

VILLAGE OF NICHOLS: **RECREATION IMPROVEMENTS PROJECT**

ENVIRONMENTAL ASSESSMENT



Prepared by:
Tectonic Engineering & Surveying
PO Box 37, 70 Pleasant Hill Road
Mountainville, NY 10953

New York State Homes and Community Renewal
Governor's Office of Storm Recovery
38-40 State Street
Albany, NY 12207

August 8, 2018

**VILLAGE OF NICHOLS:
RECREATION IMPROVEMENTS PROJECT**
Environmental Assessment

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Project Name: Village of Nichols: Recreation Improvements Project

Project Locations: Kirby Park at River Street (NYS Route 502), Village of Nichols, Town of Nichols, Tioga County New York 13812; and Village of Nichols owned parcel at West River Road (NYS Route 282), Village of Nichols, Town of Nichols, Tioga County, New York 13812


Federal Agency: U.S. Department of Housing and Urban Development (HUD)

Responsible Entity: New York State Homes and Community Renewal (HCR)
Governor's Office of Storm Recovery (GOSR)

**Responsible Agency's
Certifying Officer:** Lori A. Shirley, Certifying Environmental Officer
38-40 State Street, Hampton Plaza
Albany, New York 12207
(518) 474-0755, Lori.Shirley@nyshcr.org

Project Sponsor: Village of Nichols
Primary Contact: Lesley L. Pelotte, Village of Nichols Mayor
P.O. Box 142
Nichols, New York 13812
Phone: (607) 699-3947
E-mail: Pelotte101@gmail.com

Project NEPA Classification: 24 CFR 58.36 (Environmental Assessment)

Environmental Finding:	<input checked="checked" type="checkbox"/> Finding of No Significant Impact - The project will not result in a significant impact on the quality of the human environment.
	<input type="checkbox"/> Finding of Significant Impact - The project may significantly affect the quality of the human environment.
Certification	The undersigned hereby certifies that New York State Homes and Community Renewal has conducted an environmental review of the project identified above and prepared the attached environmental review record in compliance with all applicable provisions of the National Environmental Policy Act of 1969, as amended (42 USC Sec. 4321 et seq.) and its implementing regulations at 24 CFR Part 58.
Signature	 Lori A. Shirley

**Environmental Assessment
Prepared
By:**

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CERTIFICATION OF NEPA CLASSIFICATION

It is the finding of the New York State Housing Trust Fund Corporation that the activity(ies) proposed in its 2018 NYS CDBG-DR project, Village of Nichols: Recreation Improvements Project are:

Project Year

Project Name

Check the applicable classification.

- ☐ Exempt as defined in 24 CFR 58.34 (a).
- ☐ Categorically Excluded as defined in 24 CFR 58.35(b).
- ☐ Categorically Excluded as defined in 24 CFR 58.35(a) and no activities are affected by federal environmental statutes and executive orders [i.e., exempt under 58.34(a)(12)].
- ☐ Categorically Excluded as defined in 24 CFR 58.35(a) and some activities are affected by federal environmental statutes and executive orders.
- ☒ "Other" neither exempt (24 CFR 58.34(a)) nor categorically excluded (24 CFR 58.35).
- ☒ Part or all of the project is located in an area identified as a floodplain or wetland. For projects located in a floodplain or wetland, evidence of compliance with Executive Orders 11988 and/or 11990 is required.

For activities excluding those classified as "Other", attached is the appropriate Classification Checklist (Exhibit 2-4) that identifies each activity and the corresponding citation.



Signature of Certifying Officer

August 8, 2018

Date

Lori A. Shirley

Print Name

Certifying Environmental Officer

Title

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CERTIFICATION OF SEQRA CLASSIFICATION

It is the finding of the New York State Housing Trust Fund Corporation that the activity(ies) proposed in its 2018 NYS CDBG-DR project, Village of Nichols: Recreation Improvements Project are:

Project Year

Project Name

Check the applicable classification:

- ☒ Type I Action (6NYCRR Section 617.4)
- ☐ Type II Action (6NYCRR Section 617.5)
- ☐ Unlisted Action (not Type I or Type II Action)

Check if applicable:

- ☐ Environmental Impact Statement (EIS) Prepared
- ☐ Draft EIS
- ☐ Final EIS



Signature of Certifying Officer

August 8, 2018

Date

Lori A. Shirley

Print Name

Certifying Environmental Officer

Title

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

The Village of Nichols: Recreation Improvements involves construction at two (2) locations: Kirby Park at East River Road (NYS Route 502), Village of Nichols, Town of Nichols, Tioga County New York 13812, and at a Village of Nichols owned parcel at West River Road (NYS Route 282), Village of Nichols, Town of Nichols, Tioga County, New York 13812 (see project location maps in **Attachment 1**). The Village of Nichols is requesting CDBG-DR funding for recreational improvements to Kirby Park and the creation of a new village park, Veterans Memorial Park.

The recreational improvements to Kirby Park will include the following: installation of new park signs and lighting, multi-use trails, a pedestrian walkway, a children's play area, portable toilet facilities, constructing new parking in the northern portion of Kirby Park with increased handicapped accessible parking, resiliency landscaping, upgrading Kirby Park's perimeter and entrance, improving the southern parcel of Kirby Park with secondary parking, and repositioning the practice baseball field, pavilion, and basketball court.

The project will also involve the creation of a new village park called Veterans Memorial Park, to be located on another village owned parcel of property located in the Village of Nichols. The Veterans Memorial Park will be a small outdoor space that conserves the existing landscape and supports the surrounding landscape and local wildlife. The new public park area will improve the overall fitness of the Village of Nichols. The creation of the park will involve the installation of a landscaped park entrance with a park sign along West River Road, benches, and a five to six foot-wide park walkway along a loop configuration that will be approximately 65 feet long. Additional amenities will potentially include lighting and a Veteran's Memorial with flagpole(s). The Park site will be limited to the Village-owned parcel. A safe and feasible pedestrian link along West River Road from the Village to the park entrance is also proposed, if funding allows (see Kirby Park Improvements 60% Submission Draft plans in **Attachment 2**).

Ground disturbance will be associated with the installation of footings for the new pavilion location, appropriate grading for the installation/repositioning of new or existing structures, the installation of signs, the installation of utilities and associated infrastructure, and installation of plants and trees for resiliency landscaping. The parcels are currently owned by the Village of Nichols and contain NYSDEC, NYSDOT and Water Well easements.

The project also includes funds that may be utilized at a later date, after feasibility studies are completed to identify alternatives for streambank stabilization for Wappasening Creek. A separate environmental review will be completed for this streambank stabilization.

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:

During Tropical Storm Lee, the Wappasening Creek rose over its banks and flooded 90% of Kirby Park. The flood waters washed away goal posts, caused structural damage to existing park facilities, and left the grounds unusable due to mud and debris. This project will provide an economic benefit to the area by enhancing tourism and recreation opportunities for visitors while improving the residents' overall quality of life by increasing active recreation.

This project includes enhancements to Kirby Park that are intended to increase flood resiliency to make the park's amenities more flood-resistant and reduce the amount of damage and debris clean-up after storms, while simultaneously improving the quality of life for residents. Additionally, the creation of Veterans Memorial Park, a pocket park located within the commercial district and out of floodplain, is designed to meet the recreation needs of children, seniors, and those browsing the commercial district.

Existing Conditions and Trends [24 CFR 58.40(a)]:

The proposed project is located in Southern Tioga County, along the Susquehanna River. Tioga County is largely characterized by forested and agricultural lands. The Project Area is located within the mixed

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Village of Nichols: Recreation Improvements Project, Nichols, NY

residential and commercial development of the Village of Nichols, located immediately south of the Southern Tier Expressway and Susquehanna River. Kirby Park is an existing recreational area located east of the levee protecting the Village from the floodplain associated with Wappasening Creek and Susquehanna River. The proposed parcel for the Veterans Memorial Park is currently an undeveloped parcel located west of Kirby Park, off of River Road. Kirby Park is the heart of the Village and the Town of Nichols, with residents in the area utilizing the facility every weekend for community and individual events. Unfortunately, this park has regularly been inundated with floodwaters, which undermine the existing structures and roadways while impacting the levee by depositing mud and silt within the floodplain. The recreational structures at Kirby Park were completely destroyed during Tropical Storm Lee, with only the major structures such as the pavilion remaining. Other items, such as a nearly 300 pound cement picnic table, were transported across the length of the park by the floodwaters. Due to the expense of regular flooding at this facility, the area has come to rely on volunteers to help repair and clean the park after flood events.

Standard Conditions for All Projects

Any change to the approved scope of work will require re-evaluation by the Certifying Officer for compliance with NEPA and other laws and Executive Orders.

This review does not address all federal, state and local requirements. Acceptance of federal funding requires the recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.

Funding Information

Estimated Total HUD Funded Amount:	\$850,000.00
CDBG-DR	\$850,000.00

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$850,000.00

Compliance with 24 CFR 58.5, and 58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	Based on guidance provided by HUD via Fact Sheet #D1 ¹ , the National Plan of Integrated Airport Systems (NPIAS) was reviewed for civilian, commercial service and military airports located near the Project. This review is summarized in the Airport Hazards Map included in Attachment 3 . There are no civilian, commercial service airports located within 2,500 feet of the proposed project. There are no military airports located within 15,000 feet of the Site. No additional review is required.
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	Based on the USFWS Coastal Barrier Resources System Map ² included in Attachment 3 , the Project is not located in, or within 150 feet of, a Coastal Barrier Resource System Unit or Otherwise Protected Area.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	Based on the FEMA FIRMette included in <i>Appendix II</i> of Attachment 4 , the proposed project is located within a FEMA ³ designated flood zone (100-year floodplain, Special Flood Hazard Area – Zone AE). However, proof of National Flood Insurance Program (NFIP) insurance is not required as the proposed project does not involve insurable structures.

¹ Fact Sheet #D1: Siting HUD-Assisted Projects in Accident Potential Zones.

https://www.michigan.gov/documents/mshda/mshda_cd_nsp2_air_accident_315724_7.pdf

² USFWS Coastal Barrier Resources. <https://www.fws.gov/ecological-services/habitat-conservation/cbra/Maps/index.html>

³ FEMA Flood Map Service Center. <https://msc.fema.gov/portal>

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The proposed project is located in Tioga County, which is listed as a current attainment area⁴ for particulate matter (PM_{2.5} or PM₁₀), carbon monoxide, and ozone. Therefore, a conformity and screening analysis was not performed according to the requirements of 40 CFR 93, Subpart B (federal general conformity regulations).</p> <p>The proposed project would not generate significant levels of vehicular traffic; therefore, no exceedances of the National Ambient Air Quality Standard (NAAQS) associated with carbon monoxide (CO) or particulate matter (PM) is anticipated occur. The proposed project will not result in siting any new source of air pollutants. The proposed project will not adversely affect the State Implementation Plan (SIP). Any air quality impacts would be short-term and localized during construction and, therefore, no significant adverse impacts to air quality are anticipated. However, it is recommended that construction activities are conducted in such a way as to ensure acceptable air quality during these activities (e.g., through minimization of volatile organic compounds and nitrogen oxides emissions, mindful operation of gas-powered construction equipment to avoid prolonged idling, or fugitive dust management during construction). It is also recommended that low-VOC materials and inventory and energy star efficient equipment are used, as practicable.</p>
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>Not applicable.</p> <p>The proposed project is not located within the New York State Coastal Boundary (Attachment 3).</p>
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p><u>Project Sites:</u></p> <p>The Recreation Improvements within the Village of Nichols involves construction at two locations: Kirby Park at East River Road and a Village of Nichols owned parcel at West River Road. The proposed recreational work at Kirby Park will be performed on the following parcels</p>

⁴ EPA, *Nonattainment Areas for Criteria Pollutants*. <https://www.epa.gov/green-book>

EPA, *Recent Updates: Federal Register Notices Published or Effective After September 22, 2016*
<http://www.epa.gov/airquality/greenbook/adden.html>

<p>Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)</p>	<p>designated as Section-Block-Lot (SBL) 159.19-1-5, 159.19-1-6, and 159.19-1-7; the proposed Veterans Memorial Park will be created on parcel designated SBL 159.19-2-5. These two locations will be collectively known as the Project Sites within this section.</p> <p><u>Project Sites Records Review</u> The Project Sites are not listed on the NYSDEC Bulk Storage, Environmental Site Remediation, or Spill Incidents Databases. A review of the NYSDEC databases provided no indication of past uses of the Project Sites that could contaminate the Project Sites or conflict with the intended utilization of the Project Sites. The Project Sites are not located within 3,000 feet of a toxic or solid waste landfill site.</p> <p>The Project Sites are not listed on an EPA Superfund National Priorities or CERCLA list or equivalent State list or EPA Resource Conservation and Recovery (RCRA) database. The Project Sites are not known or suspected to be contaminated by toxic chemicals or radioactive materials.</p> <p><u>Surrounding Properties Records Review</u> A search of the NYSDEC Spill Incidents Database resulted in the identification of 23 spills within 1,000 feet of the Project Sites; all 23 spills have been closed by the NYDEC. A spill closure means that the records and the data submitted indicate that the necessary cleanup and removal actions have been completed and no further remedial actions are necessary or the case was closed for administrative reasons (e.g. multiple reports of a single spill consolidated into a single spill number). As such, these spill reports are not considered a hazard that could conflict with the intended utilization of the Project Sites.</p> <p>According to the NYSDEC Environmental Site Remediation Database, there is one (1) environmental remediation site within 3,000 feet of the Project Sites. South Main Street Dry Cleaners (Site Code: 754014) is a NYS Superfund site located at 37 South Main Street in the Village of Nichols. A “No Further Action” ROD was signed in March 2002 for this site, after groundwater sampling in 2000 indicated</p>
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<p>Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)</p>		<p>PCE contaminate levels had diminished to levels below groundwater standards for PCE in all locations but one, and that soil sample results indicated the source of contamination was gone. As such, this site is not considered a hazard that could conflict with the intended utilization of the Project Sites. This site is reviewed in depth in Attachment 5.</p> <p>According to NYSDEC Bulk Storage Database, there are three (3) Petroleum Bulk Storage (PBS) sites located within 3,000 feet of the Project Sites. These bulk storage sites are not considered a hazard that could conflict with the intended utilization of the Project Sites due to the distance and cross-gradient locations of these facilities from the Project Sites, the reported status of the permitted tanks, and the status of the existing spill report and lack of any open spills or releases to the environment from these facilities.</p>
<p>Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes No <input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>A formal request was submitted to the NYSDEC Natural Heritage Program (NHP) for records of threatened or endangered species in the vicinity of the proposed project site. On April 19, 2018, a response was received from the NHP indicating their database contained no records of rare or state-listed animals or plants, or significant natural communities at the project site or in its immediate vicinity; this response is included in Attachment 6.</p> <p>The USFWS lists the federally threatened Northern Long-eared Bat (NLEB) (<i>Myotis septentrionalis</i>) and migratory birds of concern as protected species with the potential to occur within the vicinity of the proposed project site. The Information for Planning and Consultation (IPaC) Resource List indicates that there are ten (10) species of migratory birds protected by the MBTA and BGEPA that could potentially be affected by the proposed project, including the Bald Eagle (<i>Haliaeetus leucocephalus</i>). However, there are no known breeding bald eagles within the vicinity of the proposed project site; therefore, no adverse impacts to breeding bald eagles are expected to occur as a result of the proposed project. Migratory birds are expected to temporarily leave the area during construction due to noise and disturbance.</p>

<p>Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>		<p>Therefore, the proposed project is likely to have no effect on migratory birds of concern.</p> <p>A USFWS consultation request was submitted on May 22, 2018 to determine if project activities will affect NLEB populations and is included in Attachment 6. Suitable summer habitat for NLEBs is present within the vicinity of the Project Area. The Project may involve the removal of trees in a developed area that is comprised of protected park land, residential properties, and commercial properties. A NYSDEC jurisdictional inquiry response on March 13, 2018 states that the “project area does not occur in the immediate vicinity of known occurrences of rare or state-listed bat species,” which includes the NLEB. It is recommended by the NYSDEC and GOSR that tree removal is performed during the winter season (November 1 – March 31). The project activities will not disturb hibernating NLEBs in a known hibernaculum, alter the entrance or interior environment of a known hibernaculum, remove any trees within 0.25 miles of a known hibernaculum, or cut or destroy known occupied maternity roost trees or any other trees within a 150-foot radius from the maternity roost tree.</p> <p>However, while both the NYSDEC and GOSR recommend that tree cutting occur between November 1 and March 31, this may not be feasible due to construction schedules which have not been finalized. Therefore, as indicated in the consultation package included in Appendix 6, GOSR has determined that the proposed Project may affect the NLEB, but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule. The Northern Long-Eared Bat 4(d) Rule Streamlined Consultation Form indicates that if the USFWS does not respond within 30 days from submittal of this form, the action agency may presume that its determination is informed by the best available information and that its project responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS January 5, 2016, Programmatic BO.</p> <p>The USFWS response was not received within 30 days from submission of this determination to USFWS. Therefore, GOSR may presume that its</p>
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Village of Nichols: Recreation Improvements Project, Nichols, NY

<p>Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>		<p>determination regarding the northern long-eared bat is informed by the best available information and that its responsibilities under Section 7(a)(2) of the Endangered Species Act with respect to the northern long-eared bat are fulfilled, as documented in Attachment 6.</p>
<p>Explosive and Flammable Hazards 24 CFR Part 51 Subpart C</p>	<p>Yes No <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>Not applicable.</p> <p>This criterion is applicable to HUD-assisted projects that involve new residential construction, conversion of non-residential buildings to residential use, rehabilitation of residential properties that increase the number of units, or restoration of abandoned properties to habitable condition. The proposed project does not include these activities. Further, the proposed project does not involve the introduction of bulk storage of hazardous materials.</p>
<p>Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<p>Yes No <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>Not applicable.</p> <p>The project is not located within a New York State (NYS) Agricultural District⁵. While the project is located in an area designated as “prime farmland” by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Farmland Classification Map, this project does cause new disturbance to Prime, Unique, or Statewide Important Farmland and would not involve the conversion of farmland to non-agricultural use. Therefore, the proposed project would not violate the Farmland Protection Policy Act. No further review is required.</p> <p>The NYS Agricultural District Map and USDA NRCS reports are included as part of Attachment 7.</p>

⁵ NYS Agricultural Districts. <http://www.agriculture.ny.gov/ap/agsservices/agricultural-districts.html>

Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	Based on the FEMA ⁶ FIRMette included in <i>Appendix II</i> of Attachment 4 , the project is located within a FEMA designated flood zone. A <u>Floodplain Management & Wetlands Protection Determination</u> was completed pursuant to 24 CFR 55.12(a)(4) and is included as Attachment 4 . Project activities do not involve insurable structures; these structures would not be included in calculations as defined by 24 CFR 55.2(b)(10).
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800; Tribal notification for new ground disturbance.	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>No recorded historic properties are located on or adjacent to the project area which are eligible for the State and National Register of Historic Places. There are no recorded archaeological sites near the project area according to the NYSHPO.</p> <p>Section 106 approval was obtained. On May 24, 2018, the New York State Historic Preservation Office (SHPO) responded to a consultation submission with a request for a Phase 1A/1B Archaeological Survey in order to document areas of previous disturbance and identify any archaeological sites present within these two project areas. On June 7, 2018, the SHPO determined that the project will have No Impact upon cultural resources listed in or determined eligible for inclusion in the State and National Register of Historic Places. No further action is required. See SHPO findings, annexed hereto as Attachment 8.</p> <p>In the event of any inadvertent discoveries of human remains and/or cultural resources including, but not limited to, funerary objects, sacred objects and objects of cultural patrimony are made during execution of the project scope, then work shall be halted immediately and the SHPO and THPO of all appropriate Tribes, Nations and Communities shall be consulted before work can be resumed.</p>
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The proposed project use is not a noise-sensitive use. The proposed project activities are not expected to generate excessive noise during the short-term construction work and will adhere to local noise control standards. The proposed project activities will be completed in

⁶ FEMA Flood Map Service Center. <https://msc.fema.gov/portal>

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Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B		accordance with all applicable federal, state and local laws, regulations, and permit requirements and conditions. Therefore, the proposed project is not expected to generate any significant adverse noise impacts.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The Project Area is located above the Clinton Street Ballpark SSA. The project activities were reviewed according to the non-housing project activity initial screen criteria form and a sole source aquifer analysis and consultation was submitted to the EPA on June 13, 2018. The EPA determined that there is compliance with the Safe Drinking Water Act of 1974 Section 1424(e) and the regulations promulgated in 40 CFR Part 149, and no further compliance measures are required. The EPA determination for this project is included in Attachment 9 .
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The Wappasening Creek is located on the eastern border of Kirby Park. According to the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory, the Wappasening Creek is designated as a riverine wetland, while the NYSDEC notes the Wappasening Creek is a Classification C, Standard C waterway. However, the project is located in previously developed areas and will not involve construction or disturbance within the identified wetlands or waterways. The NYSDEC Tidal Wetlands Map indicate that the project area is not located within, or adjacent to, a tidal wetland or the associated 300 foot wetland buffer zone. Wetland maps are included in <i>Appendix I</i> in Attachment 4. Therefore, a formal review process is not required for compliance with <i>Executive Order 11990 Protection of Wetlands</i>, as documented in the <u>Floodplain Management & Wetlands Protection Determination</u>, annexed hereto as Attachment 4.</p> <p>The project is not anticipated to impact on- or off-site wetlands. Therefore, the proposed project is in compliance with the section.</p>
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c) Wild and Scenic Rivers	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The Proposed Project is not located within proximity of any wild, scenic or recreational rivers, as designated by the U.S. Department of the Interior, Congress, or NYSDEC; the Proposed Project is not located within the proximity of any waterway included in the

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Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)		National Wild and Scenic Rivers System ⁷ or Nationwide Rivers Inventory ⁸ (NRI). A NYSDEC & NPS Wild and Scenic Rivers Map is included as part of Attachment 3 .
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The proposed project is not located in an area defined by the NYSDEC as a potential environmental justice area ⁹ , see map included in Attachment 10 . Therefore, the proposed project does not contribute to, or promote, environmental injustice.

