreetMap contributors

Author: C&S Engineers, Inc.
Not a legal document

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Jefferson County, New York

Site #3 Industrial Park Site

July 8, 2020

Preface

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

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

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

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

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

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

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

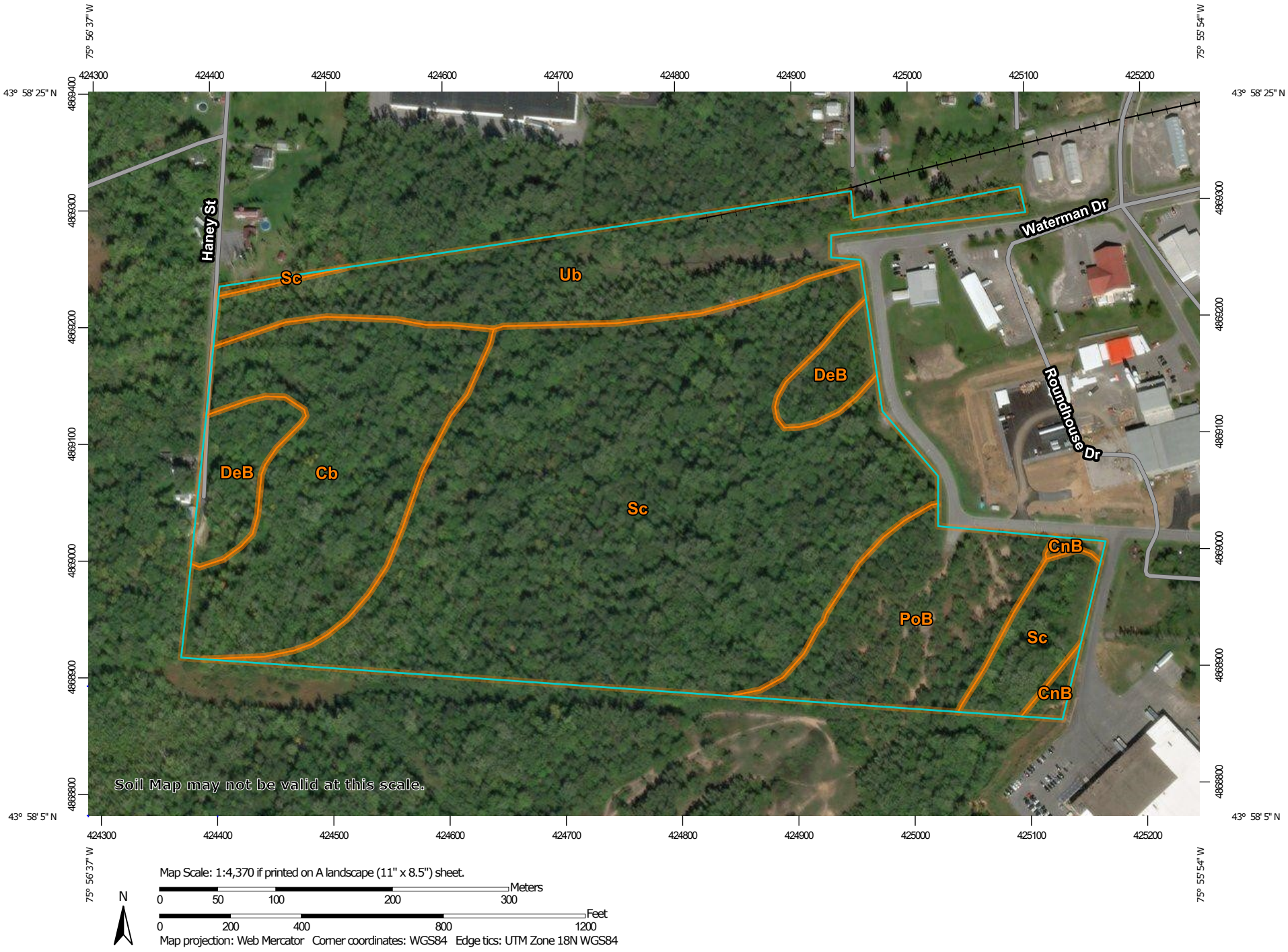
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree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

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

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

Soil Map

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


75° 56' 37" W
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43° 58' 25" N
43° 58' 5" N
4869400
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4869200
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4868900
4868800
Haney St
Waterman Dr
Roundhouse Dr
Sc
Ub
DeB
DeB
Cb
Sc
CnB
PoB
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CnB
Soil Map may not be valid at this scale.
Map Scale: 1:4,370 if printed on A landscape (11" x 8.5") sheet.
N
0 50 100 200 300 Meters
0 200 400 800 1200 Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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 20, Jun 11, 2020

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

Date(s) aerial images were photographed: Dec 31, 2009—Apr 1, 2017

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cb	Canandaigua mucky silt loam	11.1	17.7%
CnB	Collamer silt loam, 3 to 8 percent slopes	0.5	0.7%
DeB	Deerfield loamy fine sand, 0 to 8 percent slopes	3.2	5.1%
PoB	Plainfield sand, 0 to 8 percent slopes	6.1	9.7%
Sc	Scarboro mucky loamy fine sand	32.6	51.8%
Ub	Udorthents,smoothed	9.4	14.9%
Totals for Area of Interest		**62.9**	**100.0%**

Map Unit Descriptions

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

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

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

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

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

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

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

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

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

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

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

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

Jefferson County, New York

Cb—Canandaigua mucky silt loam

Map Unit Setting

National map unit symbol: 9sml
Elevation: 100 to 1,000 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Canandaigua and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Canandaigua

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Silty and clayey glaciolacustrine deposits

Typical profile

H1 - 0 to 10 inches: silt loam
H2 - 10 to 58 inches: silt loam
H3 - 58 to 72 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Available water storage in profile: Very high (about 13.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Ecological site: Wet Lake Plain Depression (F101XY010NY)
Hydric soil rating: Yes

Minor Components

Canandaigua, poorly drained

Percent of map unit: 10 percent
Landform: Depressions
Hydric soil rating: Yes

Niagara

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

Lamson

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Minoa

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

CnB—Collamer silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9smx
Elevation: 250 to 1,080 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Collamer

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Silty and clayey glaciolacustrine deposits

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 18 inches: silt loam
H3 - 18 to 32 inches: silty clay loam
H4 - 32 to 60 inches: stratified silt loam to very fine sand to clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 18 to 24 inches

Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: Moist Lake Plain (F101XY009NY)
Hydric soil rating: No

Minor Components

Unnamed soils, clayey surface texture and sandy areas

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

Niagara

Percent of map unit: 8 percent
Hydric soil rating: No

Canandaigua

Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

DeB—Deerfield loamy fine sand, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9sn8
Elevation: 0 to 1,000 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

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

Description of Deerfield

Setting

Landform: Outwash plains, deltas, terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex

Parent material: Sandy glaciofluvial or deltaic deposits derived mainly from granite, gneiss, or sandstone

Typical profile

H1 - 0 to 7 inches: loamy fine sand
H2 - 7 to 28 inches: loamy fine sand
H3 - 28 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A
Ecological site: Moist Outwash (F142XB003VT)
Hydric soil rating: No

Minor Components

Unnamed soils, sand pits, wet spots, marshes

Percent of map unit: 10 percent
Hydric soil rating: Yes

Windsor

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

Scarboro

Percent of map unit: 3 percent
Hydric soil rating: Yes

Deerfield

Percent of map unit: 2 percent
Hydric soil rating: No

PoB—Plainfield sand, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9sr6
Elevation: 720 to 1,150 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Plainfield

Setting

Landform: Outwash plains, deltas, terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

H1 - 0 to 8 inches: sand
H2 - 8 to 28 inches: sand
H3 - 28 to 65 inches: sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Deerfield

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

Windsor

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

Agawam

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

Pits, sand and gravel

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

Sc—Scarboro mucky loamy fine sand

Map Unit Setting

National map unit symbol: 9srk
Elevation: 0 to 2,100 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Scarboro

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy glaciofluvial deposits

Typical profile

Oi - 0 to 2 inches: peat
H1 - 2 to 14 inches: mucky loamy fine sand
H2 - 14 to 26 inches: loamy sand
H3 - 26 to 60 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 5.95 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Available water storage in profile: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components

Wareham
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

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

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

Ub—Udorthents,smoothed

Map Unit Setting
National map unit symbol: 9srx
Elevation: 250 to 1,330 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Udorthents, smoothed, and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents, Smoothed