⁷ U.S. Department of Interior: National Wild and Scenic Rivers System. <http://www.rivers.gov/new-york.php>

⁸ U.S. Department of Interior: Nationwide Rivers Inventory. <http://www.nps.gov/nrc/programs/rtca/nri/states/ny.html>

⁹ NYSDEC Environmental Justice. <https://www.dec.ny.gov/public/333.html>

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 & 1508.27]

Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

Impact Codes: Use an impact code from the following list to make the determination of impact for each factor.

(1) Minor beneficial impact

(2) No impact anticipated

(3) Minor Adverse Impact – May require mitigation

(4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
LAND DEVELOPMENT		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	The Town of Nichols is located within a rural area primarily devoted towards agricultural use, as agriculture is an important economic sector and contributor to the quality of life for residents. As such, the Town of Nichols zoning districts are designed to permit multiple land uses within each district and, with the exception of one residential district area located at Taylor Avenue off East River Road, agriculture is permitted throughout the Town of Nichols ¹⁰ . The Village of Nichols owns Kirby Park, a popular recreation area designated as a public park; the proposed project does not involve changing the usage of Kirby Park. The proposed Veterans Memorial Park is to be located on an undeveloped parcel within an area that acts as the downtown district of the Village, with mixed use residential and commercial properties. As such, the recreation work at Kirby Park and creation of the new Veterans Memorial Park is compatible with the Town of Nichols zoning and land use plan.
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	According to the United States Geological Survey (USGS) Topographic Map (Attachment 1), the Project is located in an area of little to no slope. The Project activities would not significantly alter the slope of the Project Area. USDA NRCS maps provide information on soils types and properties that influence development of building sites. According to the USDA NRCS Soil Map data for soil

¹⁰ Town of Nichols Agriculture & Farmland Protection Plan, 2012. <https://www.tiogacountyny.com/media/2136/03-20-2012-adopted-plan-complete.pdf>

Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff		<p>classification, the proposed project area is located in a soil map unit that is designated as poorly drained undifferentiated alluvial soils, well drained Tioga silt loam, and well drained high bottom Tioga silt loam (Attachment 7). The undifferentiated alluvial soils are rated as “Not Prime Farmland” while the two Tioga silt loam units are both considered as Prime Farmland.</p> <p>The USDA NRCS interprets and rates the suitability of soil for recreational development uses such as playgrounds and picnic areas. Playground areas are areas used intensely for games – such as baseball, football, and similar activities. Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. Picnic areas are natural or landscaped tracts used primarily for preparing meals and eating outdoors. These areas are subject to heavy foot traffic. Per the NRCS report, the existing conditions at the project area are rated as “somewhat limited” to “very limited” for playground and picnic use. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. Based on the current soil map of the area, no potential undesirable impacts are anticipated and the area should be improved in terms of its landscape and functionality upon completion of the project.</p> <p>The project includes recreational and floodwater resiliency development at an established park that has been repeatedly inundated with floodwaters due to the proximity of the confluence of the Wappasening Creek and Susquehanna River, to the point that floodwaters associated with Tropical Storm Lee covered 90% of the park. These floodwaters eroded the banks of Wappasening Creek, washed away goal posts, and caused structural damage to the park amenities. Stormwater runoff at Kirby Park travels primarily east, towards Wappasening Creek. However, the proposed construction does not involve drainage being significantly altered in the project area, and thus it will not create additional storm water runoff that would adversely affect the existing drainage areas.</p> <p>Erosion and drainage control best management practices (BMPs) will be implemented by the contractor during construction. These practices will include seeding and mulching disturbed areas immediately after construction, and dust control measures such as covering trucks contents, as applicable.</p> <p>All work will be completed utilizing engineered site plans and in accordance with all applicable Federal, State and local regulations, laws and permit requirements and conditions, including State and local building codes. Thus, no potential impacts from erosion, drainage, or stormwater runoff are anticipated.</p>
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GOSR Environmental Review Record

Village of Nichols: Recreation Improvements Project, Nichols, NY

Hazards and Nuisances including Site Safety and Noise	2	<p>Based on a review of available environmental records for the proposed project and surrounding area, the proposed project is unlikely to be impacted by hazardous materials, contamination, toxic chemicals and gases, and radioactive substances. No hazards are anticipated to affect the health and safety of occupants or conflict with the intended utilization of the proposed project. The HUD Environmental Standards Review and the associated attachments are provided in Attachment 5.</p> <p>The proposed project is not a noise-sensitive use. The proposed activities are not expected to generate excessive noise during the short-term construction work and will adhere to local noise control standards. The proposed project will be completed in accordance with all applicable federal, state and local permit requirements and conditions. Therefore, the proposed project would not generate any significant adverse noise impacts.</p>
Energy Consumption	2	The proposed project will cause a temporary increase in energy consumption in the form of fossil fuels for construction equipment necessary for project site construction activities. However, the proposed project will not increase long-term energy consumption.

Environmental Assessment Factor	Impact Code	Impact Evaluation
SOCIOECONOMIC		
Employment and Income Patterns	2	The project will not adversely affect employment opportunities or income patterns, is not likely to impact traffic and potential customer access to residences and businesses in the area, either during construction or operation. Rather, the project would increase the flood resiliency at this popular municipal park, allowing for continued use by the locals and tourists alike.
Demographic Character Changes, Displacement	2	The proposed project is not expected to cause any change in the demographic character of the area. The proposed project does not involve residential or commercial development activities. And, the proposed project does not present the potential to cause the displacement of individuals or families, destroy jobs, local businesses or public community facilities, or disproportionately affect particular populations.

Environmental Assessment Factor	Impact Code	Impact Evaluation
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	2	The proposed project will not introduce any new populations that would increase the student population of the area. As such, the proposed project would not have an impact on educational or cultural facilities.

GOSR Environmental Review Record

Village of Nichols: Recreation Improvements Project, Nichols, NY

Commercial Facilities	2	The proposed project will not introduce any new commercial development that would require additional retail services or other commercial facilities.
Health Care and Social Services	2	The proposed project will not introduce any new development that would require the availability of additional routine or emergency health services. Rather, the proposed project is likely to help provide better access for emergency health services to the local community during future storm events.
Solid Waste Disposal / Recycling	2	The proposed project will not introduce new development that would generate solid wastes on an ongoing basis. All construction wastes will be appropriately disposed of according to the type of waste generated and construction waste management practices in an appropriate, legally compliant receiving facility.
Waste Water / Sanitary Sewers	2	The proposed project will not introduce any new development that would generate waste water. No additional waste water will be generated during construction.
Water Supply	2	The proposed project will not increase demand for water. As such, the proposed project will not have an impact on local water supplies.
Public Safety - Police, Fire and Emergency Medical	2	The proposed project will not generate new demand for police, fire, or emergency services. The proposed project will not impact traffic. Therefore, there will be no adverse effect on the access and travel time for emergency services.
Parks, Open Space and Recreation	1	The proposed project will not introduce new development that would generate demand for open space resources or impede open space access. Instead, the proposed project is likely to increase resilience to flooding in the project area, allowing for quicker resumed use immediately after future storm events. Additionally, a new park and recreational space will be created at the proposed Veterans Memorial Park, creating a new open space and recreation location for the surrounding community.
Transportation and Accessibility	2	Besides limited trips generated by construction vehicles during a short window of construction, the proposed project will not introduce new development that generates continuing demand for transportation access or transportation services.

Environmental Assessment Factor	Impact Code	Impact Evaluation
NATURAL FEATURES		
Unique Natural Features, Water Resources	2	According to NYSDEC, there are no unique geological features located on or adjacent to the project area. According to

Unique Natural Features, Water Resources		<p>NYSDEC's Environmental Resource Map, the project is not located in or adjacent to Significant Natural Communities, Unique Geological Features, or Critical Environmental Areas. These maps are included as part of Attachment 3.</p> <p>Watershed Analysis</p> <p>The project is located within one of the 47 identified watersheds with watershed plans in NYS¹¹. The Susquehanna River Watershed¹² is noted to have water quality that is generally satisfactory, with the most widespread impacts associated with agricultural and other non-point sources that contribute nutrients, such as nitrogen and phosphorus, and sediment to the waters¹³. However, this project at an existing park does not involve agricultural use or other practices that would significantly contribute to this non-point source contamination. Thus, no potential impacts from the project are anticipated.</p> <p>The proposed project will not introduce new demand for groundwater or surface water, nor would the proposed project introduce septic flows that may affect groundwater. Additionally, the proposed project will not significantly increase impervious surfaces or impede waters during future storm or flooding events. Therefore, unique natural features or water resources are not expected to be permanently affected by this proposed project.</p>
Vegetation, Wildlife	1	<p>The proposed project will involve recreational improvements at an existing park. These improvements will involve the removal and replacement of dead or dying trees and the removal of multiple invasive species located along the eastern border of Kirby Park, as noted by the 60% Draft Plans in Attachment 2. Disturbed areas will be restored to pre-existing and/or improved conditions after construction is complete.</p>
Other Factors		<p>There are no other factors identified or evaluated for the proposed project.</p>

¹¹ NYSDEC Watershed Plans. <http://www.dec.ny.gov/chemical/99985.html>

¹² NYSDEC Susquehanna River Watershed. <http://www.dec.ny.gov/lands/48020.html>

¹³ Chesapeake Bay Watershed Implementation Plan: Phase I and Phase II. <http://www.dec.ny.gov/lands/33279.html#Plan>

GOSR Environmental Review Record
Village of Nichols: Recreation Improvements Project, Nichols, NY

Additional Studies Performed:

- Tetra Tech. *Village of Nichols Levee System*, February 17, 2016.

Field Inspection (Date and completed by):

- U.S. Army Corps of Engineers Continuing Eligibility Inspection (CEI): Tetra Tech personnel accompanied by USACE Baltimore District, NYSDEC, and Village of Nichols personnel; July 7, 2015.

Attachments:

1. Project Location Maps
 - a. Street Map
 - b. Topographic Map
 - c. Aerial Map
2. Project Design Plans
 - a. Kirby Park Improvements 60% Submission Draft (7/27/18)
 - b. Kirby Park Preliminary Hydraulic Recommendations (5/7/18)
 - c. Kirby Park Preliminary Model (5/10/18)
3. Project Reference Maps
 - a. Airport Hazards Map
 - b. USFWS Coastal Barrier Resources System Map
 - c. NYS DOS Coastal Boundary Map
 - d. NYSDEC & NPS Wild and Scenic Rivers Map
 - e. NYSDEC Environmental Resource Map
 - f. NYSDEC Critical Environmental Areas Map
4. Floodplain Management and Wetlands Protection Determination
 - a. Floodplain Management and Wetlands Protection Determination Report
 - b. Appendix I
 - i. USFWS National Wetlands Inventory Map
 - ii. NYSDEC Wetlands and Waterways Map
 - iii. NYSDEC Tidal Wetlands Map
 - c. Appendix II
 - i. FEMA FIRMette Map
5. HUD Environmental Standards Review
 - a. HUD Environmental Standards Review Report
 - b. HUD Environmental Standards Review Maps
 - i. NYS Environmental Report Maps
 - ii. EPA NEPA Assist Map
 - c. NYSDEC Reports for Spills, Environmental Remediation Sites, or Bulk Storage Sites
Located on, or within close proximity to, the Project Sites
6. Endangered Species Consultation Documents
 - a. NHP Records Request Response (4/19/18)
 - b. USFWS Consultation Package (5/22/18)
7. Agricultural and NRCS Soil Resource Documents
 - a. New York State Agricultural Districts Map (2016)
 - b. Town of Nichols Agricultural Districts Map (7/30/18)
 - c. USDA NRCS Soil Resource Report
 - d. USDA NRCS Farmland Classification Report
 - e. USDA NRCS Playgrounds Classification Report
 - f. USDA NRCS Picnic Areas Classification Report
 - g. Town of Nichols Zoning Map (7/30/18)
 - h. Town of Nichols Agriculture & Farmland Protection Plan (3/13/12)

GOSR Environmental Review Record

Village of Nichols: Recreation Improvements Project, Nichols, NY

8. State Historic Preservation Office Documentation
 - a. SHPO Archaeological Survey Recommendation (5/24/18)
 - b. SHPO Response (6/7/18)
9. EPA Sole Source Aquifer Documents
 - a. EPA Sole Source Aquifer Map
 - b. EPA Determination Response (6/13/18)
10. Environmental Justice Documents
 - a. NYSDEC Potential Environmental Justice Areas Map

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]:

- Federal Aviation Administration (FAA)
- Federal Emergency Management Agency (FEMA)
- United States Department of Agriculture (USDA)
- United States Department of Interior (USDOI)
- United States Environmental Protection Agency (USEPA)
- United States Fish and Wildlife Service (USFWS)
- United States Geological Survey (USGS)
- National Parks Service (NPS)
- Natural Resources Conservation Service (NRCS)
- New York State Department of Environmental Conservation (NYSDEC)
- New York State Department of State (NYSDOS)
- New York State Historic Preservation Office (SHPO)
- Natural Heritage Program (NHP)
- Nassau County Department of Health
- NYRCR Program Recreation Improvements and Creek Stabilization Project Pre-application Report. (11/8/16)
- Tioga County, *NY Rising Community Reconstruction Program Plan*. (3/2014)
- Tioga County Hazard Mitigation Plan (Updated: 2012)

List of Environmental Permits Obtained or Potentially Required:

- Town of Nichols Floodplain Development Permit
- NYSDEC – SPDES General Permit for Stormwater Discharges from Construction Activity – GP-0-15-002 (if project involves ground disturbance of one or more acre)

Public Outreach [24 CFR 50.23 & 58.43]:

- August 8, 2018 – Publication of a Combined Notice of Finding of No Significant Impact (*FONSI*) and Notice of Intent to Request Release of Funds (*NOI-RROF*).

Cumulative Impact Analysis [24 CFR 58.32]:

The proposed project was evaluated according to the proposed site plans included in **Attachment 2**. There are no other known future projects in the area of the proposed project that would create environmental or social impacts in the community. After feasibility studies are completed to identify alternatives for streambank stabilization of Wappasening Creek and if funding is available, the Town of Nichols proposes to stabilize the creek along the park. A separate environmental review will be completed for the streambank stabilization. The bank improvements will be implemented to enhance the conditions of the creek and community. The park improvements and bank stabilization fit within the surrounding area per the local zoning regulations and comprehensive plan's land use goals.

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]

The primary alternative for the proposed project is the "no action" alternative. This alternative means that there would be no resiliency work undertaken to mitigate future flood damage from future storm events. This would leave the Park vulnerable to being damaged in the future, to the point that the levee itself would sustain damage – leaving the surrounding community vulnerable to future flood damage. The "no action" alternative would provide no protection to this protective park from future flood events, as the resiliency measures would be compromised due to lack of financial support. Thus, the "no action" alternative is not feasible in relation to the desired objective of creating area resiliency to future flooding events.

Summary of Findings and Conclusions:

The preceding Statutory Checklist and Environmental Assessment Checklist, and the discussion below, document that the proposed work will comply with regulations in 24 CFR part 58 and that there are no direct or cumulative adverse environmental impacts anticipated as a result of the proposed project.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Any change to the approved scope of work will require re-evaluation by the Certifying Officer for compliance with NEPA and other laws and Executive Orders.

This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal state and local laws. Failure to obtain all appropriate federal, state, and local environmental permits and clearances may jeopardize federal funding.


Law, Authority, or Factor	Mitigation Measure
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	The proposed project will be completed in accordance with all applicable federal, state and local permit requirements and conditions.
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	The Project may involve the removal of trees in a developed area that is comprised of protected park land, residential properties, and commercial properties. A NYSDEC jurisdictional inquiry response on March 13, 2018 states that the “project area does not occur in the immediate vicinity of known occurrences of rare or state-listed bat species,” which includes the NLEB. It is recommended by the NYSDEC and GOSR that tree removal is performed during the winter season (November 1 – March 31). The project activities will not disturb hibernating NLEBs in a known hibernaculum, alter the entrance or interior environment of a known hibernaculum, remove any trees within 0.25 miles of a known hibernaculum, or cut or destroy known occupied maternity roost trees or any other trees within a 150-foot radius from the maternity roost tree. GOSR recommends that tree cutting occur between November 1 and March 31 , but this may not be feasible due to construction schedules which have not been finalized. Prior to the initiation of any construction, flagging would be used to demarcate trees to be protected compared with those to be cut. The proposed project may affect the NLEB, but any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule (Attachment 6).

GOSR Environmental Review Record
Village of Nichols: Recreation Improvements Project, Nichols, NY


Determination:

☒ **Finding of No Significant Impact** [24 CFR 58.40(g)(1); 40 CFR 1508.27]
The project will not result in a significant impact on the quality of the human environment.

☐ **Finding of Significant Impact** [24 CFR 58.40(g)(2); 40 CFR 1508.27]
The project may significantly affect the quality of the human environment.

Preparer Signature:  Date: August 8, 2018

Name/Title/Organization: Kristofer Mierisch, Senior Environmental Analyst
Tectonic Engineering and Surveying Consultants, P.C.

Certifying Officer Signature:  Date: August 8, 2018

Name/Title: Lori A. Shirley, Certifying Officer, GOSR

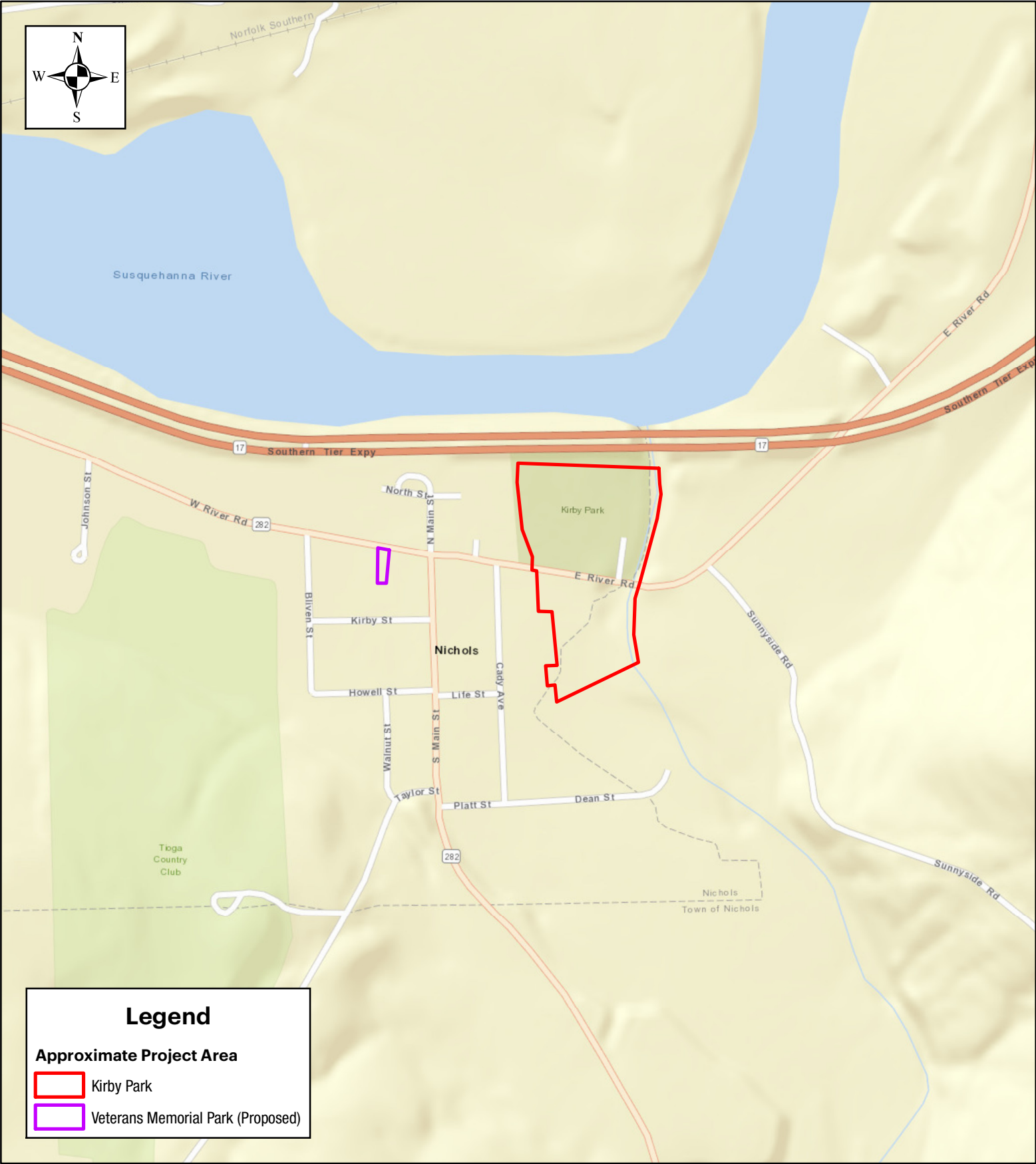
This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Attachment 1

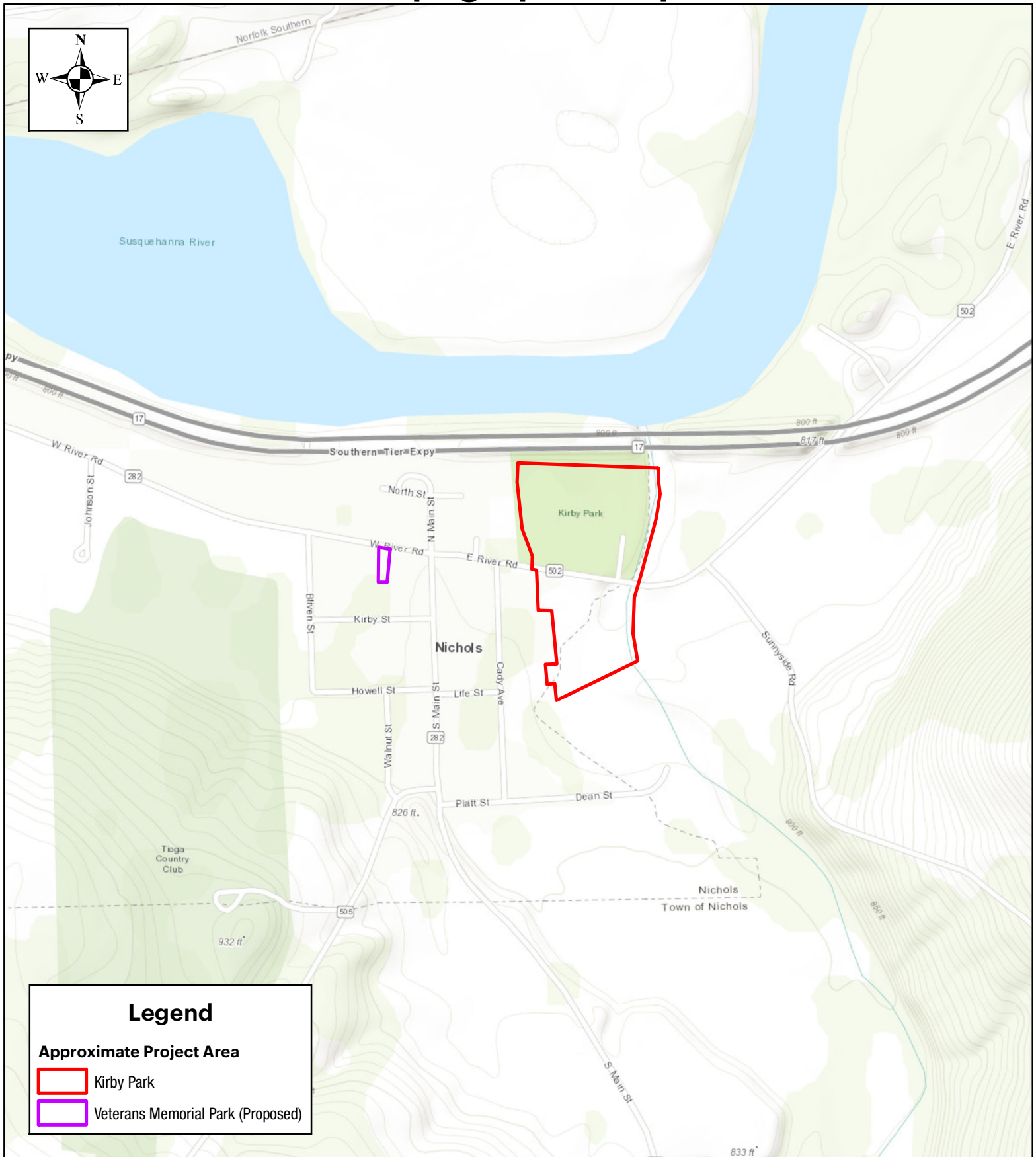
Project Location Maps

Street Map
Topographic Map
Aerial Photograph

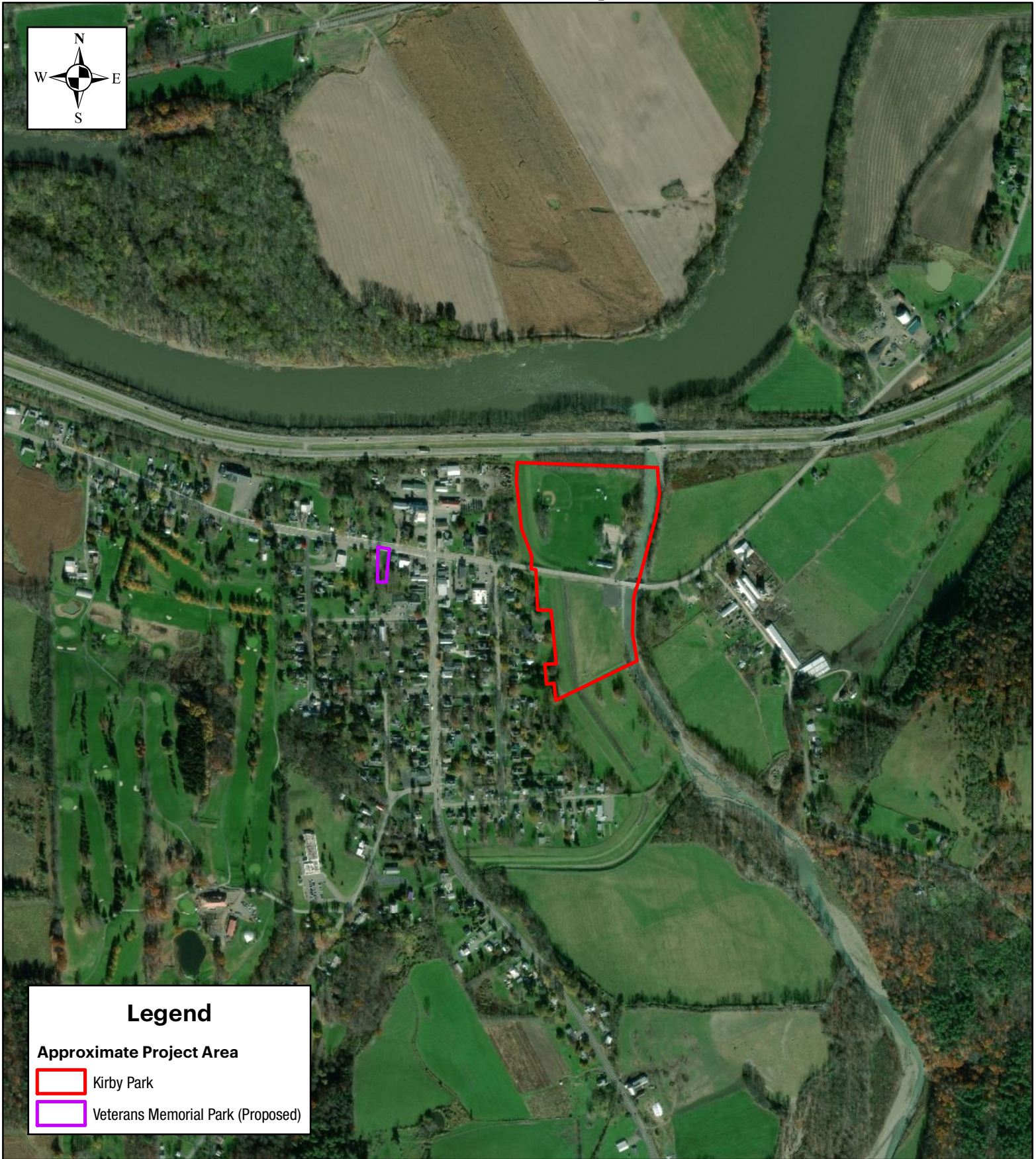
Street Map



Topographic Map



Aerial Map



Attachment 2

Project Design Plans

Kirby Park Improvements 60% Submission Draft (7/27/18)

Kirby Park Preliminary Hydraulic Recommendations (5/7/18)

Kirby Park Preliminary Model (5/10/18)

KIRBY PARK IMPROVEMENTS

60% SUBMISSION DRAFT

EAST RIVER RD.

VILLAGE OF NICHOLS, NY 13812

DELTA PROJECT NO. 2018.057.001

7/18/2018

PRELIMINARY NOT FOR CONSTRUCTION

INDEX OF DRAWINGS

GENERAL		LANDCAPE				ELECTRICAL		CIVIL	
TS	TITLE SHEET	L001	ABBREVIATIONS & LEGENDS	L013	GRADING & DRAINAGE PLAN 2	E001	UTILITY PLAN 1	C001	EAST RIVER ROAD IMPROVEMENTS
		L002	NOTES	L014	DETAILS - PAVEMENTS	E002	UTILITY PLAN 2	C002	TYPICAL SECTIONS
		L003	LOCATION KEY PLAN	L015	DETAILS - AMENITIES			C003	WORK ZONE TRAFFIC CONTROL
		L004	EXISTING CONDITIONS PLAN 1	L016	DETAILS - PLAYGROUND			C004	TRAFFIC DETAILS
		L005	EXISTING CONDITIONS PLAN 2	L017	DETAILS - BASKETBALL COURT				
		L006	DEMOLITION NOTES	L018	DETAILS - PAVILION				
		L007	DEMOLITION AND E&SC PLAN 1	L019	PLANTING NOTES & SCHEDULES				
		L008	DEMOLITION AND E&SC PLAN 2	L020	PLANTING PLAN 1				
		L009	DEMOLITION AND E&SC DETAILS 1	L021	PLANTING DETAILS				
		L010	LAYOUT & MATERIALS PLAN 1						
		L011	LAYOUT & MATERIALS PLAN 2						
		L012	GRADING & DRAINAGE PLAN 1						

ARCHITECT/ENGINEER



860 Hooper Road
Endwell, New York 13760
Tel: 607.231.6600
Fax: 607.231.6650
Email: mail@delta-eas.com
www.delta-eas.com






















PROJECT LOCATION


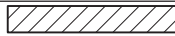


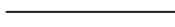
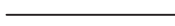


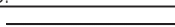


OWNER




VILLAGE OF NICHOLS
61 KIRBY ST.
NICHOLS, NY 13812








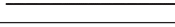


SURVEY LEGEND






	ELECTRIC MANHOLE
	ELEC. METER/BOX
	WATER VALVE
	FIRE HYDRANT
	WATER MANHOLE
	DRAINAGE MANHOLE
	DRAINAGE INVERT
	SQUARE CATCH BASIN
	TELEPHONE RISER
	UTILITY POLE
	UTILITY POLE WITH LIGHT
	PROPERTY PIPE
	PROPERTY PIN
	PROPERTY MONUMENT
	PROPERTY FENCE
	DECIDUOUS TREE
	CONIFEROUS TREE
	BASELINE POINT
	BENCHMARK
	945 MAJOR CONTOUR
	MINOR CONTOUR




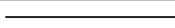


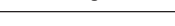











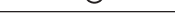

DEMOLITION LEGEND:	
UTILITY DEMOLITION	
PAVEMENT DEMOLITION	
CURB DEMOLITION	
TREE/BOLLARD DEMOLITION	
BUILDING DEMOLITION	
OTHER DEMOLITION	








EROSION AND SEDIMENT CONTROL LEGEND:	
SILT FENCE	
INLET PROTECTION	
STABILIZED CONSTRUCTION ENTRANCE	

GRADING PLAN LEGEND:	
MAJOR CONTOUR	 95
MINOR CONTOUR	 94
SPOT ELEVATION	 + 94.55

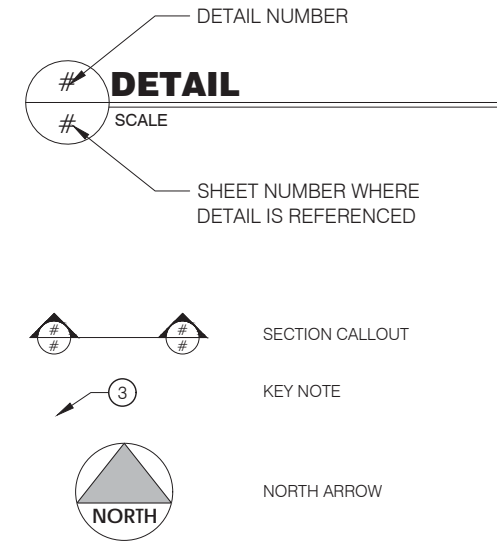
LAYOUT & MATERIALS LEGEND:		
CONCRETE AND GRANITE CURB		SEE DETAIL X/CXXX
PAVEMENT		SEE DETAIL X/CXXX
PAVEMENT		SEE DETAIL X/CXXX
PAVEMENT		SEE DETAIL X/CXXX
PAVEMENT		SEE DETAIL X/CXXX
PIPE BOLLARD		SEE DETAIL X/CXXX
CHAIN LINK FENCE		SEE DETAIL X/CXXX
WOOD FENCE		SEE DETAIL X/CXXX
GUIDE RAIL		SEE DETAIL X/CXXX
EDGE OF WATER		N/A

PAVEMENT PATTERNS LEGEND:		
PAVEMENT STRIPING		SEE DETAIL X/CXXX
HANDICAP SYMBOL		SEE DETAIL X/CXXX
DIRECTIONAL ARROW		SEE DETAIL X/CXXX
SINGLE POST SIGN		SEE DETAIL X/CXXX
DOUBLE POST SIGN		SEE DETAIL X/CXXX

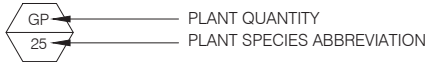
UTILITIES LEGEND:		
UNDERGROUND STORM SEWER		SEE DETAIL X/CXXX
STORM SEWER MANHOLE		SEE DETAIL X/CXXX
STORM SEWER CATCH BASIN		SEE DETAIL X/CXXX
UNDERGROUND SANITARY SEWER		SEE DETAIL X/CXXX
SANITARY SEWER MANHOLE		SEE DETAIL X/CXXX
SANITARY SEWER CLEANOUT		SEE DETAIL X/CXXX
UNDERGROUND WATER		SEE DETAIL X/CXXX
FIRE HYDRANT		SEE DETAIL X/CXXX
WATER MANHOLE		SEE DETAIL X/CXXX
WATER VALVE		SEE DETAIL X/CXXX
UNDERGROUND ELECTRIC		SEE DETAIL X/CXXX
OVERHEAD ELECTRIC		SEE DETAIL X/CXXX
UTILITY POLE		SEE DETAIL X/CXXX
LIGHT POLE		SEE DETAIL X/CXXX
ELECTRIC MANHOLE		SEE DETAIL X/CXXX
GUY WIRE		SEE DETAIL X/CXXX
UNDERGROUND TELEPHONE		SEE DETAIL X/CXXX
TELEPHONE MANHOLE		SEE DETAIL X/CXXX
UNDERGROUND NATURAL GAS		SEE DETAIL X/CXXX
GAS LINE VALVE		SEE DETAIL X/CXXX

PLANTING PLAN LEGEND:		
HEDGE ROW AND BRUSH LINE		SEE DETAIL X/CXXX
PERENNIAL		SEE DETAIL X/CXXX
SHRUB		SEE DETAIL X/CXXX
DECIDUOUS TREE		SEE DETAIL X/CXXX
CONIFEROUS TREES		SEE DETAIL X/CXXX
ORNAMENTAL GRASS		SEE DETAIL X/CXXX
FERN		SEE DETAIL X/CXXX

SECTION / DETAIL DESIGNATIONS



PLANT KEY LEGEND



ABBREVIATIONS

APPROX. & @	APPROXIMATELY AND AT
BW	BOTTOM OF WALL
C	CONDUIT
CB	CATCH BASIN
CL	CENTER LINE
CONC	CONCRETE
CM	CONSTRUCTION MANAGER
DA	DRAINAGE AREA
DIA	DIAMETER
DND	DO NOT DISTURB
DWG	DRAWING
ELEV	ELEVATION
EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
FT	FOOT, FEET
FH	FIRE HYDRANT
--G--	GAS LINE
G	GROUND
HC PKG	HANDICAPPED PARKING
HDPE	HIGH-DENSITY POLYETHYLENE
HT./SPR.	HEIGHT/ SPREAD
IN	INCH
INV	INVERT
LA	LANDSCAPE ARCHITECT
LF	LINEAR FEET
LG	LARGE
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
NO.	NUMBER
NTS	NOT TO SCALE
NIC	NOT IN CONTRACT
NYSDOT	NEW YORK STATE DEPARTMENT OF TRANSPORTATION
NO.	NUMBER
OHE	OVERHEAD ELECTRIC
O.O.	OUTSIDE DIMENSION
O.C.	ON CENTER
PL	PROPERTY LINE
PROP.	PROPOSED
PLL	PROJECT LIMIT LINE
PVMT.	PAVEMENT
PVC	POLYVINYL CHLORIDE
QTY.	QUANTITY
R	RADIUS
RW	RIGHT-OF-WAY
R&R	REMOVE AND REPLACE
RCP	REINFORCED CONCRETE PIPE
R.O.C.	RUN-OF-CRUSHER
--SAN--	SANITARY LINE
SPEC'S	SPECIFICATIONS
--ST--	STORM SEWER LINE
TOC	TOP OF CURB
TW	TOP OF WALL
TYP	TYPICAL
--UE--	UNDERGROUND ELECTRIC
VERT	VERTICAL
--W--	WATER LINE (POTABLE)
w/	WITH

PRELIMINARY
NOT FOR CONSTRUCTION

No.	Revision	Date
Project Name		
KIRBY PARK IMPROVEMENTS		
VILLAGE OF NICHOLS		NEW YORK
<div></div> <div>860 Hooper Road Endwell, New York 13760 Tel: 607.231.6600 Fax: 607.231.6650 Email: mail@delta-eas.com www.delta-eas.com</div>		
Seal	Scale AS SHOWN	
	Project No. 2018.057.001	
	UNAUTHORIZED ALTERATION OF THIS DRAWING IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209, SUBDIVISION 2.	
	Date 7/19/2018	
Drawing Title ABBREVIATIONS & LEGENDS		
Drawing No. L001		

GENERAL NOTES

1. THE COST OF ALL JOINT MATERIAL SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS ITEMS OF THE CONTRACT, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2. THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE VILLAGE, WILL NOT BE DAMAGED.
3. IF CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE OR WHICH ARE TO REMAIN THE PROPERTY OF THE VILLAGE, THE DAMAGED MATERIALS SHALL REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE LANDSCAPE ARCHITECT AT THE EXPENSE OF THE CONTRACTOR.
4. WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THOSE ITEMS.
5. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL CONDUCT OPERATIONS IN SUCH A MANNER AS TO PREVENT OR REDUCE TO A MINIMUM ANY DAMAGE TO ANY STREAM FROM POLLUTION BY DEBRIS, SEDIMENT, OR OTHER FOREIGN MATERIAL, OR FROM MANIPULATION OF EQUIPMENT AND/OR MATERIALS NEAR SUCH STREAMS. THE CONTRACTOR SHALL NOT RETURN DIRECTLY TO A STREAM ANY WATER WHICH HAS BEEN USED FOR WASH PURPOSES OR OTHER SIMILAR OPERATIONS WHICH CAUSE THIS WATER TO BECOME POLLUTED WITH SAND, CEMENT, OIL OR OTHER IMPURITIES.

STOCKPILE NOTES

1. STOCKPILED MATERIAL SHALL BE COVERED WITH TARPS AND/OR STRAW IMMEDIATELY FOLLOWING COMPLETION OF EXCAVATION EFFORT.
2. ALL STOCKPILES TO BE ENCLOSED BY SILT FENCE, PLACED AS DISCUSSED IN THE SILT FENCE NOTES.
3. WORK AND TARPS ARE SUBSIDIARY TO THE PROJECT.
4. ONSITE STOCKPILE LOCATIONS TO BE WITHIN PROPERTY LIMITS OR ON VILLAGE OF NICHOLS PROPERTY AT THE DISCRETION OF THE CONTRACTOR AND APPROVED BY THE LANDSCAPE ARCHITECT AND/OR VILLAGE OF NICHOLS.