Typical profile
H1 - 0 to 4 inches: channery loam
H2 - 4 to 70 inches: very gravelly sandy loam

Properties and qualities
Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Low (about 5.4 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

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

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

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

Canandaigua
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

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

Sun
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix D

- Site Location (from City of Watertown GIS)
- Blank SEQR Environmental Form with partially filled-in Data
- Information from the NYS DEC Environmental Mapper
- USDA Soil Report for the Site

Site #4: Water Street Site

ArcGIS Web Map

6/17/2020 8:44:17 AM

City Parcel | City Boundary | ROADS

Black River | Parcels

1:9,028

0 300 600 1,200 ft

0 90 180 360 m

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS,

Web AppBuilder for ArcGIS

New York State, USDA FSA, GeoEye, Maxar, CNES/Airbus DS |

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:		
Project Location (describe, and attach a location map):		
Brief Description of Proposed Action:		
Name of Applicant or Sponsor:	Telephone: E-Mail:	
Address:		
City/PO: q	State:	Zip Code:

	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:	NO ☐	YES ☐

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

4. Check all land uses that occur on, 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?	☐	☐	☐
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?		NO ☐	YES ☐
b. Are public transportation services available at or near the site of the proposed action?		☐	☐
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?		☐	☐
9. Does the proposed action meet or exceed the state energy code requirements? 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?		NO ☐	YES ☑
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?		☐	☑
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?		NO ☐	YES ☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?		☐	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____			

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

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

☐ Wetland ☐ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Indiana Bat, Northern Long-...	☐	☑
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: _____ _____		
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: _____ _____	☐	☐
~~1~~9. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____	☐	☐
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____	☐	☑

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

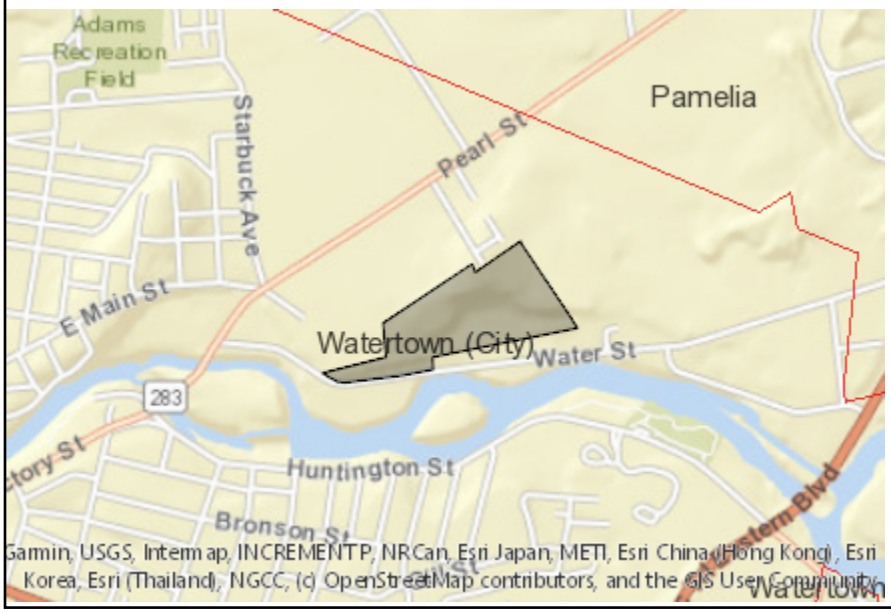
Applicant/sponsor/name: _____ Date: _____

Signature: _____ Title: _____

PRINT FORM

EAF Mapper Summary Report

Monday, July 13, 2020 5:03 PM



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

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	Yes
Part 1 / Question 12b [Archeological Sites]	No
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]	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

Environmental Resource Mapper

The coordinates of the point you clicked on are:

UTM 18	**Easting:**	428941.93736207275	**Northing:**	4870155.65988717
Longitude/Latitude	**Longitude:**	-75.88601667671918	**Latitude:**	43.98111289531483

The approximate address of the point you clicked on is:
Watertown, New York

County: Jefferson
City: Watertown
USGS Quad: WATERTOWN

DEC Region

Region 6:
(Western Adirondacks/Eastern Lake Ontario) Herkimer, Jefferson, Lewis, Oneida and St. Lawrence counties. For more information visit **http://www.dec.ny.gov/about/613.html**.

Old or Potential Records (Not displayed on the map)

Common Name: Lake-cress
Scientific Name: Rorippa aquatica
Date Last Documented: no date
Location: Watertown
NYS Protected: Threatened

Common Name: Crawe's Sedge
Scientific Name: Carex crawei
Date Last Documented: 1865
Location: Watertown
NYS Protected: Threatened

Rare Plants and Rare Animals

This location is in the vicinity of Bats Listed as Endangered or Threatened -- Contact NYSDEC Regional Office

If your project or action is within or near an area with a rare animal, a permit may be required if the species is listed as endangered or threatened and the department determines the action may be harmful to the species or its habitat.

If your project or action is within or near an area with rare plants and/or significant natural communities, the environmental impacts may need to be addressed.

The presence of a unique geological feature or landform near a project, unto itself, does not trigger a requirement for a NYS DEC permit. Readers are advised, however, that there is the chance that a unique feature may also show in another data layer (ie. a wetland) and thus be subject to permit jurisdiction.

Please refer to the "Need a Permit?" tab for permit information or other authorizations regarding these natural resources.

Disclaimer: If you are considering a project or action in, or near, a wetland or a stream, a NYS DEC permit may be required. The Environmental Resources Mapper does not show all natural resources which are regulated by NYS DEC, and for which permits from NYS DEC are required. For example, Regulated Tidal Wetlands, and Wild, Scenic, and Recreational Rivers, are currently not included on the maps.

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Jefferson County, New York

Site #4, Water Street Site

July 8, 2020

Preface

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

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

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

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

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

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

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

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

Soil Map

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

Custom Soil Resource Report
Soil Map

Map Scale: 1:4,300 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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 20, Jun 11, 2020

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

Date(s) aerial images were photographed: Nov 3, 2013—Sep 27, 2016

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgA	Agawam fine sandy loam, 0 to 3 percent slopes	4.8	9.4%
BoB	Bombay loam, 3 to 8 percent slopes	7.2	14.0%
CnB	Collamer silt loam, 3 to 8 percent slopes	5.1	9.8%
Dp	Dumps	14.9	29.0%
FaB	Farmington loam, 0 to 8 percent slopes	5.1	10.0%
NmE	Nellis and Madrid soils, 25 to 50 percent slopes	3.9	7.6%
NoA	Niagara silt loam, 0 to 3 percent slopes	2.7	5.2%
Ub	Udorthents,smoothed	7.0	13.5%
Ur	Urban land	0.7	1.4%
Totals for Area of Interest		**51.5**	**100.0%**

Map Unit Descriptions

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

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

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

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

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

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

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

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

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

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

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

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

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

Jefferson County, New York

AgA—Agawam fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9sld
Elevation: 0 to 1,000 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Agawam

Setting

Landform: Deltas, terraces, outwash plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy glaciofluvial deposits derived mainly from crystalline rock

Typical profile

H1 - 0 to 10 inches: fine sandy loam
H2 - 10 to 30 inches: fine sandy loam
H3 - 30 to 60 inches: loamy fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: A
Ecological site: Dry Outwash (F142XB002VT)
Hydric soil rating: No

Minor Components

Windsor

Percent of map unit: 8 percent
Hydric soil rating: No

Deerfield
Percent of map unit: 7 percent
Hydric soil rating: No

Unnamed soils
Percent of map unit: 5 percent

BoB—Bombay loam, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 9smf
Elevation: 260 to 1,280 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: All areas are prime farmland

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

Description of Bombay

Setting
Landform: Hills, till plains, drumlinoid ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Loamy till derived mainly from sandstone and limestone

Typical profile
H1 - 0 to 8 inches: loam
H2 - 8 to 17 inches: gravelly loam
Bt - 17 to 39 inches: gravelly fine sandy loam
C - 39 to 65 inches: gravelly fine sandy loam

Properties and qualities
Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 15 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: Moist Till Upland (F142XB013NY)
Hydric soil rating: No

Minor Components

Madrid

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

Collamer

Percent of map unit: 4 percent
Hydric soil rating: No

Niagara

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed soils, wet areas and stony areas

Percent of map unit: 4 percent
Hydric soil rating: Yes

Galway

Percent of map unit: 3 percent
Hydric soil rating: No

CnB—Collamer silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9smx
Elevation: 250 to 1,080 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Collamer