LAND GRADING NOTES

1. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.
2. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.
3. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL, VEGETATION, ROOTS, OR OTHER OBJECTIONABLE MATERIAL.
4. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF TOPSOIL.
5. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE, OR OTHER RELATED PROBLEMS.
6. ALL FILL TO BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8" IN THICKNESS UNLESS NOTED OTHERWISE.
7. FILL MATERIAL SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
8. FROZEN MATERIALS OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED IN FILLS.
9. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

MAINTENANCE PROGRAM

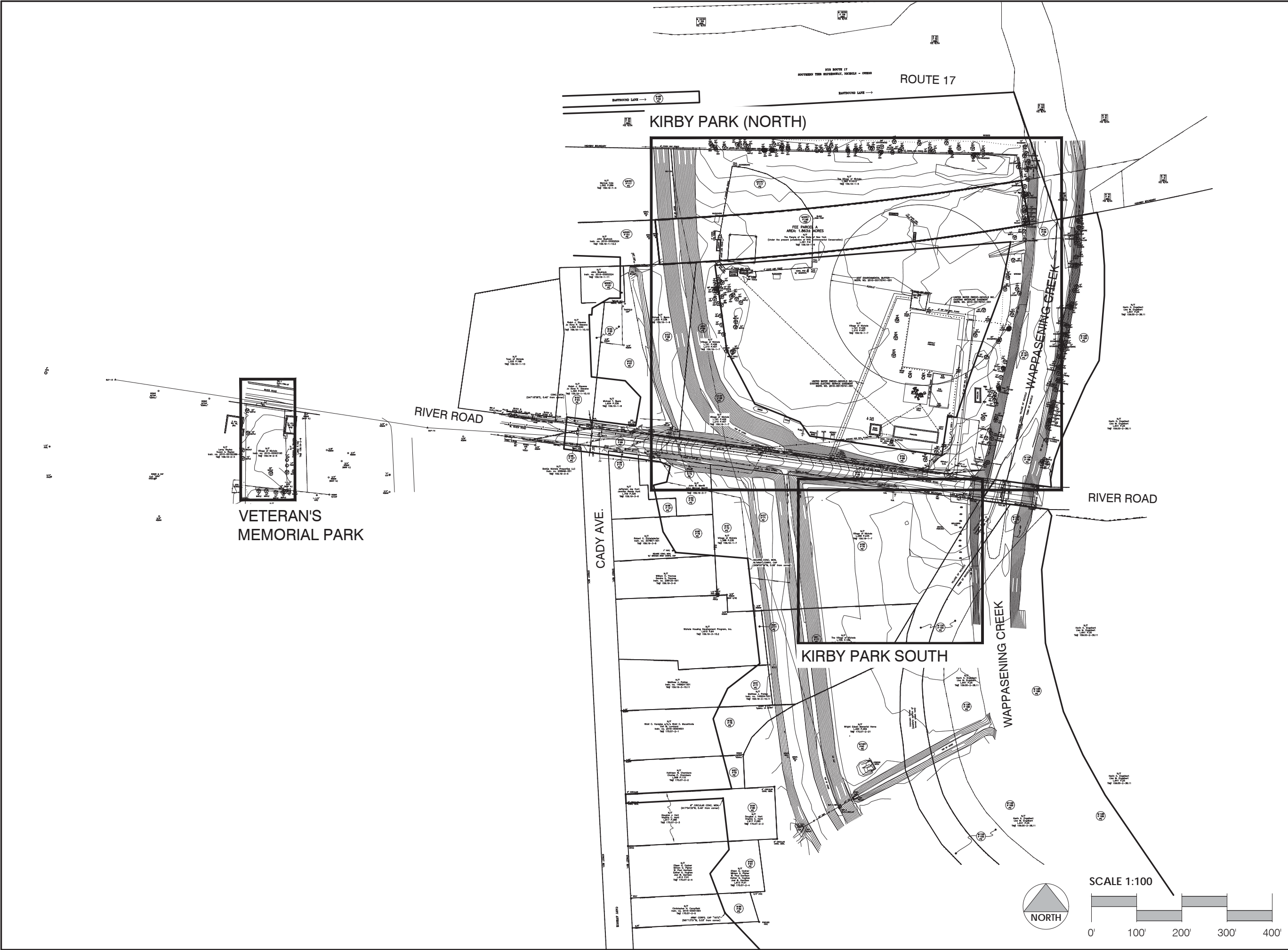
1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION AT LEAST EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
2. SEDIMENT WILL BE REMOVED FROM BEHIND THE FILTER FABRIC WHEN IT BECOMES ABOUT ONE-HALF (1/2) THE DEPTH OF THE FENCE. THE FILTER FABRIC FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A CONSTANT BARRIER.
3. THE THICKNESS OF THE ROCK CONSTRUCTION ENTRANCE SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSION BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE.
4. DURING THE COURSE OF EACH WORKDAY, ALL SEDIMENT DEPOSITED ON THE PUBLIC ROAD ROADWAYS AND SIDEWALKS SHALL BE REMOVED AND RETURNED TO THE WORK AREA.
5. SEDIMENT REMOVED FROM **BMP'S** WILL BE DISPOSED OF AS UNSUITABLE MATERIAL OFF-SITE.
6. ALL SEEDED AREAS WILL BE RE-FERTILIZED, RE-SEEDED AS NECESSARY, AND MULCHED ACCORDING TO THE SPECIFICATIONS TO MAINTAIN A DENSE VEGETATIVE COVER.

REQUIRED CONTRACTOR MAINTENANCE FOR A PERIOD OF 1 YEAR AFTER
SUBSTANTIAL COMPLETION:

1. FOR ALL MAINTENANCE REQUIREMENTS, IF CONTRACTOR DOES NOT PERFORM WORK, ALTERNATIVE MEANS WILL BE PURSUED BY THE OWNER AT THE EXPENSE OF THE CONTRACTOR.
2. TREES AND SHRUBS
 - A. IMMEDIATELY AFTER PLANT INSTALLATION AND FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION, PROVIDE SUPPLEMENTAL WATERING DURING EXTENDED PERIODS OF DROUGHT.
 - B. CLOSELY MONITOR NEWLY PLANTED TREES AND SHRUBS DURING FIRST SEASON FOR SIGNS OF DROUGHT STRESS, DISEASE, PEST INFESTATION OR STRUCTURAL DEFECT. ADDRESS ANY AND ALL ISSUES PROMPTLY IN SUCH A MANNER THAT CONTAINS CONTAGIONS AND PREVENTS FUTURE PROBLEMS.
1. PERENNIALS & OTHER HERBACEOUS LANDSCAPE AREAS:
 - A. WEEDING IS REQUIRED UNTIL VEGETATION IS ESTABLISHED. WEEDS SHOULD BE REMOVED BY HAND.
 - B. DEBRIS AND TRASH SHALL BE DISPOSED OF AT SUITABLE DISPOSAL/RECYCLING SITES AND MUST COMPLY WITH STATE, LOCAL, AND FEDERAL REGULATIONS.
 - C. DETRITUS IS TO BE REMOVED APPROXIMATELY TWICE PER YEAR. DEAD OR DISEASED PLANTS SHOULD BE REPLACED AND NOXIOUS INVASIVE PLANT SPECIES SHOULD BE REMOVED. PERENNIAL PLANT SPECIES MAY BE CUT BACK AT THE END OF THE GROWING SEASON, OR BEFORE THE BEGINNING OF THE FOLLOWING GROWING SEASON.
 - D. MULCH SHOULD BE REPLACED WHEN EROSION IS EVIDENT. MULCH FOR THE ENTIRE PLANTING AREAS SHOULD BE REPLENISHED ANNUALLY UNTIL DENSE PLANT COVER IS ESTABLISHED.
 - E. IMMEDIATELY AFTER PLANT INSTALLATION AND FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION, PROVIDE SUPPLEMENTAL WATERING DURING EXTENDED PERIODS OF DROUGHT.

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Drawing No.		
L002		



No.

Revision

Date

Project Name

KIRBY PARK IMPROVEMENTS

VILLAGE OF NICHOLS NEW YORK

DELTA

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Seal

Scale

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Project No.

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Date

7/19/2018

Drawing Title

LOCATION KEY PLAN

Drawing No.

L003



1. HORIZONTAL DATUM IS REFERENCED TO NEW YORK STATE PLANE COORDINATE SYSTEM NAD83 CENTRAL ZONE.

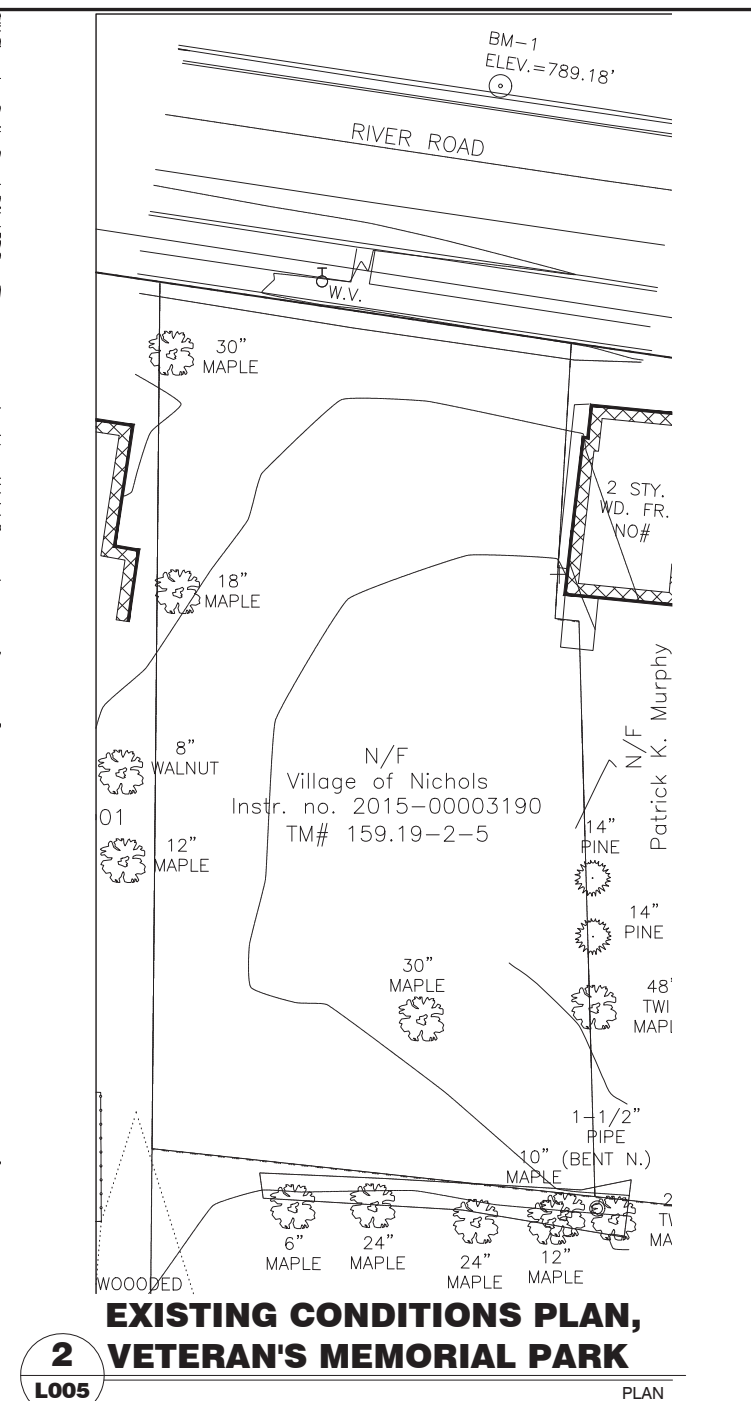
2. VERTICAL DATUM IS REFERENCED TO NORTH AMERICAN VERTICAL DATUM 1988.

3. THE LOCATION OF UNDERGROUND UTILITY LINES SHOWN ARE TO QUALITY LEVEL C AS STATED IN SECTION 38-02 PAGE 5 OF THE ASCE "STANDARD GUIDELINE FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA". THERE IS NO GUARANTEE THAT ALL THE EXISTING UTILITIES, WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT LIMITS ARE SHOWN ON THIS DRAWING. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THIS WORK. BEFORE COMMENCING WORK CONTACT "DIG SAFELY NEW YORK" AT 1-800-962-7962 AND PROVIDE 72 HOURS NOTICE.

PRELIMINARY
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Drawing Title
EXISTING CONDITIONS PLAN 1
Drawing No.

L004



PRELIMINARY
NOT FOR CONSTRUCTION

1. THE CONTRACTOR MUST NOTIFY THE LANDSCAPE ARCHITECT (L.A.) IN WRITING AND BY TELEPHONE AT THE FOLLOWING POINTS:

- THE REQUIRED PRE-CONSTRUCTION MEETING.
- FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES.
- DURING THE INSTALLATION OF SEDIMENT TRAPS, CHECK DAMS, SWALES, BERMS AND PIPES.
- PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S).
- PRIOR TO REMOVAL OF ALL SEDIMENT CONTROL DEVICES.
- PRIOR TO FINAL ACCEPTANCE.

2. PRIOR TO THE START OF CONSTRUCTION AND UNTIL ALL DISTURBED AREAS ARE RE-VEGETATED, ALL EROSION AND SEDIMENT CONTROL MEASURES, AS SHOWN ON THE APPROVED SITE PLAN, SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR. THE LANDSCAPE ARCHITECT SHALL APPROVE PROPOSALS FOR EROSION AND SEDIMENT CONTROL PRIOR TO INSTALLATION. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES.

3. BARE SOIL SHALL BE SEEDED WITHIN 7 DAYS OF EXPOSURE, UNLESS CONSTRUCTION WILL BEGIN IN THE DISTURBED AREA WITHIN 14 DAYS. AREAS WHERE CONSTRUCTION IS COMPLETED, OR AREAS WHERE CONSTRUCTION IS SUSPENDED SHALL BE SEEDED IMMEDIATELY. SITE PREPARATION SHALL INCLUDE:

- SEEDBED PREPARATION- IF NO NEW TOPSOIL IS REQUIRED, THOROUGHLY LOOSEN SOIL IN AREAS TO BE SEEDED TO A MINIMUM OF 4 INCHES WITH APPROVED EQUIPMENT. REMOVE ROCKS, DEBRIS GREATER THAN 2 INCHES IN ANY DIRECTION, CLODS OR OTHER HARMFUL SUBSTANCES, AND MAINTAIN GRADING AND DRAINAGE PATTERNS. TRACK DOZER PERPENDICULAR TO SLOPE TO LEAVE TRACKS FOR SEED TO SETTLE AND REDUCE RILLS AND RUNOFF.
- SOIL AMENDMENTS
 - ADD LIME TO ATTAIN pH 6.5
 - FERTILIZE WITH 850 LBS OF 5-10-10 OR EQUIVALENT PER ACRE (14LBS/100 SQ. FT.)
- SEED MIXTURES
SELECTED FROM THE PREVIOUS YEARS CROP, FURNISHED AND DELIVERED PREMIXED IN THE FOLLOWING PROPORTIONS OR APPROVED EQUAL AS SUPPLIED BY "THE PAGE SEED COMPANY, GREENE, NY (607)656-4107 OR ALTERNATE APPROVED SUPPLIER. LABELS MUST SHOW THE PERCENTAGE BY WEIGHT AND ALL PARTICULARS OF EACH INGREDIENT IN THE MIXTURE.

1. TEMPORARY SEEDING

- SPRING, SUMMER OR EARLY FALL SEED WITH RYEGRASS (ANNUAL OR PERENNIAL) @ 30 LBS/ACRE (0.7 LBS/1000 SQ. FT.)
- LATE FALL OR EARLY WINTER SEED WITH CERTIFIED "AROOSTOCK" WINTER RYE (CEREAL RYE) @ 100LBS/ACRE (2.5 LBS/100 SQ. FT.)

2. PERMANENT SEEDING

GENERAL LAWN AREAS:	<u>LBS/ ACRE</u>	<u>LBS/1000 SQ. FT.</u>
20% KENTUCKY BLUEGRASS	80	5
31.5% PERENNIAL RYEGRASS		
17.7% ANNUAL RYEGRASS		
25% RED FESCUE		
5% WHITE CLOVER		

D. METHOD OF SEEDING
BROADCASTING, DRILLING WITH CULTIPACK TYPE SEEDER OR HYDROSEEDING ARE ACCEPTABLE. PLACE FERTILIZER AND SEED THEN LIGHTLY RAKE AND ROLL WITH 200 POUND ROLLER. WHEN PLACING BY HYDROSEEDING, APPLICATION SEED SHALL BE PLACED AT 80 POUNDS PER ACRE, HYDROMULCH AT 1,200 POUNDS PER ACRE, WATER AT 500 GALLONS PER ACRE, AND FERTILIZER AT MINIMUM OF 200 POUNDS PER ACRE. IF

PER ACRE, WATER AT 500 GALLONS PER ACRE, AND FERTILIZER AT A MINIMUM OF 220 POUNDS PER ACRE. IF PLACING BY MECHANICAL MEANS, FERTILIZER SHALL BE PLACED AT 25 POUNDS PER 1000 SQUARE FEET, AND SEED AT 5 POUNDS PER 1000 SQUARE FEET.

E. MULCHING
STRAW - 2 TONS PER ACRE (100 BALES MIN.) FOR OTHER MULCH MATERIAL, APPLICATION RATES, REFER TO TABLE 3.7 IN THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL. MULCH MAY NEED TO BE SECURED TO KEEP IT FROM BLOWING AWAY.

F. WATERING
WATER SEEDED AREAS AS NEEDED TO PROMOTE GROWTH. THE CONTRACTOR WILL BE RESPONSIBLE TO WATER, RESEED, OR WHAT EVER WORK IS NECESSARY TO INSURE GROWTH OF SEEDED AREAS UNTIL COMPLETE AND UNIFORM STAND OF GRASS HAS BEEN ESTABLISHED AND CUT AT LEAST TWICE.

G. RESEEDING
THE CONTRACTOR SHALL CONTINUE TO REPAIR WASHOUTS AND RESEED UNSATISFACTORY AREAS DURING THE 12 MONTH WARRANTY PERIOD, AS SATISFACTORY TO THE OWNER AND THE LANDSCAPE ARCHITECT.

4. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC ROADS ON A DAILY BASIS. ALL MATERIALS DEPOSITED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY. ACCESS TO DISTURBED AREAS SHALL BE LIMITED TO THE AREAS SHOWN ON THE PLAN OR AS DIRECTED BY LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE AT EACH ACCESS POINT.

5. TEMPORARY SEDIMENT TRAPS TO BE CONSTRUCTED AND MAINTAIN IN ACCORDANCE WITH FIGURE 7A.20(1) AND 5A.20(2) IN THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".

6. ALL CONSTRUCTION WORK TO BE STAGED TO MAINTAIN A DISTURBED AREA OF LESS THAN 5 ACRES, AT ANY TIME, UNLESS SEPARATE PERMISSION IS RECEIVED FROM NYSDEC. IF GREATER THAN 5 ACRES IS DISTURBED AT ANY ONE TIME, AND NYSDEC PERMISSION IS OBTAINED, THE FOLLOWING CONDITIONS WILL APPLY:

A. AT LEAST TWO (2) SITE INSPECTIONS SHALL TAKE PLACE EVERY SEVEN (7) CALENDAR DAYS, WITH A MINIMUM OF TWO (2) FULL CALENDAR DAYS OF SEPARATION BETWEEN INSPECTIONS.

B. WHEN SOIL DISTURBANCE ACTIVITY TEMPORARILY OR PERMANENTLY CEASES, TEMPORARY AND/OR PERMANENT STABILIZATION MEASURES SHALL BE INSTALLED/IMPLEMENTED WITHIN SEVEN (7) DAYS OF TERMINATION OF WORK.

8. TOPSOIL STOCKPILES SHALL BE PLACED ON A LEVEL SURFACE. ALL TOPSOIL STOCKPILES TO BE SEEDED WITH TEMPORARY VEGETATION IMMEDIATELY AFTER PLACEMENT, AND PROTECTED FROM SEDIMENT RUNOFF AT THE BASE WITH SILT FENCING. IF STOCKPILES ARE DISTURBED, THEY SHALL BE RE-SEEDED IMMEDIATELY AFTER USE.

9. ALL SEDIMENT BASINS, TRAP EMBANKMENTS AND SLOPES, PERIMETER DIKES, SWALES AND ALL DISTURBED SLOPES STEEPER OR EQUAL TO 3:1 SHALL BE STABILIZED WITH SOD OR SEED AND ANCHORED WITH STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES, AS SOON AS POSSIBLE BUT NO LATER THEN SEVEN (7) CALENDAR DAYS AFTER ESTABLISHMENT. ALL AREAS DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.

PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING, RIP-RAP, OR BY OTHER APPROVED STABILIZATION MEASURE.

FOR FINISHED GRADING, THE CONTRACTOR SHALL PROVIDE ADEQUATE GRADIENTS TO PREVENT WATER FROM PONDING FOR MORE THAN TWENTY FOUR (24) HOURS AFTER THE END OF A RAINFALL EVENT. DRAINAGE COURSES AND SWALE FLOW AREAS MAY TAKE AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL EVENT TO DRAIN. AREAS DESIGNED TO HAVE STANDING WATER SHALL NOT BE REQUIRED TO MEET THIS REQUIREMENT.

SEDIMENT REMOVED FROM DAMS (AND BASINS) SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN, WETLAND OR TREE-SAVE AREA. WHEN PUMPING SEDIMENT LADEN WATER, THE DISCHARGE MUST BE DIRECTED TO A SEDIMENT TRAPPING DEVICE PRIOR TO RELEASE FROM THE SITE. A SUMP PIT MAY BE USED IF SEDIMENT TRAPS THEMSELVES ARE BEING PUMPED OUT.

1. PRIOR TO STARTING CONSTRUCTION, ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED IN INSTALLING, CONSTRUCTING, REPAIRING, REPLACING, INSPECTING AND MAINTAINING THE EROSION AND SEDIMENT CONTROL PRACTICES, AND THE CONTRACTOR(S) RESPONSIBLE FOR CONSTRUCTING THE POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES MUST HAVE ON SITE, ON A DAILY BASIS, AN INDIVIDUAL EMPLOYED BY THE COMPANY WHO HAS ATTENDED A DEC-ENDORSED 4-HOUR EROSION AND SEDIMENT CONTROL TRAINING.
2. TRAINED CONTRACTORS MUST BE ABLE TO SHOW PROOF OF ATTENDANCE (VALID WALLET CARD OR CERTIFICATE) UPON REQUEST BY THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION OR THE REGULATED MUNICIPALITY CONDUCTING AN INSPECTION OF THE CONSTRUCTION SITE. AT LEAST ONE INDIVIDUAL FROM EACH COMPANY MUST BE ON SITE ON A DAILY BASIS WHEN THE COMPANY IS PERFORMING SOIL DISTURBING ACTIVITIES.

PHASE ONE:

1. MOBILIZE AND CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
2. BEGIN EROSION AND SEDIMENTATION CONTROL SEQUENCING.
3. DEMOLISH EXISTING SITE FEATURES AS SHOWN ON PLANS.
4. ROUGH GRADE SITE TO CONTOURS AS SHOWN ON PLANS.
- 5.
6. FINAL GRADE, SEED, AND MULCH ALL UNPAVED AREAS AS SHOWN ON PLANS.
7. PLANT TREES AND OTHER VEGETATION AS SHOWN ON PLANS.
8. FINAL CLEANUP, DEMOBILIZE.

1. LANDSCAPE ARCHITECT ACCEPTS NO RESPONSIBILITY FOR DAMAGE TO PROPERTY OR PERSONAL INJURY OCCURRING DURING CONSTRUCTION OR THEREAFTER. CONTRACTOR IS RESPONSIBLE FOR ALL APPLICABLE INSURANCES, CONSTRUCTION METHODS AND PERMITS.
2. UNDERGROUND UTILITY LOCATIONS ARE NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT AREA ARE SHOWN ON THIS DRAWING. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM HIS WORK. CONTRACTOR SHALL NOTIFY UNDERGROUND FACILITIES PROTECTIVE ORGANIZATION (UFPPO) 1-800-962-7962 OR 811 IN ACCORDANCE WITH 16 NYCRR PART 753.
3. PRIOR TO CONSTRUCTION, CONSULT WITH LOCAL OFFICIALS & UTILITY COMPANIES TO DETERMINE THE LOCATION OF FACILITIES WITHIN PROJECT LIMITS.
4. CONTRACTOR SHALL BE RESPONSIBLE TO TAKE ALL PRECAUTIONS NECESSARY TO PROTECT ALL EXISTING BUILDINGS, TREE ROOTS, PAVEMENTS, UTILITIES, JOB SAFETY & PROTECTION OF TRAFFIC.
5. ANY CORNER SURVEY PINS DAMAGED OR MOVED DURING CONSTRUCTION MUST BE REPLACED AT THE CONTRACTORS EXPENSE PRIOR TO COMPLETION OF CONSTRUCTION.
6. IT IS CRITICAL THAT THE CONTRACTOR HAS THE PROPER EQUIPMENT AND INSTRUMENTS ON SITE TO VERIFY GRADES DURING CONSTRUCTION. EFFECTIVE METHODS FOR MAINTAINING GRADES AND SLOPES OF PAVEMENTS SHALL BE EMPLOYED IN ORDER TO MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDINGS.
7. CONTRACTOR TO VERIFY ALL DIMENSIONS ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY, FIELD CHANGES MUST BE APPROVED BY LANDSCAPE ARCHITECT.
8. ALL DEBRIS SHALL BE CLEANED UP FROM FROM THE CONSTRUCTION SITE DAILY.
9. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO MAINTAIN FREE PROTECTED ACCESS TO BUILDING ENTRY/EXITS.
10. CONTRACTOR SHALL REVIEW WITH LANDSCAPE ARCHITECT ANY AND ALL ITEMS OF DEMOLITION NOT IMPLIED OR SPECIFIED ON DRAWINGS OR SPECIFICATIONS AND TO INCLUDE SUCH COSTS IN BID UNLESS OTHERWISE ADVISED.
11. WORK SHALL CONFORM TO THE LATEST EDITION OF ALL APPLICABLE REFERENCE SPECIFICATIONS AND TO GOVERNING BUILDING CODES AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
12. A JOBSITE INSPECTION MUST BE CONDUCTED TO EXAMINE EXISTING CONDITIONS, TO DETERMINE NATURE AND SCOPE OF WORK OR ANY DIFFICULTIES THAT MIGHT ARISE AT TIME OF WORK. IN ADDITION, EXAMINE ALL WORK THAT IS INTENDED TO REMAIN AS PART OF THE COMPLETED PROJECT AND REPORT ALL UNSATISFACTORY CONDITIONS TO LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK. EXERCISE EXTREME CARE DURING DEMOLITION SO AS NOT TO DAMAGE ITEMS TO REMAIN. ANYTHING DAMAGED AT TIME OF WORK IS TO BE REPAIRED AND/OR REPLACED TO MATCH EXISTING CONSTRUCTION AT CONTRACTORS EXPENSE.
13. CONTRACTOR TO REMOVE ALL TREES MARKED ON PLAN AND IN FIELD, DEAD TREES AND STUMPS. VERIFY REMOVALS IN FIELD WITH VILLAGE REPRESENTATIVE / LANDSCAPE ARCHITECT (NOT ALL TREES TO BE REMOVED ARE SHOWN ON PLAN). ALL TREE REMOVED SHOULD BE GROUND MIN. 6" BELOW GRADE IF ROOT MASS IS NOT REMOVED. BRUSH REMOVAL INCLUDES SHRUBS, VINES, AND DEAD WOOD AS INDICATED. ALL REMOVALS SHALL BE DONE BY HAND AS MUCH AS POSSIBLE TO MINIMIZE DAMAGE TO THE SLOPE, ALL DEBRIS SHALL BE DISPOSED OF PROPERLY OFF SITE.
14. EXISTING KNOTWEED STANDS TO BE CONTROLLED AS PER NYDOT ITEM 617.0101. SEE ITEM 617.10 24 & ITEM 617.11 24. FOR REMOVAL, HANDLING, DISPOSAL & EQUIPMENT CLEANING MEASURES. THREE ACCEPTABLE REMOVAL MEASURES INCLUDE: PULLING, EXCAVATION, HERBICIDE APPLICATION. TRANSPORT AND DISPOSE OF LEGALLY.

1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AS SHOWN ON PLANS.
2. PROVIDE MAINTENANCE, SWEEPING, CLEANING, OF OFFSITE ROADWAYS AS NECESSARY DURING CONSTRUCTION.
3. INSTALL AND MAINTAIN SILT FENCE AS SHOWN ON PLANS PRIOR TO ANY EARTH DISTURBANCE.
4. PROVIDE SILT FENCE PROTECTION AT TOE OF SLOPE FOR ALL SOIL STOCKPILES, OR TEMPORARILY SEED AND MULCH SOIL STOCKPILES.
5. PROVIDE TEMPORARY STABILIZATION OF ALL IDLE DISTURBED AREAS WITH STRAW MULCH AND SEED AS REQUIRED DURING CONSTRUCTION.
6. PROVIDE DUST CONTROL MEASURES AS NECESSARY DURING CONSTRUCTION.
7. PROVIDE VEGETATION PROTECTION OF ALL TREES AND SHRUBBERY AS NECESSARY.
8. REMOVE ALL TEMPORARY E&S CONTROLS WHEN PERMANENT VEGETATION IS ESTABLISHED.

No.	Revision	Date
Project Name		

KIRBY PARK IMPROVEMENTS

VILLAGE OF NICHOLS NEW YORK



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L006



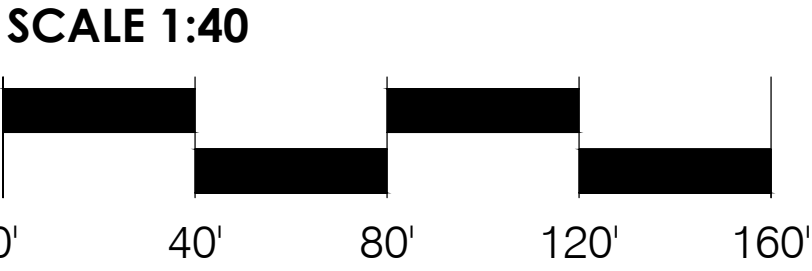
DEMOLITION LEGEND:	
UTILITY DEMOLITION	----
PAVEMENT DEMOLITION	
CURB DEMOLITION	-----
TREE/BOLLARD DEMOLITION	X
BUILDING DEMOLITION	----
OTHER DEMOLITION	----

EROSION AND SEDIMENT CONTROL LEGEND:	
SILT FENCE	-----
INLET PROTECTION	□
STABILIZED CONSTRUCTION ENTRANCE	□

DEMOLITION AND E&SC PLAN 1 NOTES:

1. INSTALL SILT FENCE ALONG PERIMETER OF WORKSITE, DOWNHILL FROM GROUND DISTURBANCES.
2. PROTECT EXISTING WATER UTILITY ENCLOSURE, & CLEARLY MARK ALL UNDERGROUND WATER UTILITIES. CONFIRM WITH UTILITY COMPANY BEFORE EXCAVATING IN EASEMENT.
3. FULLY REMOVE ALL 6" WOOD POST BOLLARDS AS SHOWN. SALVAGE & STOCKPILE FOR REUSE ON SITE.
4. PROTECT ALL TREES IN WORKSITE VICINITY AS SHOWN.
5. CONFIRM ASH TREES TO REMAIN OR BE REMOVED WITH LANDSCAPE ARCHITECT. PROTECT TREES IF TO REMAIN.
6. CUT & REMOVE TWO (2) MATURE PINE TREES. GRIND STUMPS TO MIN. 6" BELOW FINISHED GRADE.
7. DEMOLISH & REMOVE ASPHALT AS SHOWN TO FULL DEPTH OF PROFILE.
8. PROTECT EXISTING UTILITY POLES & ELECTRIC CONDUITS. SEE UTILITY PLAN.
9. REMOVE UTILITY POLE & RELOCATE POWER LINES. CONFIRM WITH LANDSCAPE ARCHITECT & UTILITY COMPANY (NYSEG).
10. DEMOLISH & DISPOSE OF EXISTING PAVILION. DISCUSS SALVAGE POSSIBILITIES WITH LANDSCAPE ARCHITECT PRIOR TO DEMOLITION. DEMOLISH & DISPOSE OF FOUNDATION SLAB TO MIN. 6" BELOW FINISHED GRADE.
11. DISSASSEMBLE & STOCKPILE PLAYGROUND EQUIPMENT FOR RE-USE ON SITE.
12. PROTECT EXISTING BANDSTAND, FLAGPOLE, AND OTHER SITE ELEMENTS TO REMAIN.
13. REMOVE & STOCKPILE EXISTING BBQ STATIONS FOR RE-USE ON SITE.
14. ALL CONSTRUCTION DISTURBANCE TO MAINTAIN MINIMUM 15' FROM TOP OF STREAM BANK, EXCEPT WHERE NOTED.
15. DISASSEMBLE DUGOUTS & BACKSTOP AND STOCKPILE FOR RE-USE ON SITE.
16. INSTALL & MAINTAIN CONCRETE WASHOUT STATION FOR DURATION OF CONCRETE WORK ON SITE. CONFIRM LOCATION WITH LANDSCAPE ARCHITECT.
17. SPIGOT & WATER FOUNTAIN REMOVED BY OTHERS
18. SALVAGE & PROTECT PLAQUE, CARRIAGE STEP, & GRANITE BOULDER FOR RE-USE ON SITE.
19. KNOTWEED REMEDIATION: LIMITS SHOWN APPROXIMATE. SELECTIVELY REMOVE INVASIVE SPECIES: WILD ROSE, KNOT WEED, ETC. REMOVE ALL INVASIVE SPECIES WITHIN A SINGLE STAND, EVEN IF THE STAND BOUNDARIES EXTEND BEYOND SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

CALL BEFORE YOU DIG:
NYS CODE RULE 753 REQUIRES THAT YOU CALL BEFORE YOU DIG
Know what's below.
Call 811 before you dig.
CALL DIG SAFELY NEW YORK AT 811 OR 1-800-962-7962



1 DEMOLITION AND E&SC PLAN, KIRBY PARK (NORTH)
L007



PRELIMINARY
NOT FOR CONSTRUCTION

No. 1 Revision KNOTWEED EXTENTS & NOTE Date 7/27/18

Project Name

KIRBY PARK
IMPROVEMENTS

VILLAGE OF NICHOLS NEW YORK



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Endwell, New York 13760
Tel: 607.231.6600
Fax: 607.231.6650
Email: mail@delta-eas.com
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Seal

Scale

AS SHOWN

Project No.

2018.057.001

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Date

7/27/2018

Drawing Title

DEMOLITION AND E&SC
PLAN 1

Drawing No.

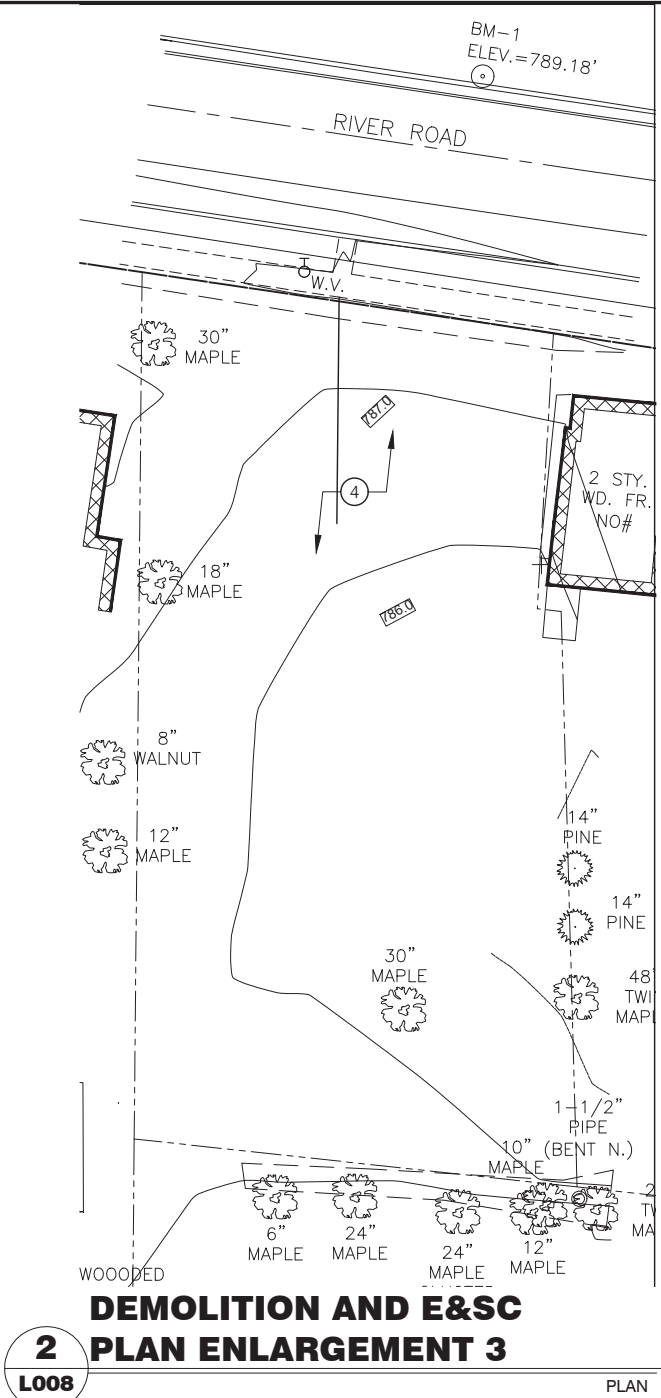
L007



1 DEMOLITION AND E&SC PLAN ENLARGEMENT 2
L008

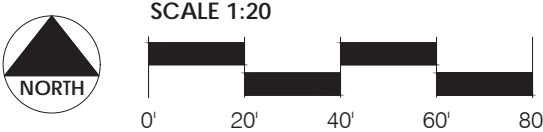
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2 DEMOLITION AND E&SC PLAN ENLARGEMENT 3
L008

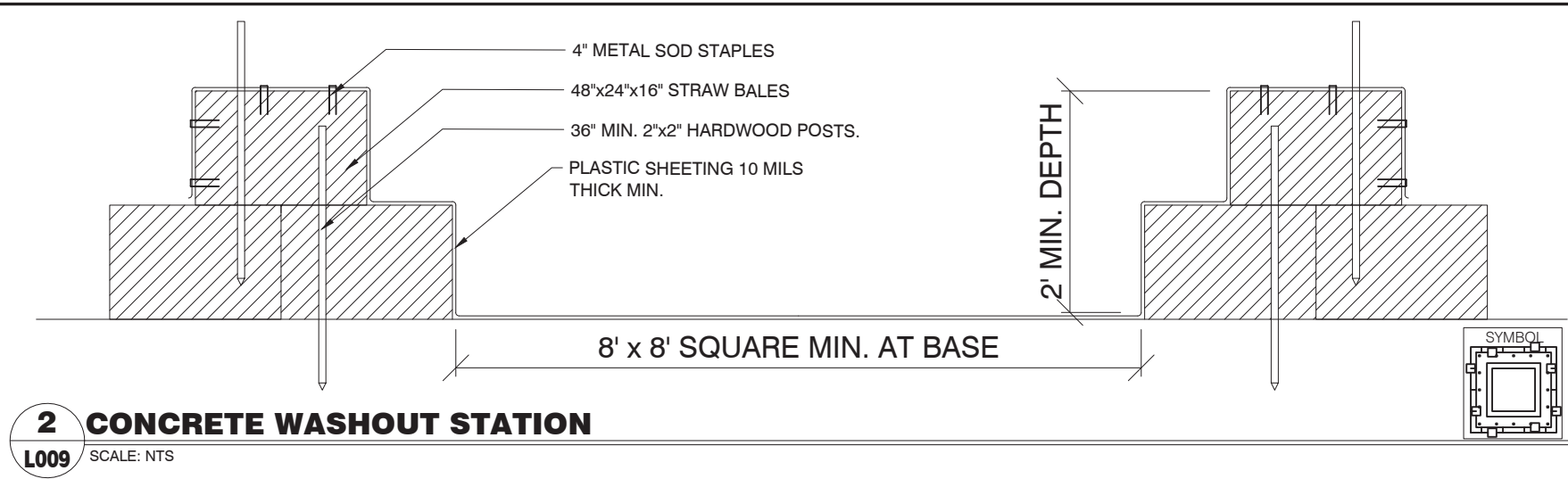
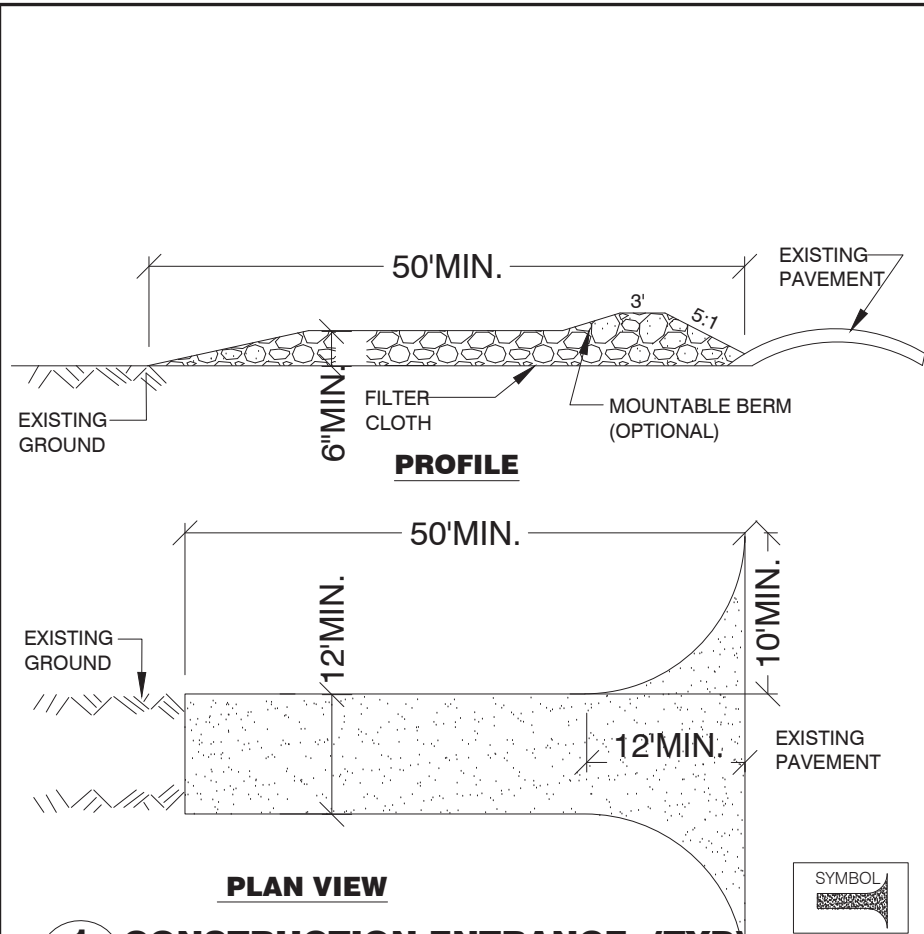
- DEMOLITION AND E&SC PLAN 2 NOTES:**
- 1 INSTALL SILT FENCE ALONG PERIMETER OF WORKSITE, DOWNHILL FROM GROUND DISTURBANCES.
 - 2 FOR ALL WORK TAKING PLACE WITHIN 15' OF TOP OF STREAM BANK, CONFIRM APPROPRIATE PERMITS FROM NYSCED & USACOE.
 - 3 EXCAVATE & STOCKPILE ASPHALTIC MILLINGS FOR RE-USE ON SITE.
 - 4
 - 5
 - 6
 - 7