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave

Across-slope shape: Convex
Parent material: Silty and clayey glaciolacustrine deposits

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 18 inches: silt loam
H3 - 18 to 32 inches: silty clay loam
H4 - 32 to 60 inches: stratified silt loam to very fine sand to clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: Moist Lake Plain (F101XY009NY)
Hydric soil rating: No

Minor Components

Unnamed soils, clayey surface texture and sandy areas

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

Niagara

Percent of map unit: 8 percent
Hydric soil rating: No

Canandaigua

Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

Dp—Dumps

Map Unit Setting

National map unit symbol: 9sn9
Elevation: 100 to 1,600 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Dumps: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dumps

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 25 percent
Hydric soil rating: No

FaB—Farmington loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9sng
Elevation: 100 to 900 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

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

Description of Farmington

Setting

Landform: Till plains, benches, ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till or congeliturbate derived from limestone, dolomite, shale, and sandstone, and in many places mixed with wind and water deposits

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 19 inches: loam
H3 - 19 to 23 inches: unweathered bedrock

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Available water storage in profile: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: D
Ecological site: Shallow Rich Till Upland (F142XB010NY)
Hydric soil rating: No

Minor Components

Benson

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

Galway

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

Galoo

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

Unnamed soils, stony, clayey, sandy areas, wet spots

Percent of map unit: 5 percent
Hydric soil rating: Yes

NmE—Nellis and Madrid soils, 25 to 50 percent slopes

Map Unit Setting

National map unit symbol: 2wrf4
Elevation: 300 to 1,280 feet
Mean annual precipitation: 26 to 59 inches
Mean annual air temperature: 39 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Nellis and similar soils: 60 percent
Madrid and similar soils: 30 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nellis

Setting

Landform: Drumlinoid ridges, terraces, low hills
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Side slope, crest, tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy lodgement till derived from limestone

Typical profile

Ap - 0 to 8 inches: loam
Bw1 - 8 to 18 inches: loam
Bw2 - 18 to 27 inches: loam
BC - 27 to 37 inches: gravelly loam
C - 37 to 79 inches: gravelly sandy loam

Properties and qualities

Slope: 25 to 50 percent
Percent of area covered with surface fragments: 0.0 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.01 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 35 percent
Available water storage in profile: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Madrid

Setting

Landform: Drumlinoid ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from sandstone and limestone

Typical profile

H1 - 0 to 8 inches: sandy loam
H2 - 8 to 19 inches: sandy loam
H3 - 19 to 25 inches: fine sandy loam
H4 - 25 to 60 inches: gravelly fine sandy loam

Properties and qualities

Slope: 25 to 50 percent
Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 7.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Amenia

Percent of map unit: 5 percent
Landform: Drumlinoid ridges
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Massena

Percent of map unit: 3 percent
Landform: Drumlinoid ridges
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

Galway

Percent of map unit: 2 percent
Landform: Hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

NoA—Niagara silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9sqx
Elevation: 250 to 930 feet

Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

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

Description of Niagara

Setting

Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Silty and clayey glaciolacustrine deposits

Typical profile

H1 - 0 to 13 inches: silt loam
H2 - 13 to 35 inches: silt loam
H3 - 35 to 75 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: High (about 10.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Hydric soil rating: No

Minor Components

Guffin

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Collamer

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

Canandaigua

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Ub—Udorthents,smoothed

Map Unit Setting

National map unit symbol: 9srx
Elevation: 250 to 1,330 feet
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents, smoothed, and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents, Smoothed

Typical profile

H1 - 0 to 4 inches: channery loam
H2 - 4 to 70 inches: very gravelly sandy loam

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Urban land

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

Collamer

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

Dumps

Percent of map unit: 5 percent

Hydric soil rating: No

Canandaigua

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Bombay

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

Sun

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Ur—Urban land

Map Unit Setting

National map unit symbol: 9srz
Mean annual precipitation: 33 to 50 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Minor Components

Udorthents, smoothed

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

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

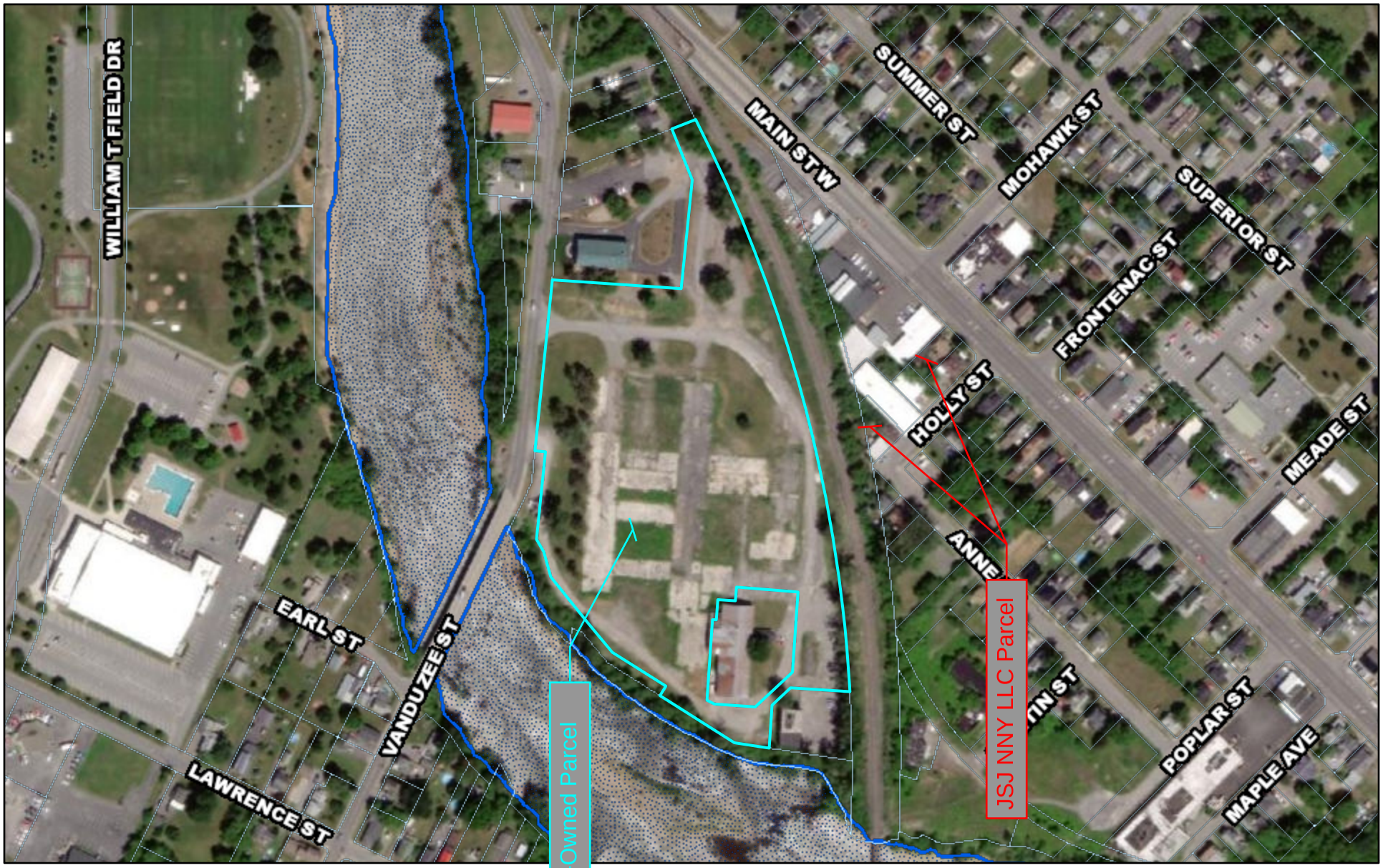
United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix E

- Site Location (from City of Watertown GIS)
- Site Parcel Information from City of Watertown Real Property Records

Site #5: Vanduzee Street



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Black River

Parcels

City Boundary

ROADS

1:4,514

0 0.03 0.06 0.11 mi

0 0.04 0.09 0.17 km

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS,

Web AppBuilder for ArcGIS

New York State, USDA FSA, GeoEye, Maxar |

Property Description Report For: 424 Vanduzee St, Municipality of City of Watertown

Status:	Active		
Roll Section:	Wholly Exem		
Swis:	221800		
Tax Map ID #:	1-18-102.000		
Account #:	21113750		
Property Class:	340 - Vacant indus		
Site:	RES 1		
In Ag. District:	No		
Site Property Class:	340 - Vacant indus		
Zoning Code:	LI - Light Industry		
Neighborhood Code:	00435		
Total Acreage/Size:	9.50	**School District:**	Watertown
Land Assessment:	2020 - $287,500 2019 - $287,500	**Total Assessment:**	2020 - $287,500 2019 - $287,500
Full Market Value:	2020 - $312,500 2019 - $312,500		
Equalization Rate:	----	**Property Desc:**	For Sale by Auction 9.50 Ac 118102
Deed Book:	2015	**Deed Page:**	14342
Grid East:	993931	**Grid North:**	1453079

Area

Living Area:	0 sq. ft.	**First Story Area:**	0 sq. ft.
Second Story Area:	0 sq. ft.	**Half Story Area:**	0 sq. ft.
Additional Story Area:	0 sq. ft.	**3/4 Story Area:**	0 sq. ft.
Finished Basement:	0 sq. ft.	**Number of Stories:**	0
Finished Rec Room	0 sq. ft.	**Finished Area Over Garage**	0 sq. ft.

Structure

Building Style:	0	**Bathrooms (Full - Half):**	0 - 0
Bedrooms:	0	**Kitchens:**	0
Fireplaces:	0	**Basement Type:**	0
Porch Type:	0	**Porch Area:**	0.00
Basement Garage Cap:	0	**Attached Garage Cap:**	0.00 sq. ft.
Overall Condition:	0	**Overall Grade:**	
Year Built:			

Owners

City of Watertown
245 Washington St
Watertown NY 13601

Sales

Sale Date	Price	Property Class	Sale Type	Prior Owner	Value Usable	Arms Length	Addl. Parcels	Deed Book and Page
6/26/2015	$44,366	449 - Other Storage	Land & Building	City of Watertown	No	No	No	2015/14342
5/1/2015	$175,000	440 - Warehouse	Land & Building	No. Ctry Dev. of Jeff Co Inc	No	No	No	2015/6363
7/11/2002	$1	440 - Warehouse	Land & Building	Watertown Properties Trust	No	No	Yes	1870/155
3/15/2002	$81,000	440 - Warehouse	Land & Building	Red Aves Corporation	No	No	No	1846/134
3/1/1997	$25,000	449 - Other Storage	Land & Building	Watertown Warehouse Corp	No	No	No	1596/111
12/18/1995	$50	449 - Other Storage	Land & Building	Vanduzee St Warehouse	No	No	No	1489/194

Utilities

Sewer Type:	Comm/public	**Water Supply:**	Comm/public
Utilities:	Gas & elec	**Heat Type:**	0
Fuel Type:	0	**Central Air:**	No

Improvements

Structure	Size	Grade	Condition	Year

Special Districts for 2020

No information available for the 2020 roll year.

Special Districts for 2019

No information available for the 2019 roll year.

Exemptions

Year	Description	Amount	Exempt %	Start Yr	End Yr	V Flag	H Code	Own %
2020		$287,500	0	2016				0
2019		$287,500	0	2016				0

Taxes

Year	Description	Amount
2016	County	$1,923.95
2015	City	$10,906.66
2015	County	$1,854.73
2015	School	$2,536.44

*** Taxes reflect exemptions, but may not include recent changes in assessment.**

Property Description Report For: 424A Vanduzee St, Municipality of City of Watertown

Status:	Active		
Roll Section:	Taxable		
Swis:	221800		
Tax Map ID #:	1-18-102.003		
Account #:	21113755		
Property Class:	714 - Lite Ind Manftr		
Site:	COM 1		
In Ag. District:	No		
Site Property Class:	714 - Lite Ind Manftr		
Zoning Code:	LI - Light Industry		
Neighborhood Code:	00435		
Total Acreage/Size:	0.79	**School District:**	Watertown
Land Assessment:	2020 - $9,800 2019 - $9,800	**Total Assessment:**	2020 - $100,500 2019 - $100,500
Full Market Value:	2020 - $109,239 2019 - $109,250		
Equalization Rate:	----	**Property Desc:**	.79 118102.003
Deed Book:	2017	**Deed Page:**	8057
Grid East:	994067	**Grid North:**	1452727

Owners

JSJ NNY LLC
200 Mullin St Ste 101
Watertown NY 13601-3619

Sales

Sale Date	Price	Property Class	Sale Type	Prior Owner	Value Usable	Arms Length	Addl. Parcels	Deed Book and Page
5/30/2017	$30,000	714 - Lite Ind Manftr	Land & Building	VanDuzee Street Properties LLC	No	No	No	2017/8057
6/8/2015	$75,000	714 - Lite Ind Manftr	Land & Building	Shambo, Robert W	Yes	Yes	No	2015/8081

Utilities

Sewer Type:	Comm/public	**Water Supply:**	Comm/public
Utilities:	Gas & elec		

Inventory

Overall Eff Year Built:	0	**Overall Condition:**	Fair
Overall Grade:	Average	**Overall Desirability:**	1

Buildings

AC%	Sprinkler%	Alarm%	Elevators	Basement Type	Year Built	Condition	Quality	Gross Floor Area (sqft)	Stories
0	0	0	0		1950	Normal	Average	11216	1
0	0	0	0		1950	Normal	Average	594	1

Site Uses

Use	Rentable Area (sqft)	Total Units
Light mfg	11,216	0
Light mfg	594	0

Improvements

Structure	Size	Grade	Condition	Year

Land Types

Type	Size
Primary	0.79 acres

Special Districts for 2020

No information available for the 2020 roll year.

Special Districts for 2019

Description	Units	Percent	Value
SW001-Sewer Water Relevy	0	0%	25.35

Exemptions

Year	Description	Amount	Exempt %	Start Yr	End Yr	V Flag	H Code	Own %

Taxes

Year	Description	Amount
2020	City	$898.97
2020	County	$804.80
2019	City	$908.09
2019	County	$764.85
2019	School	$1,059.06

*** Taxes reflect exemptions, but may not include recent changes in assessment.**

Property Description Report For: 424 Rear Vanduzee St, Municipality of City of Watertown

Status:	Active		
Roll Section:	Taxable		
Swis:	221800		
Tax Map ID #:	1-18-102.004		
Account #:	21113796		
Property Class:	340 - Vacant indus		
Site:	RES 1		
In Ag. District:	No		
Site Property Class:	340 - Vacant indus		
Zoning Code:	LI - Light Industry		
Neighborhood Code:	00435		
Total Acreage/Size:	0.45	**School District:**	Watertown
Land Assessment:	2020 - $7,300 2019 - $7,300	**Total Assessment:**	2020 - $7,300 2019 - $7,300
Full Market Value:	2020 - $7,935 2019 - $7,950		
Equalization Rate:	----	**Property Desc:**	0.45 Acres 118102.004
Deed Book:	2016	**Deed Page:**	17081
Grid East:	994190	**Grid North:**	1452578

Area

Living Area:	0 sq. ft.	**First Story Area:**	0 sq. ft.
Second Story Area:	0 sq. ft.	**Half Story Area:**	0 sq. ft.
Additional Story Area:	0 sq. ft.	**3/4 Story Area:**	0 sq. ft.
Finished Basement:	0 sq. ft.	**Number of Stories:**	0
Finished Rec Room	0 sq. ft.	**Finished Area Over Garage**	0 sq. ft.

Structure

Building Style:	0	**Bathrooms (Full - Half):**	0 - 0
Bedrooms:	0	**Kitchens:**	0
Fireplaces:	0	**Basement Type:**	0
Porch Type:	0	**Porch Area:**	0.00
Basement Garage Cap:	0	**Attached Garage Cap:**	0.00 sq. ft.
Overall Condition:	0	**Overall Grade:**	
Year Built:			

Owners

JSJ NNY LLC
200 Mullin St Ste 101
Watertown NY 13601-3619

Sales

Sale Date	Price	Property Class	Sale Type	Prior Owner	Value Usable	Arms Length	Addl. Parcels	Deed Book and Page
11/29/2016	$1,000	340 - Vacant indus	Land Only	Alexander, Richard E	No	No	No	2016/17081
2/5/1997	$1	449 - Other Storage	Land & Building	Watertown, Warehouse Corp	No	No	No	1554/270

Utilities

Sewer Type:	Comm/public	**Water Supply:**	Comm/public
Utilities:	Gas & elec	**Heat Type:**	0
Fuel Type:	0	**Central Air:**	No

Improvements

Structure	Size	Grade	Condition	Year

Land Types

Type	Size
Undeveloped	0.45 acres

Special Districts for 2020

No information available for the 2020 roll year.