PRELIMINARY

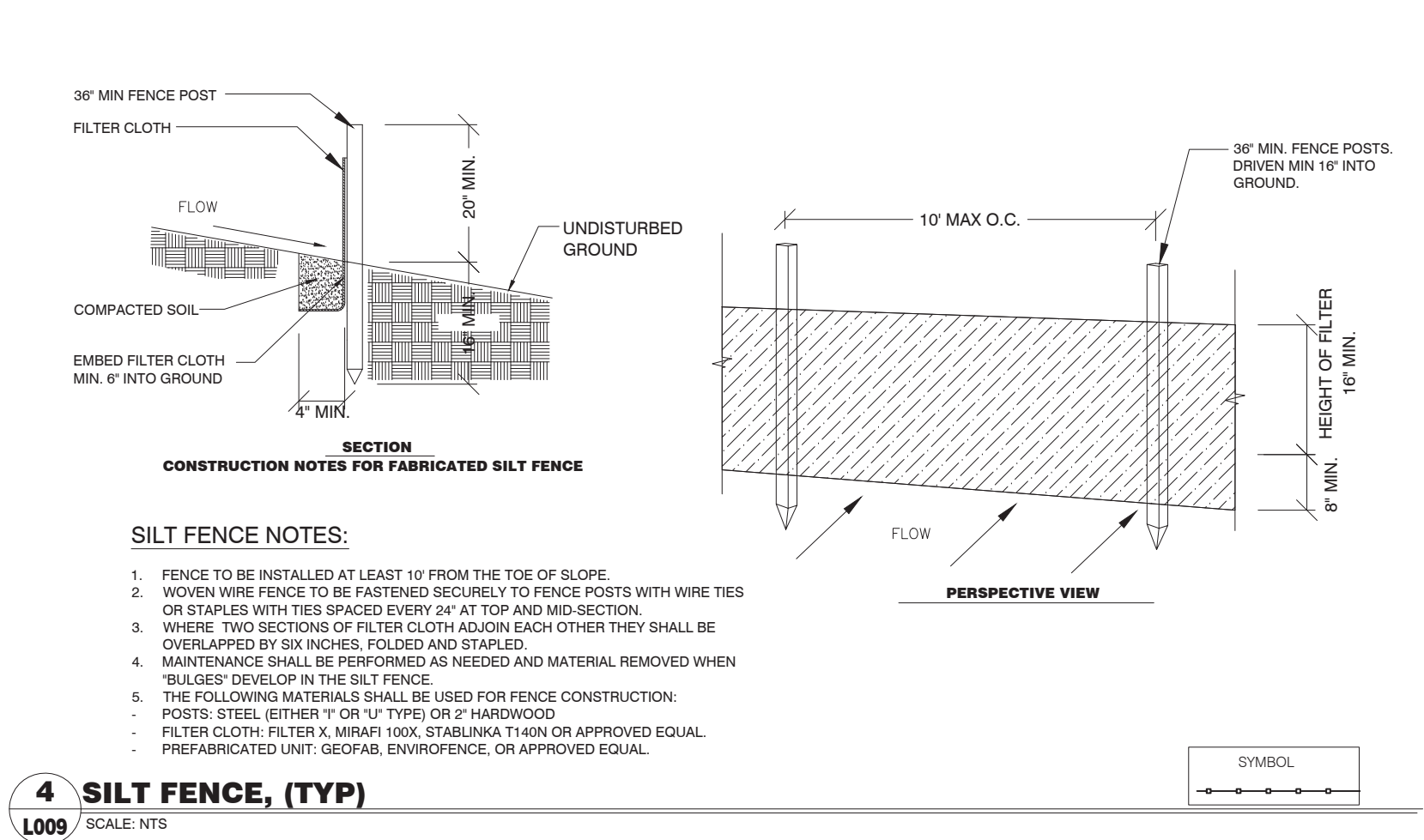
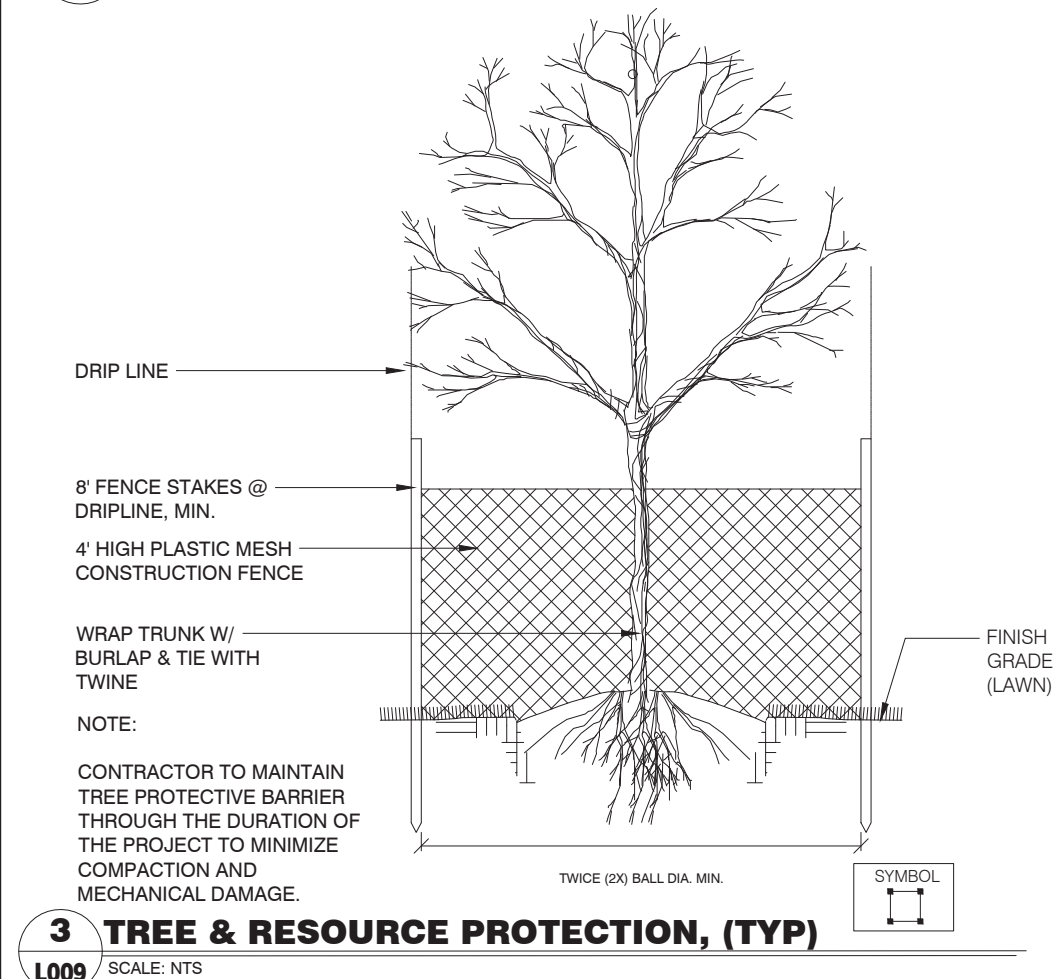
NOT FOR CONSTRUCTION

No.	Revision	Date
Project Name		
KIRBY PARK IMPROVEMENTS		
VILLAGE OF NICHOLS NEW YORK		
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Date	7/19/2018	
Drawing Title		
DEMOLITION AND E&SC PLAN 2		
Drawing No.		
L008		



CONSTRUCTION ENTRANCE NOTES:

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

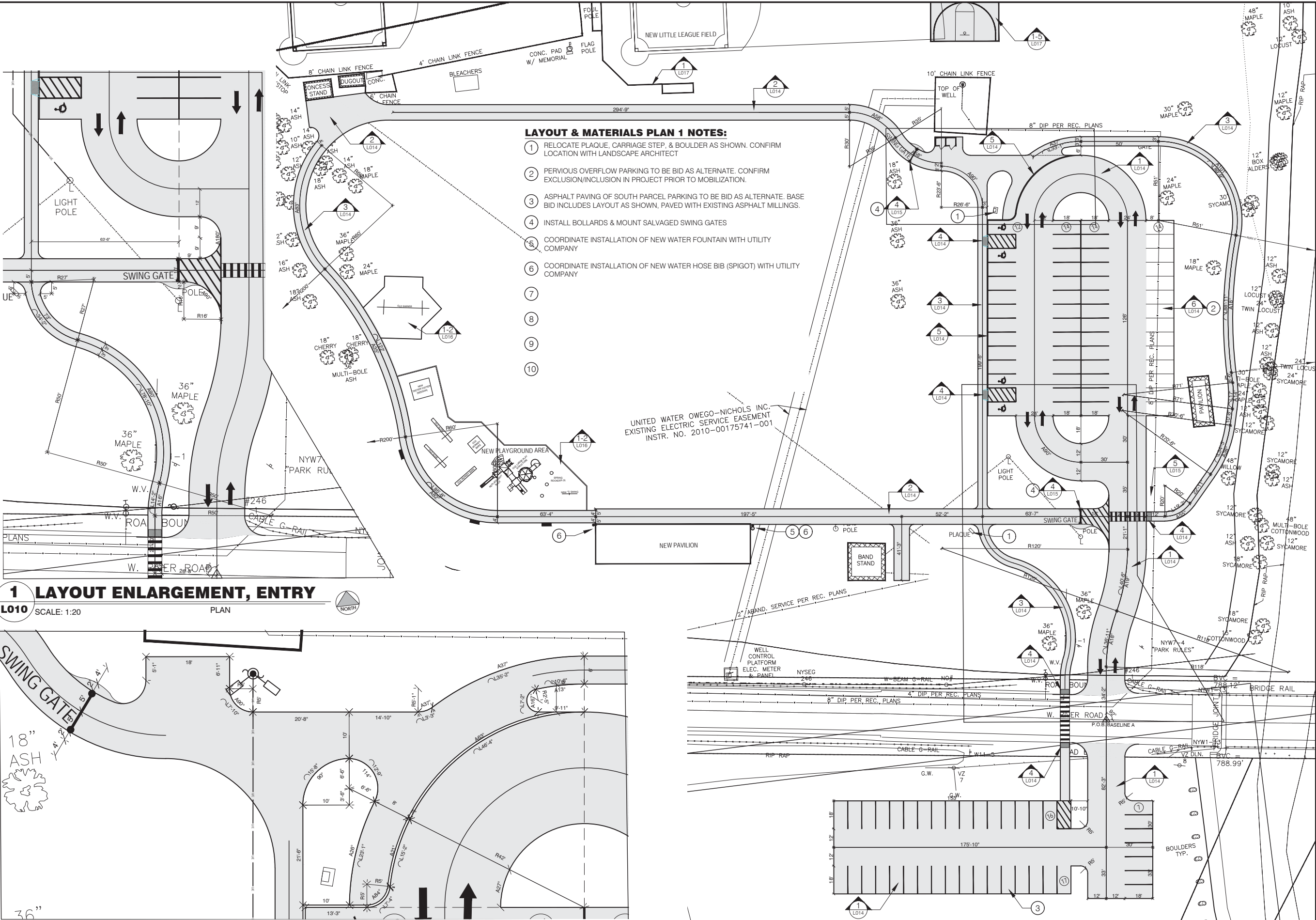


SILT FENCE NOTES:

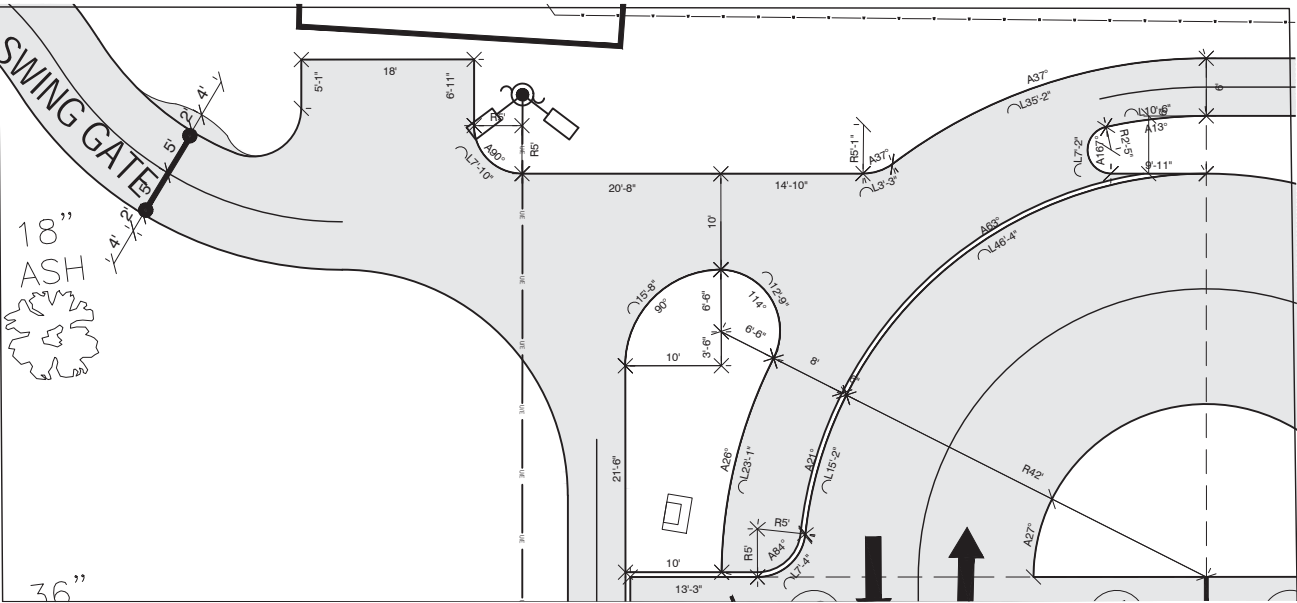
1. FENCE TO BE INSTALLED AT LEAST 10' FROM THE TOE OF SLOPE.
2. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES WITH TIES SPACED EVERY 24" AT TOP AND MID-SECTION.
3. WHERE TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
5. THE FOLLOWING MATERIALS SHALL BE USED FOR FENCE CONSTRUCTION:
 - POSTS: STEEL (EITHER "I" OR "U" TYPE) OR 2" HARDWOOD
 - FILTER CLOTH: FILTER X, MIRAFI 100X, STABLINKA T140N OR APPROVED EQUAL.
 - PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

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No. Revision		Date
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Drawing Title		
DEMOLITION AND E&SC DETAILS 1		
Drawing No.		
L009		



1 LAYOUT ENLARGEMENT, ENTRY
L010 SCALE: 1:20



1 LAYOUT ENLARGEMENT, PLAZA
L010 SCALE: 1:10




- LAYOUT & MATERIALS PLAN 1 NOTES:**
- 1 RELOCATE PLAQUE, CARRIAGE STEP, & BOULDER AS SHOWN. CONFIRM LOCATION WITH LANDSCAPE ARCHITECT
 - 2 PERVIOUS OVERFLOW PARKING TO BE BID AS ALTERNATE. CONFIRM EXCLUSION/INCLUSION IN PROJECT PRIOR TO MOBILIZATION.
 - 3 ASPHALT PAVING OF SOUTH PARCEL PARKING TO BE BID AS ALTERNATE. BASE BID INCLUDES LAYOUT AS SHOWN, PAVED WITH EXISTING ASPHALT MILLINGS.
 - 4 INSTALL BOLLARDS & MOUNT SALVAGED SWING GATES
 - 5 COORDINATE INSTALLATION OF NEW WATER FOUNTAIN WITH UTILITY COMPANY
 - 6 COORDINATE INSTALLATION OF NEW WATER HOSE BIB (SPIGOT) WITH UTILITY COMPANY
 - 7
 - 8
 - 9
 - 10

UNITED WATER OWEGO-NICHOLS INC.
EXISTING ELECTRIC SERVICE EASEMENT
INSTR. NO. 2010-00175741-001

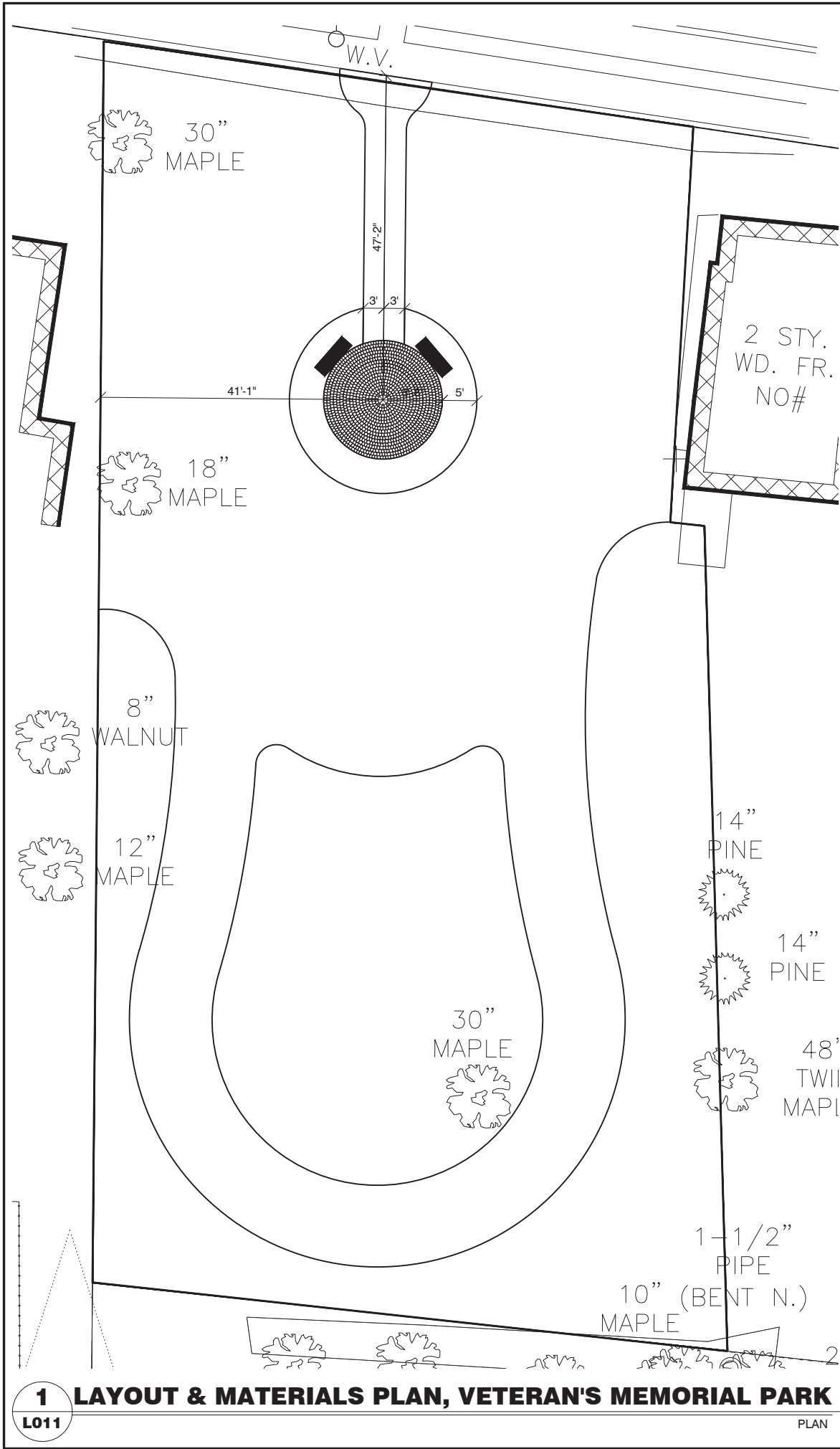
1 LAYOUT & MATERIALS PLAN, KIRBY PARK (NORTH & SOUTH)
L010 SCALE: 1:30



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	Date	7/19/2018
Drawing Title		
LAYOUT & MATERIALS PLAN 1		
Drawing No.		