Special Districts for 2019

No information available for the 2019 roll year.

Exemptions

Year	Description	Amount	Exempt %	Start Yr	End Yr	V Flag	H Code	Own %

Taxes

Year	Description	Amount
2020	City	$65.30
2020	County	$58.46
2019	City	$64.12
2019	County	$55.56
2019	School	$76.93

*** Taxes reflect exemptions, but may not include recent changes in assessment.**

Appendix F

- Site Location (from City of Watertown GIS)
- Site Parcel Information from City of Watertown Real Property Records

Site #6: West Main Street

9/15/2020, 7:52:08 AM

1:4,514

0 0.03 0.06 0.11 mi

0 0.04 0.09 0.17 km

Black River

City Boundary

Parcels

ROADS

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Web AppBuilder for ArcGIS
New York State, USDA FSA, GeoEye, Maxar |

Property Description Report For: 560 Main St W, Municipality of City of Watertown

Status:	Active		
Roll Section:	Taxable		
Swis:	221800		
Tax Map ID #:	1-01-128.000		
Account #:	13071440		
Property Class:	449 - Other Storage		
Site:	COM 1		
In Ag. District:	No		
Site Property Class:	449 - Other Storage		
Zoning Code:	LI - Light Industry		
Neighborhood Code:	00608		
Total Acreage/Size:	148 x 448	**School District:**	Watertown
Land Assessment:	2020 - $5,000 2019 - $5,000	**Total Assessment:**	2020 - $54,800 2019 - $54,800
Full Market Value:	2020 - $59,565 2019 - $59,550		
Equalization Rate:	----	**Property Desc:**	148x448 101128
Deed Book:	2010	**Deed Page:**	16273
Grid East:	996194	**Grid North:**	1452057

Owners

Janet M Abrams
603 LeRay St
Watertown NY 13601

Sales

Sale Date	Price	Property Class	Sale Type	Prior Owner	Value Usable	Arms Length	Addl. Parcels	Deed Book and Page
11/3/2010	$100	449 - Other Storage	Land & Building	City of Watertown	No	No	No	2010/16273
2/1/1991	$175,000	455 - Dealer-prod.	Land & Building	Taylor F G & C	Yes	Yes	No	1251/321

Utilities

Sewer Type:	Comm/public	**Water Supply:**	Comm/public
Utilities:	Gas & elec		

Inventory

Overall Eff Year Built:	0	**Overall Condition:**	Poor
Overall Grade:	Average	**Overall Desirability:**	1

Buildings

AC%	Sprinkler%	Alarm%	Elevators	Basement Type	Year Built	Condition	Quality	Gross Floor Area (sqft)	Stories
0	0	0	0		1948	Fair	Average	19350	1
0	0	0	0		1968	Fair	Average	3360	1

Site Uses

Use	Rentable Area (sqft)	Total Units
Dstr wrhouse	6,371	0

Improvements

Structure	Size	Grade	Condition	Year
Ovrhdoor-com	196.00 sq ft	Average	Fair	1954
Ovrhdoor-com	144.00 sq ft	Average	Fair	1948
Ovrhdoor-com	80.00 sq ft	Average	Fair	1948
Pavng-asphlt	11000 × 4	Average	Fair	1965
Fence-chn lk	590 x 6	Average	Fair	1965

Land Types

Type	Size
Primary	148 × 448

Special Districts for 2020

No information available for the 2020 roll year.

Special Districts for 2019

No information available for the 2019 roll year.

Exemptions

Year	Description	Amount	Exempt %	Start Yr	End Yr	V Flag	H Code	Own %

Taxes

Year	Description	Amount
2020	City	$490.19
2020	County	$438.84
2019	City	$481.34
2019	County	$417.05
2019	School	$577.48

*** Taxes reflect exemptions, but may not include recent changes in assessment.**

Property Description Report For: 570 Main St W, Municipality of City of Watertown

Status:	Active
Roll Section:	Taxable
Swis:	221800
Tax Map ID #:	1-01-129.000
Account #:	13071442
Property Class:	449 - Other Storage
Site:	COM 1
In Ag. District:	No
Site Property Class:	449 - Other Storage
Zoning Code:	HI - Heavy Industry
Neighborhood Code:	00608
School District:	Watertown
Total Assessment:	2020 - $78,300 2019 - $78,300
Property Desc:	11.80 AC 101129
Deed Page:	10451
Grid North:	1452723

Total Acreage/Size:	11.80
Land Assessment:	2020 - $59,000 2019 - $59,000
Full Market Value:	2020 - $85,109 2019 - $85,100
Equalization Rate:	----
Deed Book:	2017
Grid East:	996576

Owners

Dennis L Esch
2006 North 101 Circle
Omaha NE 68134

Sales

Sale Date	Price	Property Class	Sale Type	Prior Owner	Value Usable	Arms Length	Addl. Parcels	Deed Book and Page
6/30/2017	$75,000	449 - Other Storage	Land & Building	Edmund Street Realty LLC	Yes	Yes	Yes	2017/10451
4/9/2001	$1	449 - Other Storage	Land & Building	Cleaves, R E III	No	No	No	1786/232

Utilities

Sewer Type:	Comm/public
Utilities:	Gas & elec
Water Supply:	Comm/public

Inventory

Overall Eff Year Built:	0
Overall Grade:	Average
Overall Condition:	Normal
Overall Desirability:	1

Buildings

AC%	Sprinkler%	Alarm%	Elevators	Basement Type	Year Built	Condition	Quality	Gross Floor Area (sqft)	Stories
0	0	0	0	Unfinished	1902	Poor	Average	41658	2

Site Uses

Use	Rentable Area (sqft)	Total Units
Non-contrib	35,758	8
Row storage	2,900	0

Improvements

Structure	Size	Grade	Condition	Year
Barn-pole	3,725.00 sq ft	Economy	Poor	1974

Land Types

Type	Size
Primary	2.50 acres
Residual	9.30 acres

Special Districts for 2020

Description	Units	Percent	Value
DPW01-DPW Relevy	0	0%	501.14

Special Districts for 2019

No information available for the 2019 roll year.

Exemptions

Year	Description	Amount	Exempt %	Start Yr	End Yr	V Flag	H Code	Own %

Taxes

Year	Description	Amount
2020	City	$1,201.53
2020	County	$627.02
2019	City	$687.75
2019	County	$595.90
2019	School	$825.12

*** Taxes reflect exemptions, but may not include recent changes in assessment.**

Property Description Report For: 576 Main St W, Municipality of City of Watertown

Status:	Active		
Roll Section:	Taxable		
Swis:	221800		
Tax Map ID #:	1-01-201.000		
Account #:	13071460		
Property Class:	446 - Cold storage		
Site:	COM 1		
In Ag. District:	No		
Site Property Class:	446 - Cold storage		
Zoning Code:	LI - Light Industry		
Neighborhood Code:	00608		
Total Acreage/Size:	1.01	**School District:**	Watertown
Land Assessment:	2020 - $40,400 2019 - $40,400	**Total Assessment:**	2020 - $100,000 2019 - $100,000
Full Market Value:	2020 - $108,696 2019 - $108,700		
Equalization Rate:	----	**Property Desc:**	1.01 Acres 101201
Deed Book:	2020	**Deed Page:**	10368
Grid East:	996076	**Grid North:**	1452203

Owners

Jesse T Wilson
20560 Weaver Rd
Watertown NY 13601

Sales

Sale Date	Price	Property Class	Sale Type	Prior Owner	Value Usable	Arms Length	Addl. Parcels	Deed Book and Page
7/13/2020	$65,000	446 - Cold storage	Land & Building	Back Bay Enterprises LLC	Yes	Yes	No	2020/10368
12/30/2011	$41,800	400 - Commercial	Land & Building	Zions First National Bank	No	No	No	2012/657
5/12/2011	$169,955	446 - Cold storage	Land & Building	California Fruit Market I	No	No	Yes	2011/7297

Utilities

Sewer Type:	Comm/public	**Water Supply:**	Comm/public
Utilities:	Gas & elec		

Inventory

Overall Eff Year Built:	0	**Overall Condition:**	Poor
Overall Grade:	Economy	**Overall Desirability:**	2

Buildings

AC%	Sprinkler%	Alarm%	Elevators	Basement Type	Year Built	Condition	Quality	Gross Floor Area (sqft)	Stories
0	100	0	0	Unfinished	1900	Fair	Average	27690	3
0	0	0	0		1972	Normal	Average	4680	1
0	0	0	0		2001	Normal	Average	3630	1
0	0	0	0		1970	Normal	Average	1920	1

Site Uses

Use	Rentable Area (sqft)	Total Units
Row storage	27,690	0
Non-contrib	9,230	0
Row storage	4,680	0
Row storage	3,630	0
Row storage	1,920	0

Improvements

Structure	Size	Grade	Condition	Year
Pavng-asphlt	9500 × 4	Average	Fair	1950
Ld dock-st/c	780.00 sq ft	Average	Normal	1970
Ld dock-st/c	900.00 sq ft	Average	Normal	1972

Land Types

Type	Size
Primary	1.01 acres

Special Districts for 2020

No information available for the 2020 roll year.

Special Districts for 2019

Description	Units	Percent	Value
DPW01-DPW Relevy	0	0%	416.31

Exemptions

Year	Description	Amount	Exempt %	Start Yr	End Yr	V Flag	H Code	Own %

Taxes

Year	Description	Amount
2020	City	$894.50
2020	County	$800.80
2019	City	$1,294.66
2019	County	$761.05
2019	School	$1,053.79

*** Taxes reflect exemptions, but may not include recent changes in assessment.**

February 9, 2022

To: The Honorable Mayor and City Council

From: Kenneth A. Mix, City Manager

Subject: Single-Stream Recycling

Staff will be going over much of the same information that we presented to the previous Council for the benefit of the new members. The main question at-hand is whether the City should transition from source-separated recycling to single-stream recycling. A copy of the PowerPoint presentation that will be given is attached.

Fort Drum currently uses single-stream and there is potential for us to partner with them on a shared transfer facility. Their Public Works Department wishes to upgrade their facility. A new one could be funded through the Defense Community Infrastructure Program. That application will require conceptual drawings and cost estimates by an outside engineer.

DEPARTMENT OF PUBLIC WORKS

Presented by Patrick Keenan, Superintendent of Public Works

• City of Watertown Refuse & Recycling

The City Council has expressed a desire to enhance our current residential refuse and recycling service with the transition from source separated recycling to single stream recycling.

Why Single Stream Recycling?

- Customer convenience… 1 bin vs 5
- Collection efficiency
- Increased customer participation
- Diversion of waste taken to the landfill which lengthens the life span of the facility and results in lower costs down the road for all users.

This presentation will briefly look at our current program and highlight the changes required to implement a single stream program.

Department of Public Works – Solid Waste Management Residential Collection

Current Operations

- The Refuse & Recycling account is staffed with 8 full time employees

Services Provided:

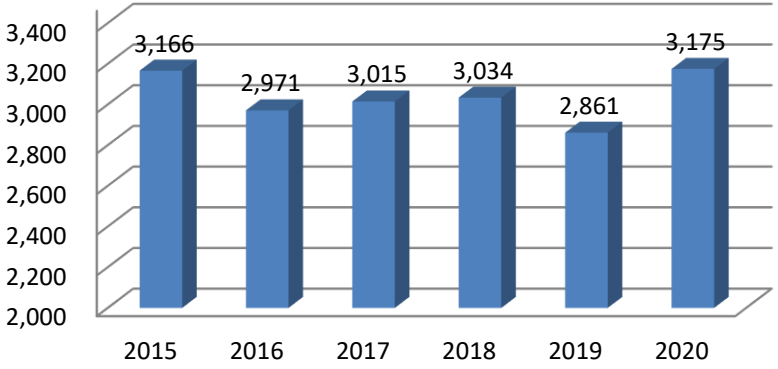
- Weekly Refuse Collection
- Bi-Weekly Source Separated Recycle Collection
- Seasonal Brush & Green Waste Collection
- Seasonal On-Demand Bulk Item Pick-up
- Code Enforcement Response

Scale of the Operation:

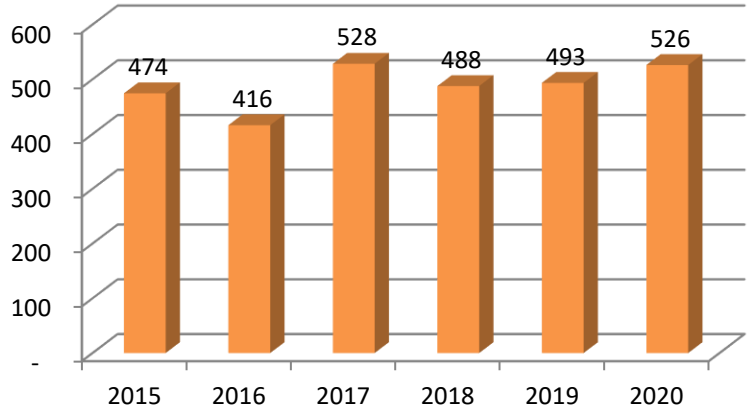
- Refuse and Recycle services are available to the City's 8,000 residential customers
- We estimate approximately 3000 customers based on collection stop data with 1600+ active tote customers and the balance comprised of sticker users.
- Refuse is Pay as you Throw…
- In FY 20-21, we collected 3280 tons of refuse and 530 tons of source separated recycling product.