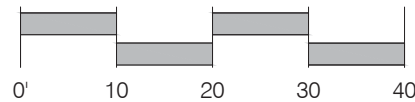
L010



1 LAYOUT & MATERIALS PLAN, VETERAN'S MEMORIAL PARK
L011 PLAN



SCALE 1:10



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No.	Revision	Date
Project Name		

KIRBY PARK
IMPROVEMENTS

VILLAGE OF NICHOLS NEW YORK

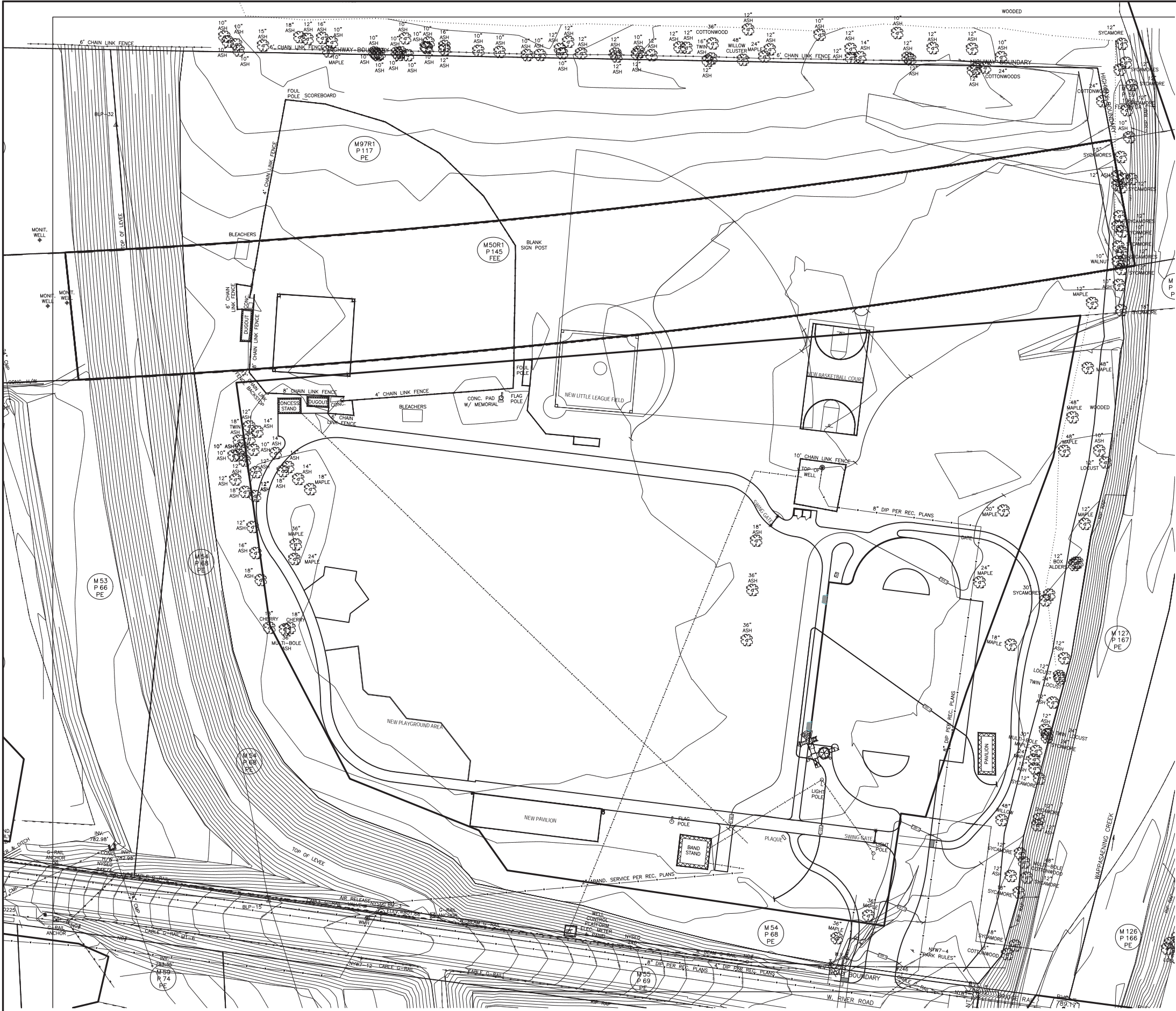


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Date 7/19/2018	

Drawing Title
**LAYOUT & MATERIALS
PLAN 2**

Drawing No.
L011



GRADING & DRAINAGE PLAN 1 NOTES:

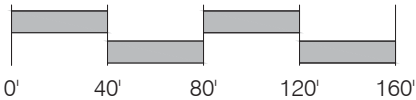
- 1 SAWCUT EXIST. PAVEMENT @ PROPERTY LINE OR TO CREATE NEAT APPEARANCE AT PAVEMENT JOINT.
- 2
- 3
- 4
- 5


1 GRADING & DRAINAGE PLAN KIRBY PARK (NORTH)
L012

PLAN



SCALE 1:40.00061



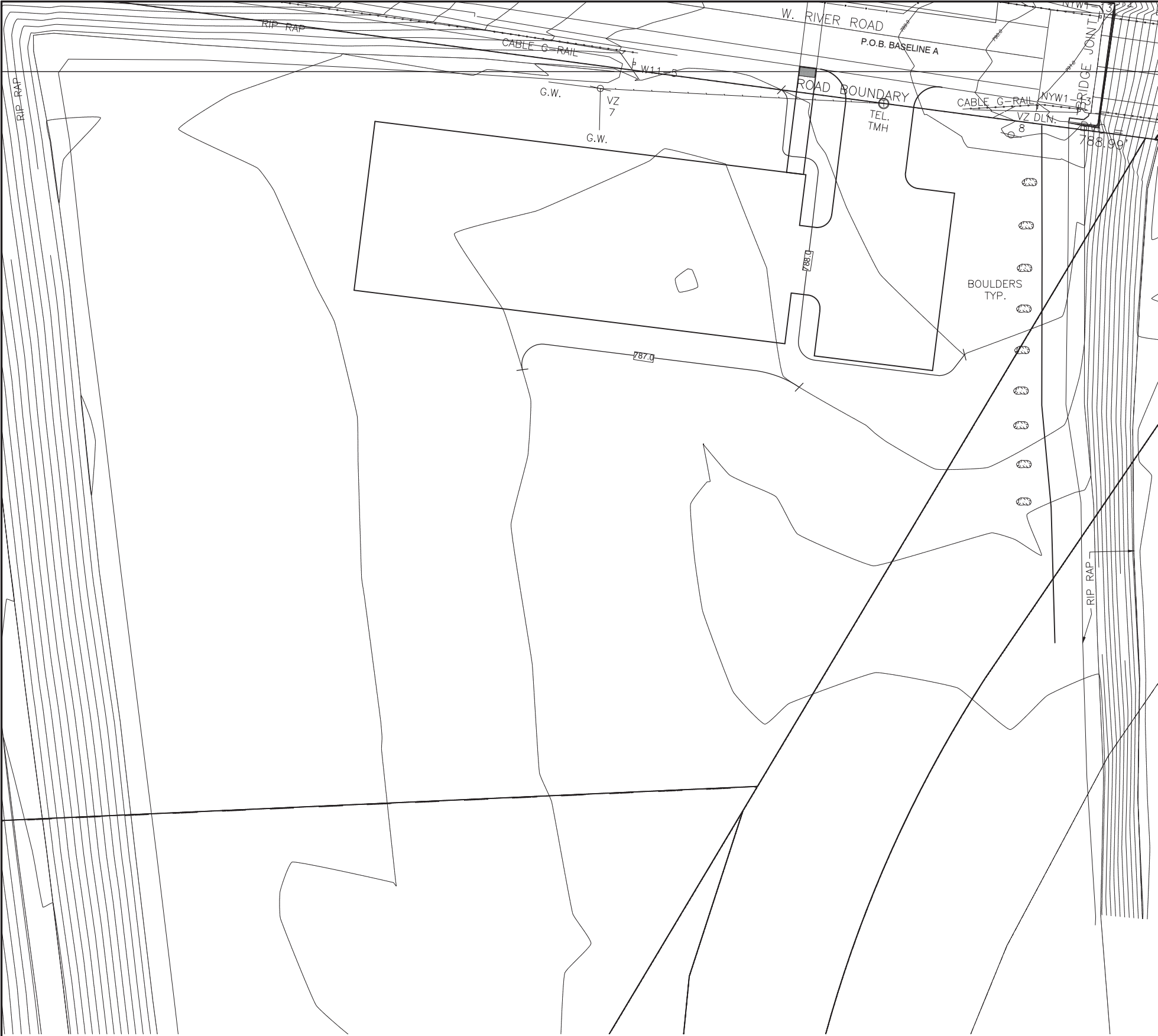
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Drawing Title
GRADING & DRAINAGE
PLAN 1

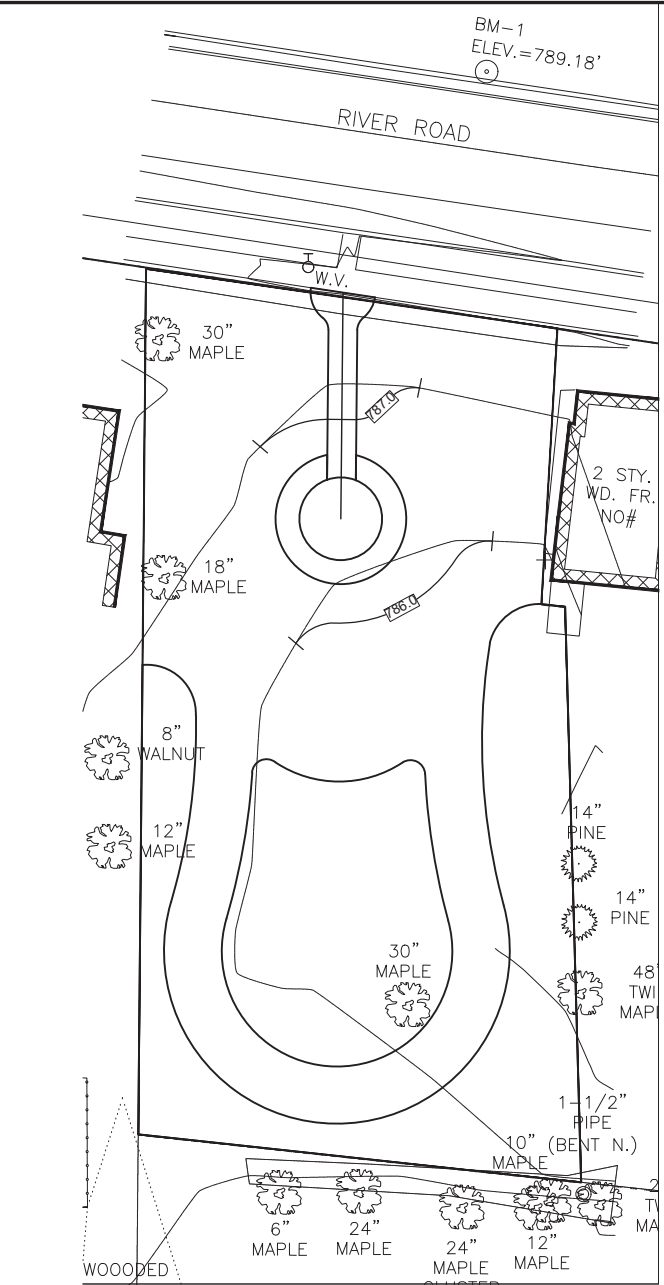
Drawing No.

L012

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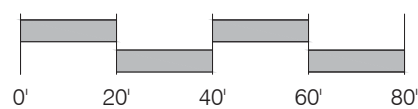
1 GRADING & DRAINAGE PLAN, KIRBY PARK (SOUTH)
L013 PLAN



2 GRADING & DRAINAGE PLAN, VETERAN'S MEMORIAL PARK
L013 PLAN



SCALE 1:20



PRELIMINARY
NOT FOR CONSTRUCTION

No.	Revision	Date

Project Name

KIRBY PARK IMPROVEMENTS

VILLAGE OF NICHOLS NEW YORK

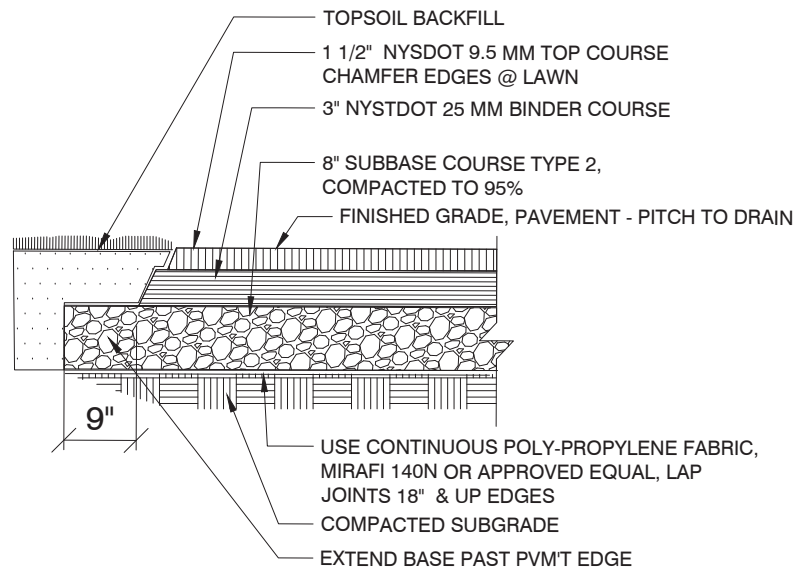


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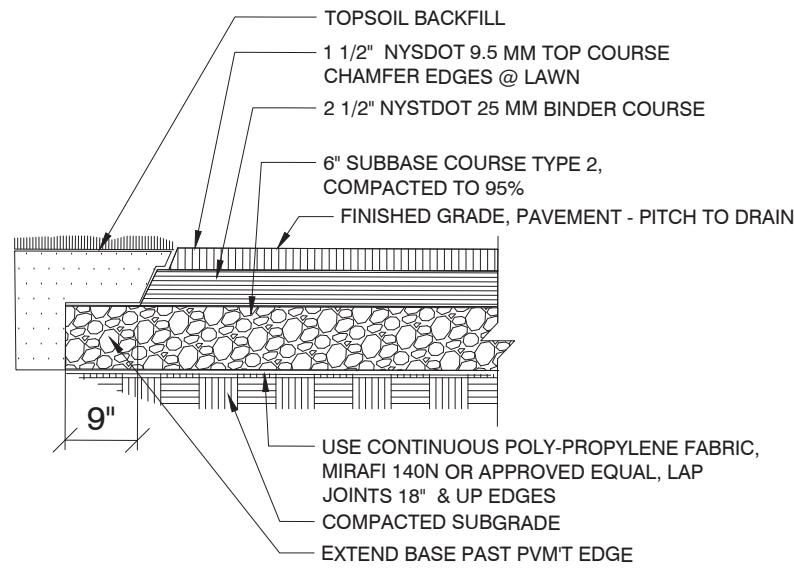
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**GRADING & DRAINAGE
PLAN 2**

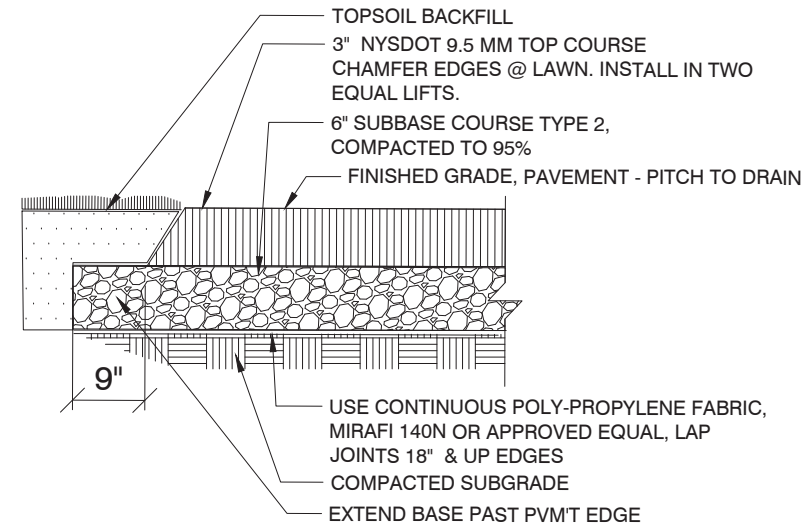
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L013



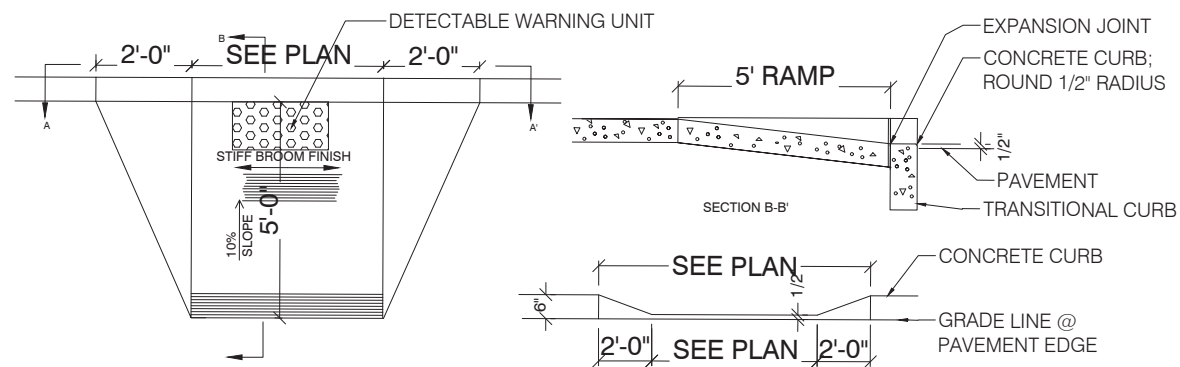
1 ASPHALT PAVING DETAIL, HEAVY DUTY
L014 SCALE: 1"=1' SECTION



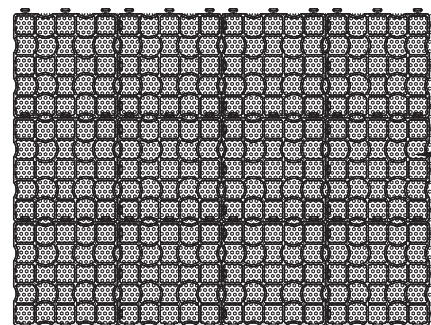
2 ASPHALT PAVING DETAIL, MAIN TRAILS
L014 SCALE: 1"=1' SECTION



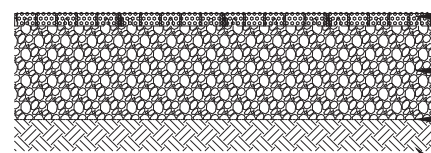
3 ASPHALT PAVING DETAIL, PEDESTRIAN
L014 SCALE: 1"=1' SECTION



4 HANDICAP RAMP
L014 SCALE: NOT TO SCALE SECTION

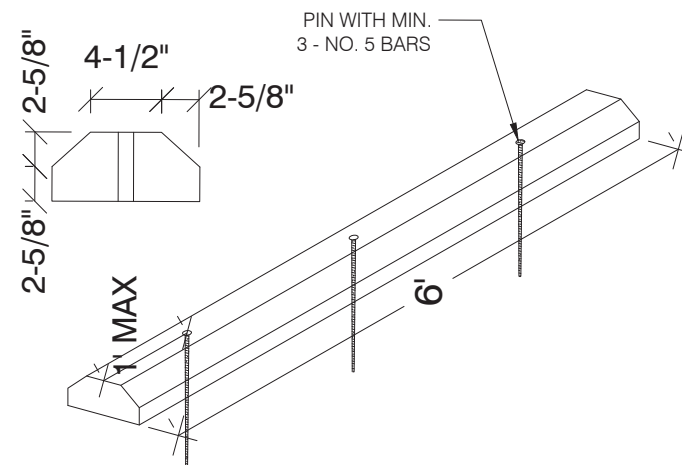


ECORASTER® E40 OR APPROVED
EQUAL, FILLED WITH 3/4\"/>



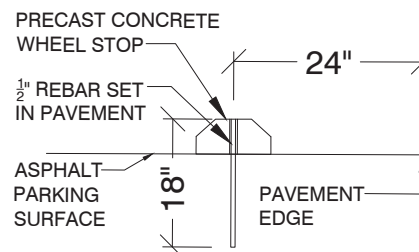
ECORASTER® E40 OR APPROVED
EQUAL, SLIGHTLY OVER FILLED
COMPACTED GRANULAR FILL
BASE LAYER
NONWOVEN GEOTEXTILE
SEPERATION LAYER
COMPACTED SUBGRADE

6 PERVIOUS GRID STONE CHIP PAVING DETAIL (ALT #)
L014 SCALE: 1"=1' PLAN & SECTION

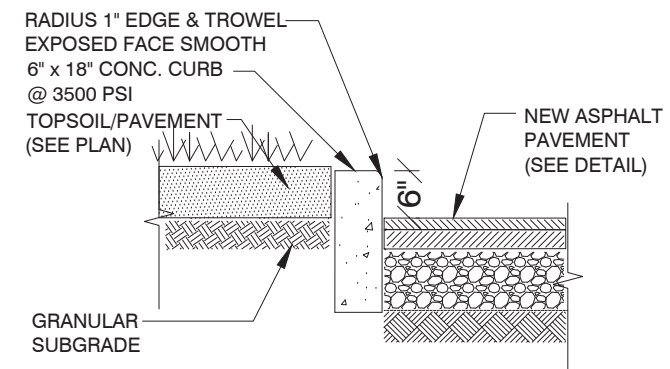


NOTE:

PREFABRICATED CONC. WHEELSTOP
@ 3500 psi AS SUPPLIED BY
BINGHAMTON PRECAST & SUPPLY
PHONE #: (607) 722-0334



7 WHEEL STOP (TYP)
L014 SCALE: 1"=1' SECTION



5 CONCRETE CURB, TYP.
L014 SCALE: 1"=1' SECTION

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No.	Revision	Date
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KIRBY PARK
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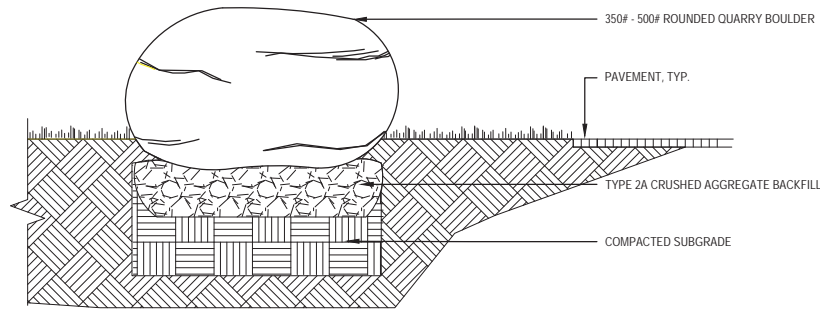
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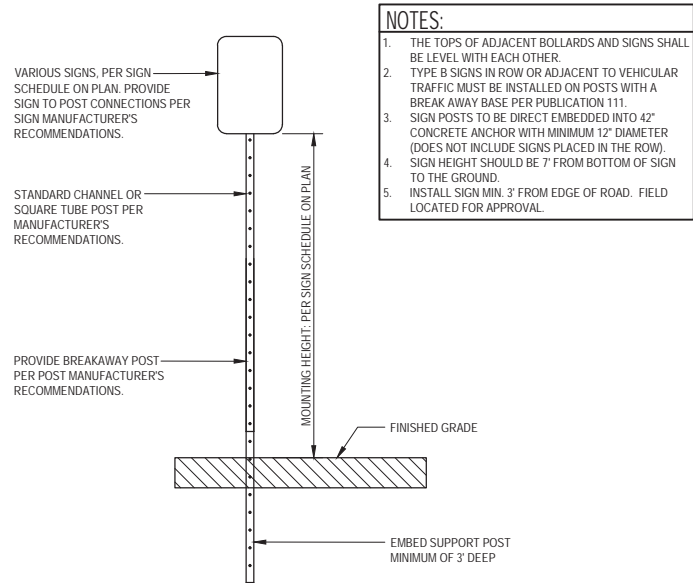
DETAILS - PAVEMENTS

Drawing No.