• Program Statistics Through 2020

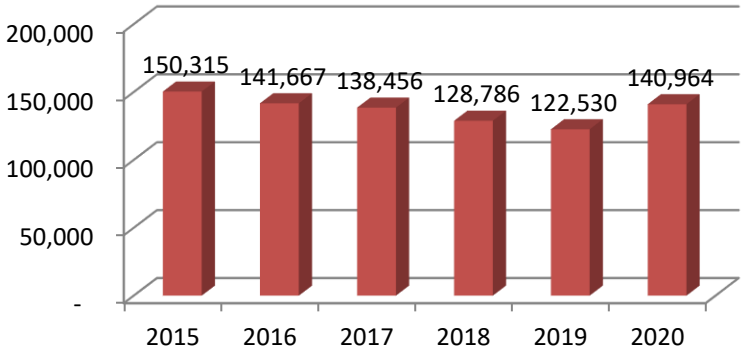
Refuse Tons



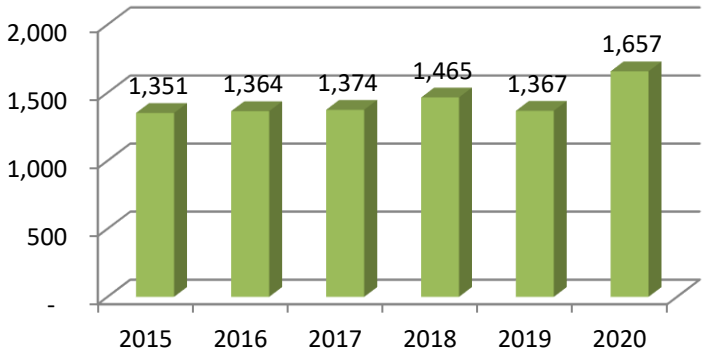
Recycle Tons



Bag Collection



Active Totes

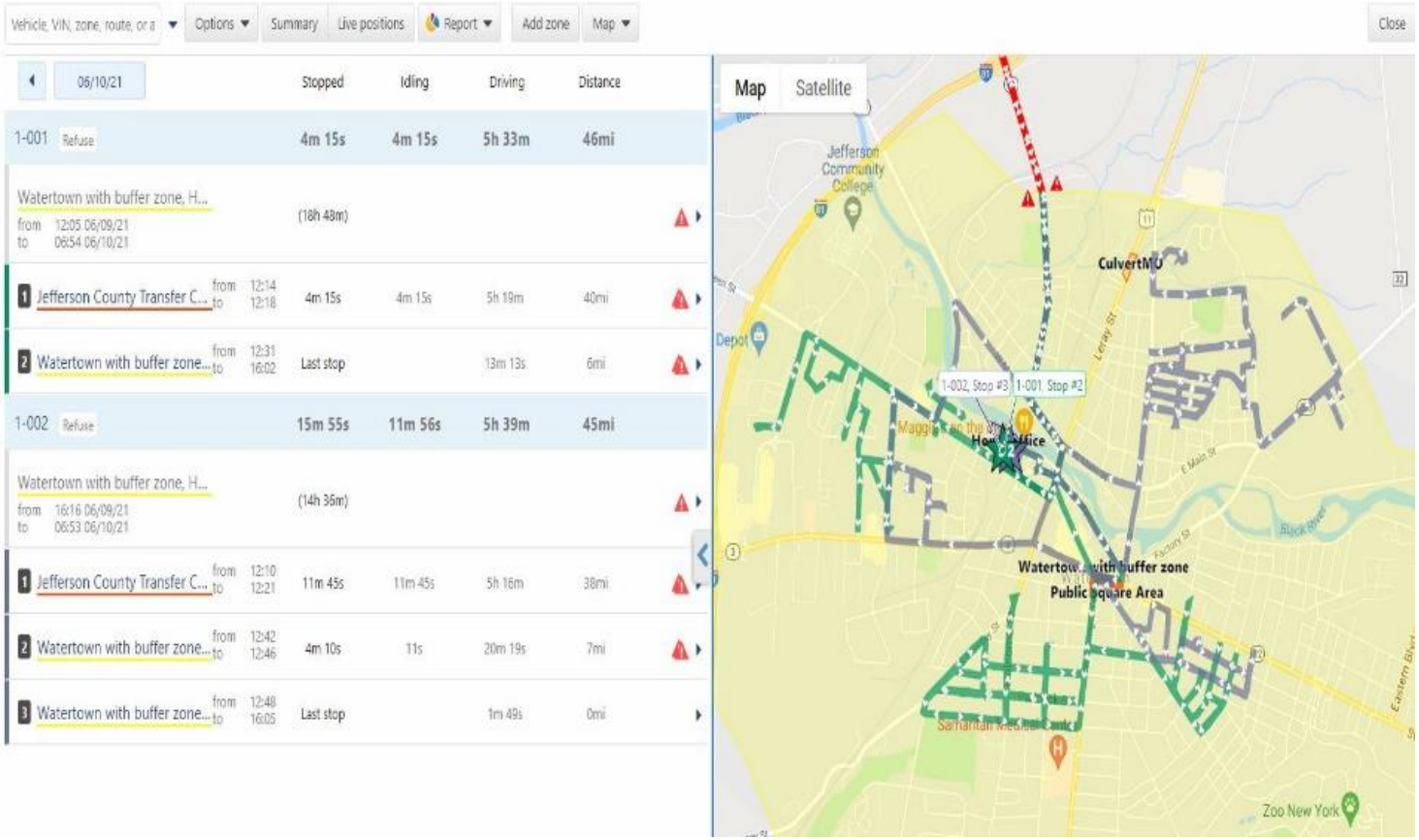


• Current Refuse & Recycling Disposal Operation

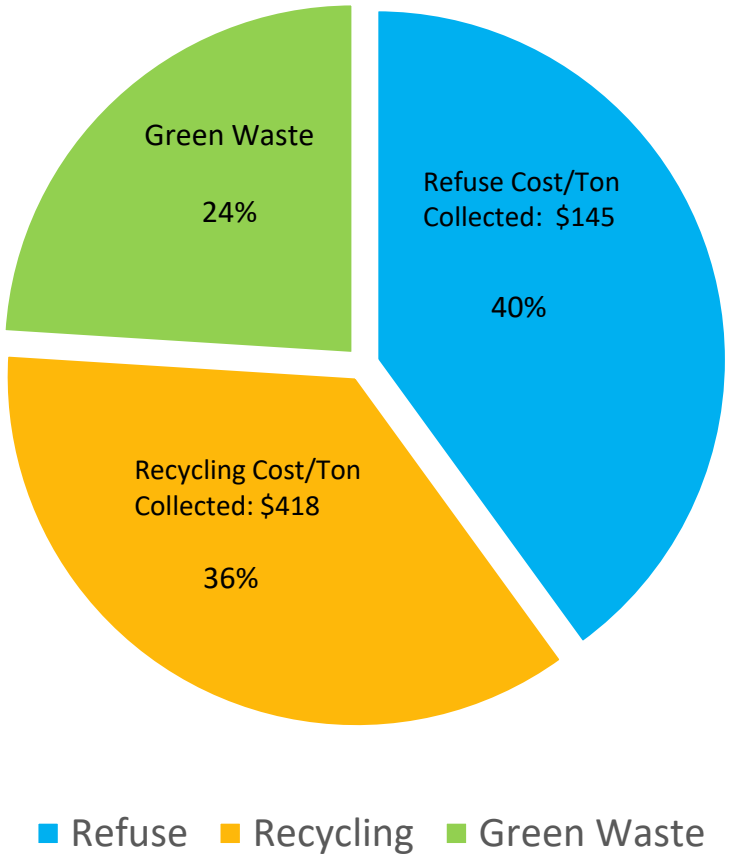
- Currently, both refuse & recycling are taken to the Jefferson County Solid Waste Facility in Pamelia.
- The County charges $73/ton to load, transport and dispose of our refuse at the regional landfill in Rodman.
- There is no charge for recycling which is delivered pre-sorted by customers to the County facility.
- Yard waste collection is offered to all residents regardless of participation with the refuse program.

• Typical daily collection route from GPS data

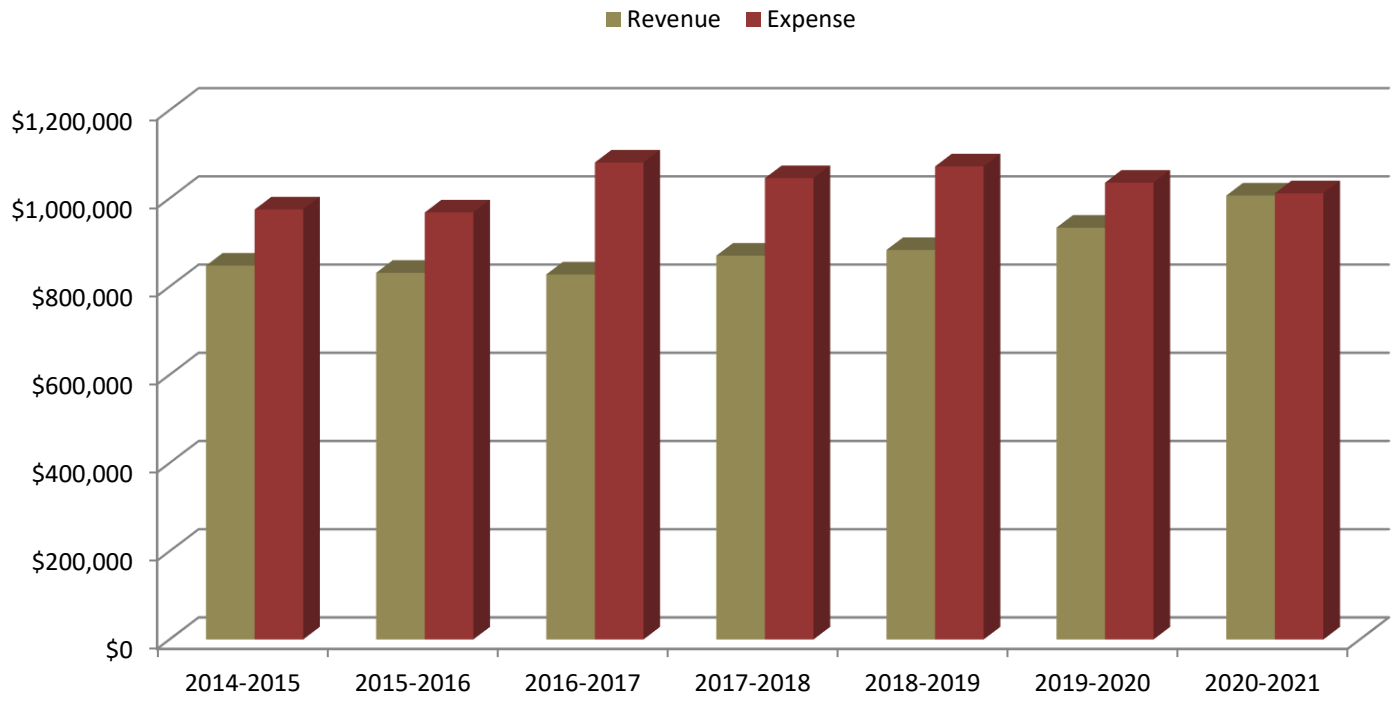
Daily collection routes are balanced in terms of miles traveled and stops collected



• Refuse & Recycling Cost; Budget % by Task & Program Cost/Ton



• Historical Revenue & Expense



	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Revenue	$847,616	$831,250	$827,556	$870,171	$883,025	$933,688	$1,006,471
Expense	$974,812	$968,111	$1,081,373	$1,045,796	$1,072,572	$1,035,699	$1,011,625
Gain (Loss)	***($127,196)***	***($136,862)***	***($253,818)***	***($175,625)***	***($189,547)***	***($102,011)***	***($5,154)***

Revenue/Expenses are taken from actual YTD figures for the fiscal years noted and include capital depreciation and indirect costs.

• How do we change?

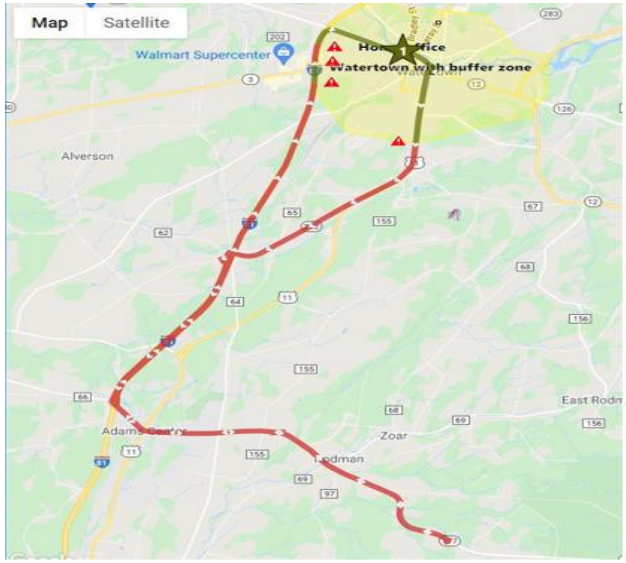
Transitioning to Single Stream essentially requires two questions be answered:

How & How Much $$

- ***Maintaining a sustainable, reliable service for the community is paramount to any proposed changes.***

- Recycling:
  - Collection considerations
  - How and where will we dispose of the single stream product?
  - Budget implications

- Refuse:
  - Continue hauling to the County facility in Pamelia
  - Direct haul to the Rodman landfill



• Recycling Collection

- Side load/rear load trucks can be used for single stream collection.
- We currently deploy 2 collection trucks for recycling with 2 operators.
- Single Stream collection will see 1 truck/1 operator deployed daily for recycling collection.

• Recycling Disposal

- Currently, the only facility accepting single stream recycling is located in Syracuse
  - Option 1:
    - Establish City owned/operated recycle transfer facility to consolidate loads for transfer to Syracuse.
  - Option 2:
    - Partner w/Fort Drum to share their recycling transfer facility.

• Refuse Disposal

- Continuing to use the County transfer station
  - No new capital requirements
- Direct Haul to the Rodman Landfill
  - Requires replacing the current collection fleet with tandem axle trucks.
  - 5000 mile annual increase when compared to the current operation which translates to about 9 miles/day/vehicle.
  - Unknown impact on repair/maintenance expenses with equipment operating in a landfill environment vs. a transfer station.
  - Reduced Tip fee of $26 per ton or $82,000 annually based on the current tons collected.
  - Larger truck capacity affords ability to absorb increased demand.
  - Replace trucks on current schedule and transition to direct haul incrementally.

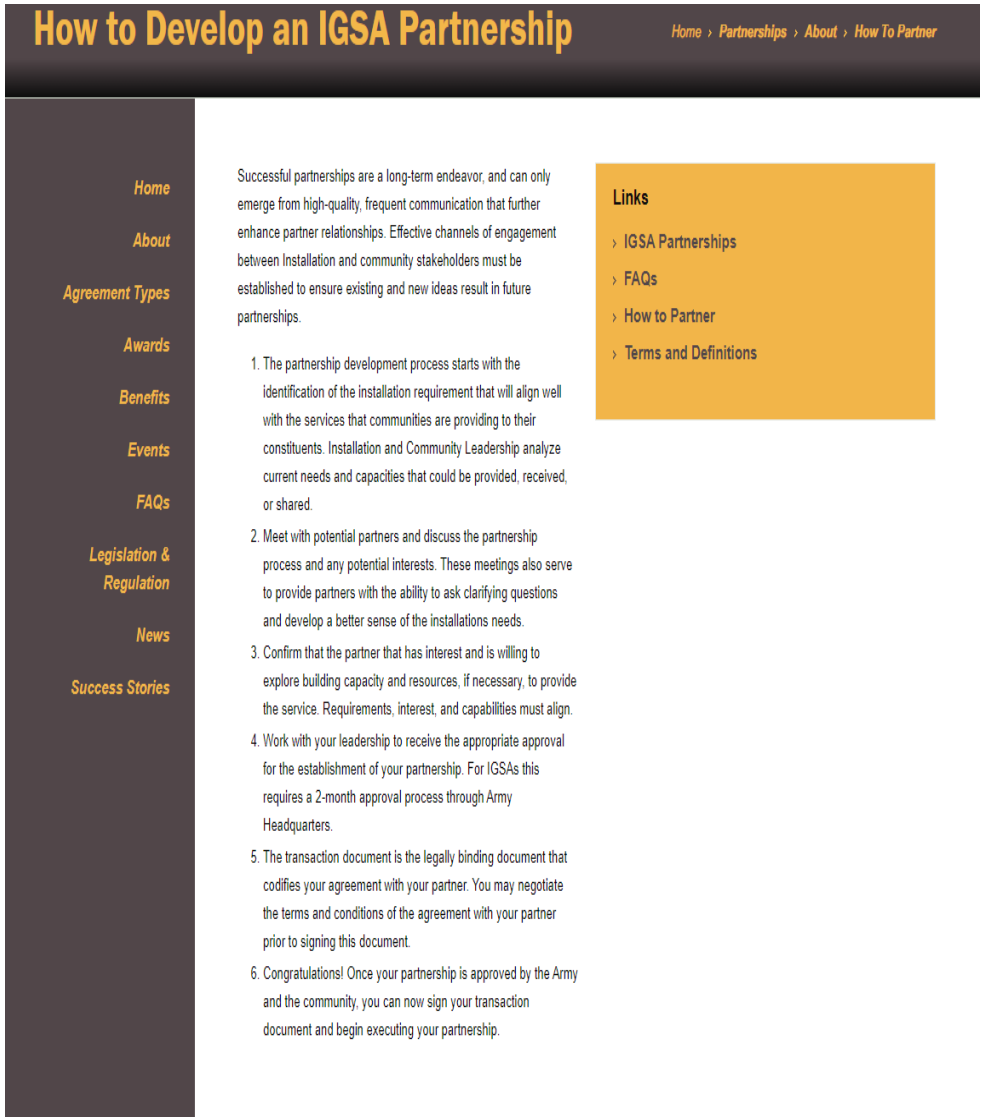
• Options with Fort Drum

- Partnering with Fort Drum to use their existing transfer facility through an Intergovernmental Support Agreement (IGSA).
- The City will provide for the transportation of compacted single stream containers to the Syracuse Material Recovery Facility in exchange for utilizing the Forts facility.
- This requires acquisition of a roll-off transit vehicle. $180,000.

Longer Term Options with Fort Drum

- Apply for a Defense Community Infrastructure Program (DCIP) Grant to fund construction of a recycling transfer facility in conjunction with Fort Drum.

• Intergovernmental Support Agreement



How to Develop an IGSA Partnership

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Successful partnerships are a long-term endeavor, and can only emerge from high-quality, frequent communication that further enhance partner relationships. Effective channels of engagement between Installation and community stakeholders must be established to ensure existing and new ideas result in future partnerships.

1. The partnership development process starts with the identification of the installation requirement that will align well with the services that communities are providing to their constituents. Installation and Community Leadership analyze current needs and capacities that could be provided, received, or shared.
2. Meet with potential partners and discuss the partnership process and any potential interests. These meetings also serve to provide partners with the ability to ask clarifying questions and develop a better sense of the installations needs.
3. Confirm that the partner that has interest and is willing to explore building capacity and resources, if necessary, to provide the service. Requirements, interest, and capabilities must align.
4. Work with your leadership to receive the appropriate approval for the establishment of your partnership. For IGSAs this requires a 2-month approval process through Army Headquarters.
5. The transaction document is the legally binding document that codifies your agreement with your partner. You may negotiate the terms and conditions of the agreement with your partner prior to signing this document.
6. Congratulations! Once your partnership is approved by the Army and the community, you can now sign your transaction document and begin executing your partnership.

Links

- IGSA Partnerships
- FAQs
- How to Partner
- Terms and Definitions

QUESTIONS, COMMENTS, SUGGESTIONS?

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