L014

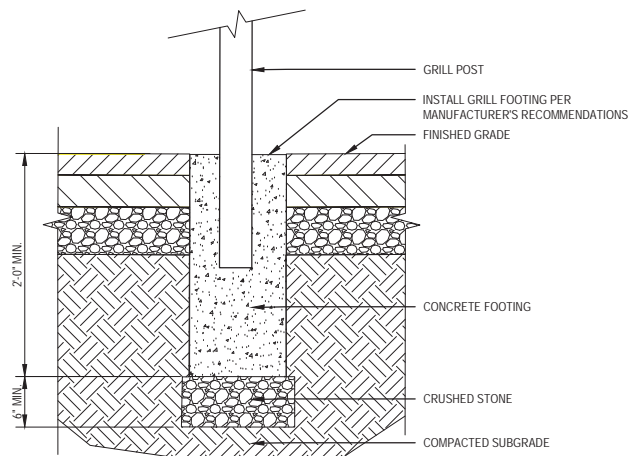


1 TRAFFIC BOULDER BARRIER, (TYP)
L015 SCALE: NTS SECTION

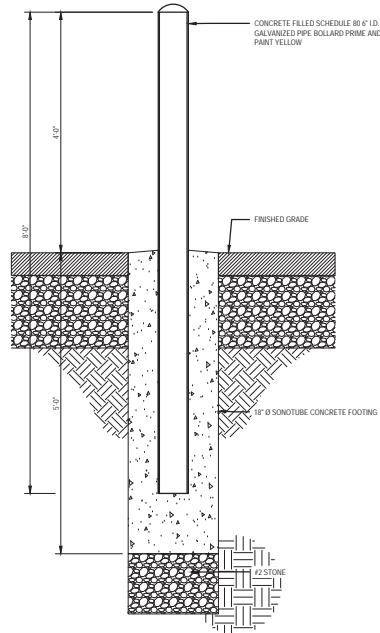


- NOTES:**
1. THE TOPS OF ADJACENT BOLLARDS AND SIGNS SHALL BE LEVEL WITH EACH OTHER.
 2. TYPE B SIGNS IN ROW OR ADJACENT TO VEHICULAR TRAFFIC MUST BE INSTALLED ON POSTS WITH A BREAK AWAY BASE PER PUBLICATION 111.
 3. SIGN POSTS TO BE DIRECT EMBEDDED INTO 42" CONCRETE ANCHOR WITH MINIMUM 12" DIAMETER (DOES NOT INCLUDE SIGNS PLACED IN THE ROW).
 4. SIGN HEIGHT SHOULD BE 7' FROM BOTTOM OF SIGN TO THE GROUND.
 5. INSTALL SIGN MIN. 3' FROM EDGE OF ROAD. FIELD LOCATED FOR APPROVAL.

2 SIGN INSTALLATION, (TYP)
L015 SCALE: NTS SECTION



3 GRILL FOUNDATION, (TYP)
L015 SCALE: NTS SECTION



4 BOLLARD, (TYP)
L015 SCALE: NTS SECTION



5 PARK ENTRY SIGN
L015 SCALE: NTS SECTION

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Project Name		

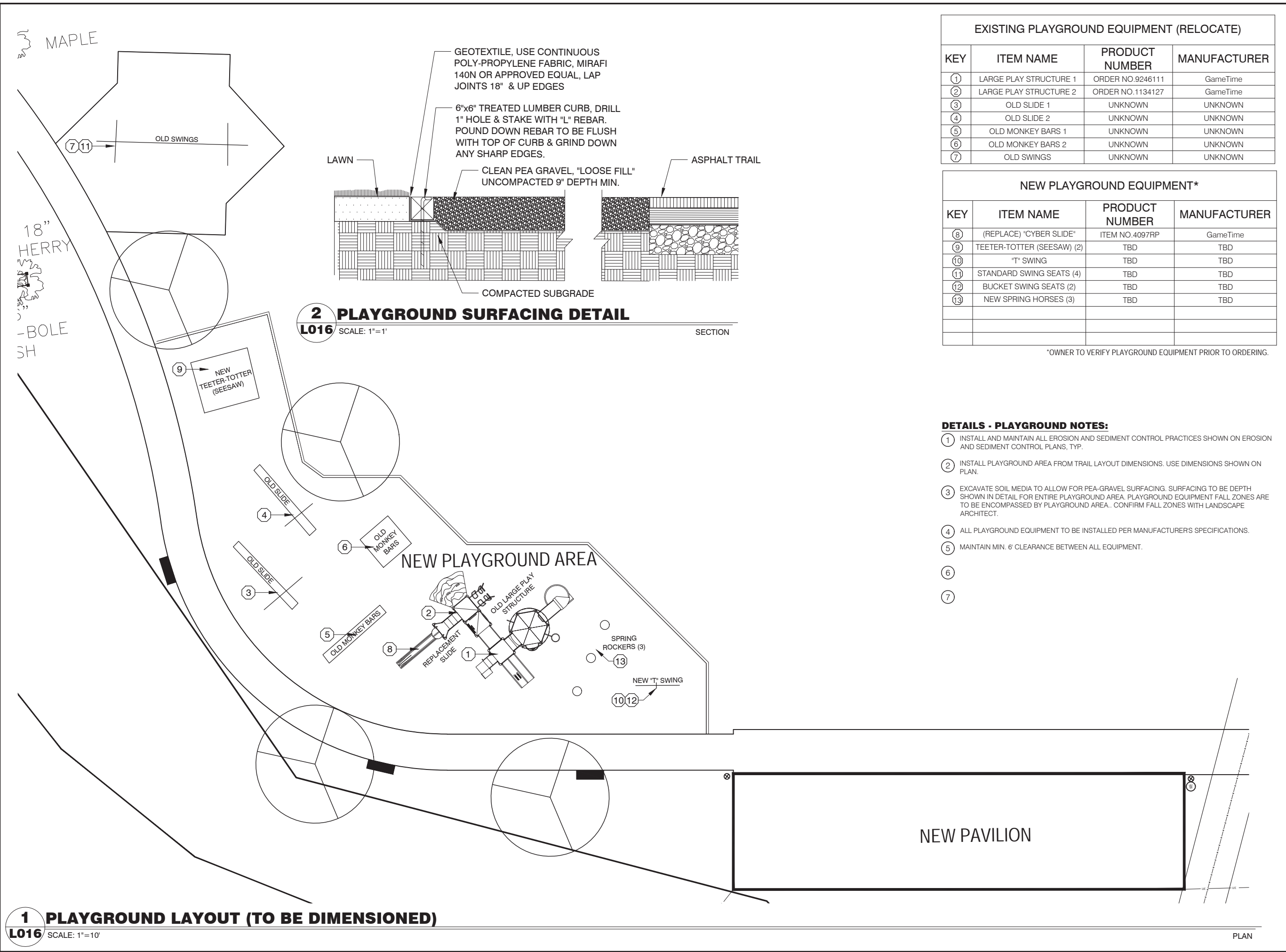
KIRBY PARK
IMPROVEMENTS
VILLAGE OF NICHOLS NEW YORK

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DETAILS - AMENITIES

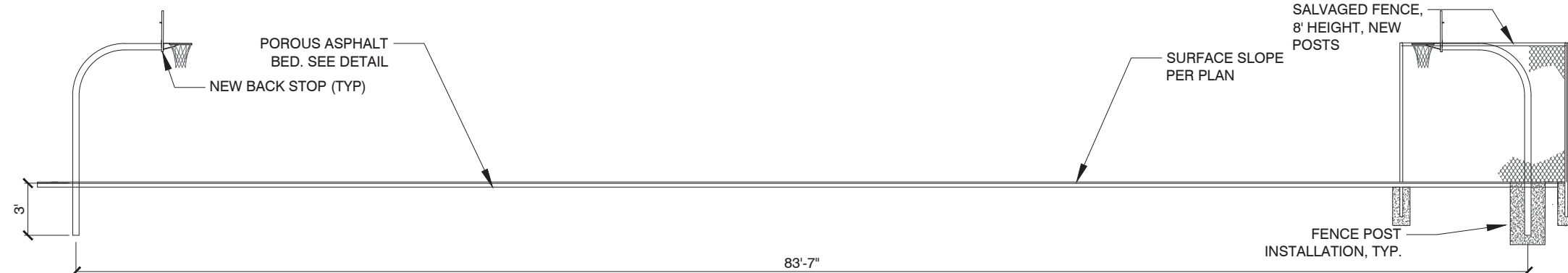
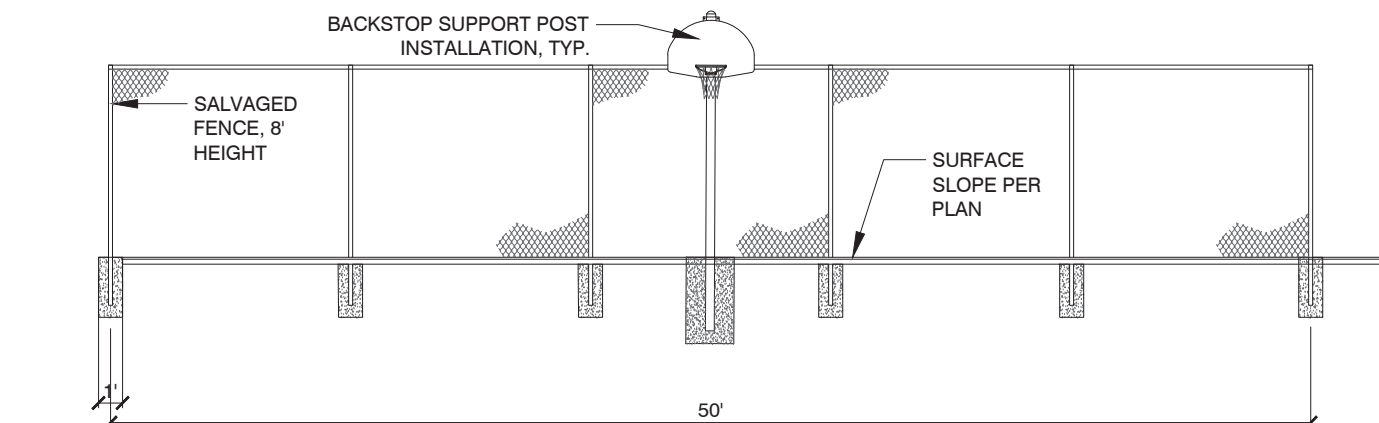
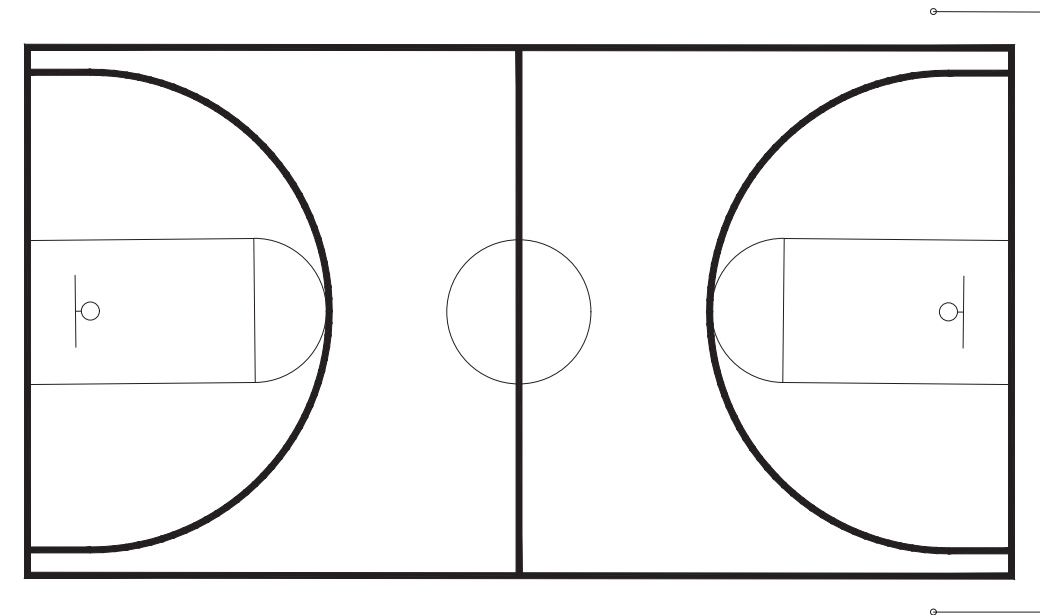
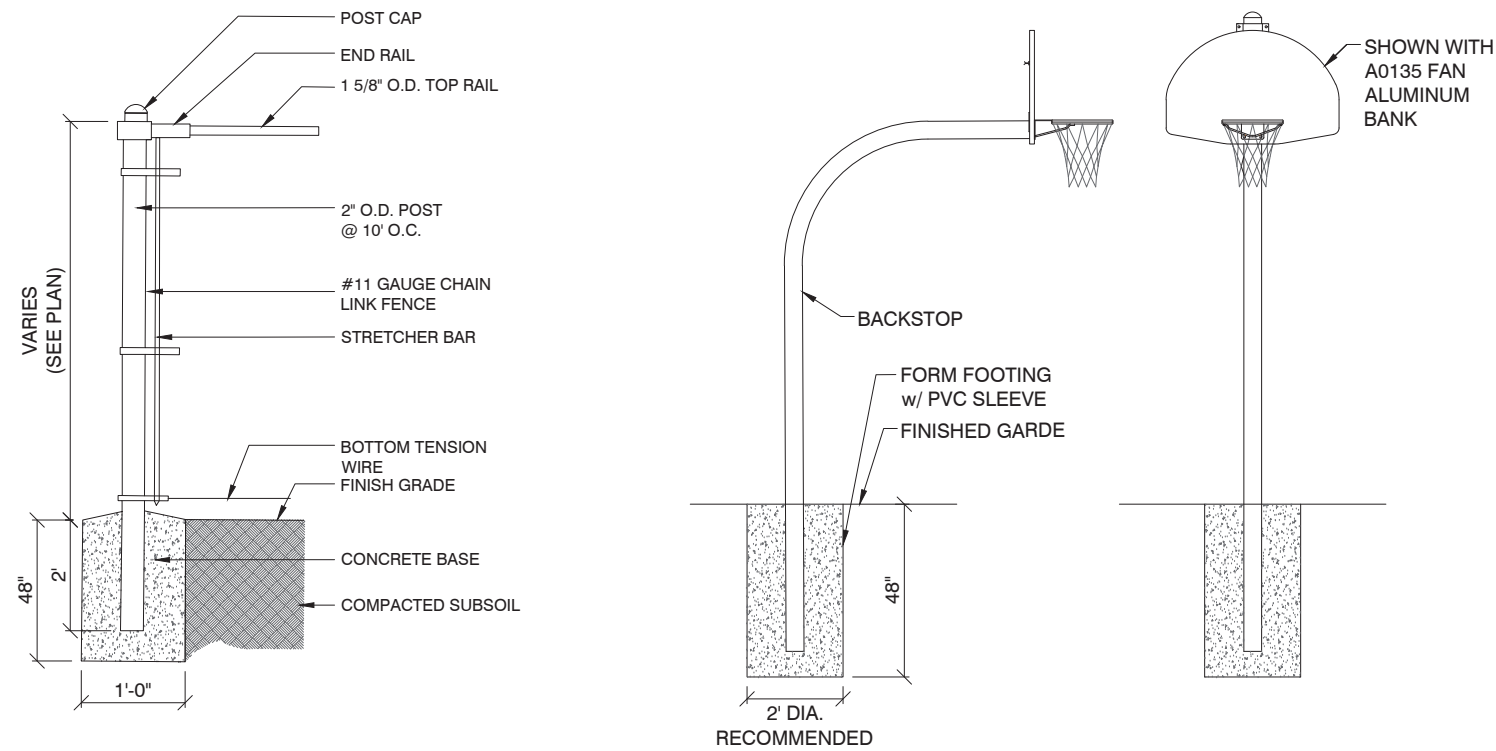
Drawing No.
L015



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Drawing Title		
DETAILS - PLAYGROUND		
Drawing No.		
L016		



NOTES:

- FIELD ASSEMBLE AND INSTALL BACKSTOPS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
- COORDINATE INSTALLATION TO ENSURE:
 - TOP OF GOAL RIM IS [10 FEET] [] ABOVE ELEVATION OF FINISH BASKETBALL COURT SURFACE.
 - FACE OF BACKBOARD IS [48 INCHES] INSIDE PERIMETER COURT LINE.
- EXCAVATE POST FOUNDATION WITH MINIMUM DIMENSIONS OF:
 - DIAMETER: AS SHOWN ON MANUFACTURERS INSTALLATION INSTRUCTIONS OR AS REQUIRED BY LOCAL CONDITIONS OR CODE REQUIREMENTS.
 -DEPTH: AS SHOWN ON MANUFACTURERS INSTALLATION INSTRUCTIONS OR AS REQUIRED BY LOCAL CONDITIONS OR CODE REQUIREMENTS.
 - SET POSTS IN CONCRETE WITH EMBEDMENT AS SHOWN ON MANUFACTURES INSTALLATION INSTRUCTIONS. SLOPE TOP OF FOUNDATION FOR DRAINAGE. VERIFY THAT POST IS CORRECTLY POSITIONED AND PLUMB VERTICALLY.
- WHERE CONCRETE SLAB IS CAST AROUND BACKSTOP POST, PROVIDE COMPRESSIBLE JOINT MATERIAL TO PROVIDE BOND BREAKER.
- ALLOW CONCRETE TO CURE 24 HOURS MINIMUM.
- INSTALL BACKBOARDS AND GOALS POSTS PLUMB, LEVEL, AND RIGID USING MANUFACTURER PROVIDED ATTACHMENT HARDWARE. ENSURE BACKSTOPS ARE ACCURATELY POSITIONED AND FREE OF VIBRATIONS.
- REMOVE PROTECTIVE WRAPPINGS, WASH SURFACES, AND ATTACH NETS.

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No.	Revision	Date
Project Name		

**KIRBY PARK
IMPROVEMENTS**

VILLAGE OF NICHOLS NEW YORK



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	Date 7/19/2018

Drawing Title
**DETAILS - BASKETBALL
COURT**

Drawing No.
L017

GENERAL NOTES

1.

SEE LAYOUT PLAN FOR LOCATION OF PAVILION.
2.

20' X 44' PAVILION AS PROVIDED BY GAZEBOCREATIONS.COM. #LWG2044-03 - 20'x44' WOOD GABLE RECTANGULAR SAVANNAH PAVILION OR EQUAL TO BE INSTALLED BY CONTRACTOR.
3.

THE GENERAL CONTRACTOR SHALL ERECT THE 20'X44' PAVILION ON THE 22'X46' CONCRETE SLAB. INCLUDE ALL ROOFING MATERIALS WITH 25 YEAR WARRANTY. SUBMIT COLOR SAMPLES FOR APPROVAL BY OWNER REPRESENTATIVE.
4.

ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER WITH QUALIFIED MECHANICS IN THEIR TRADE.
5.

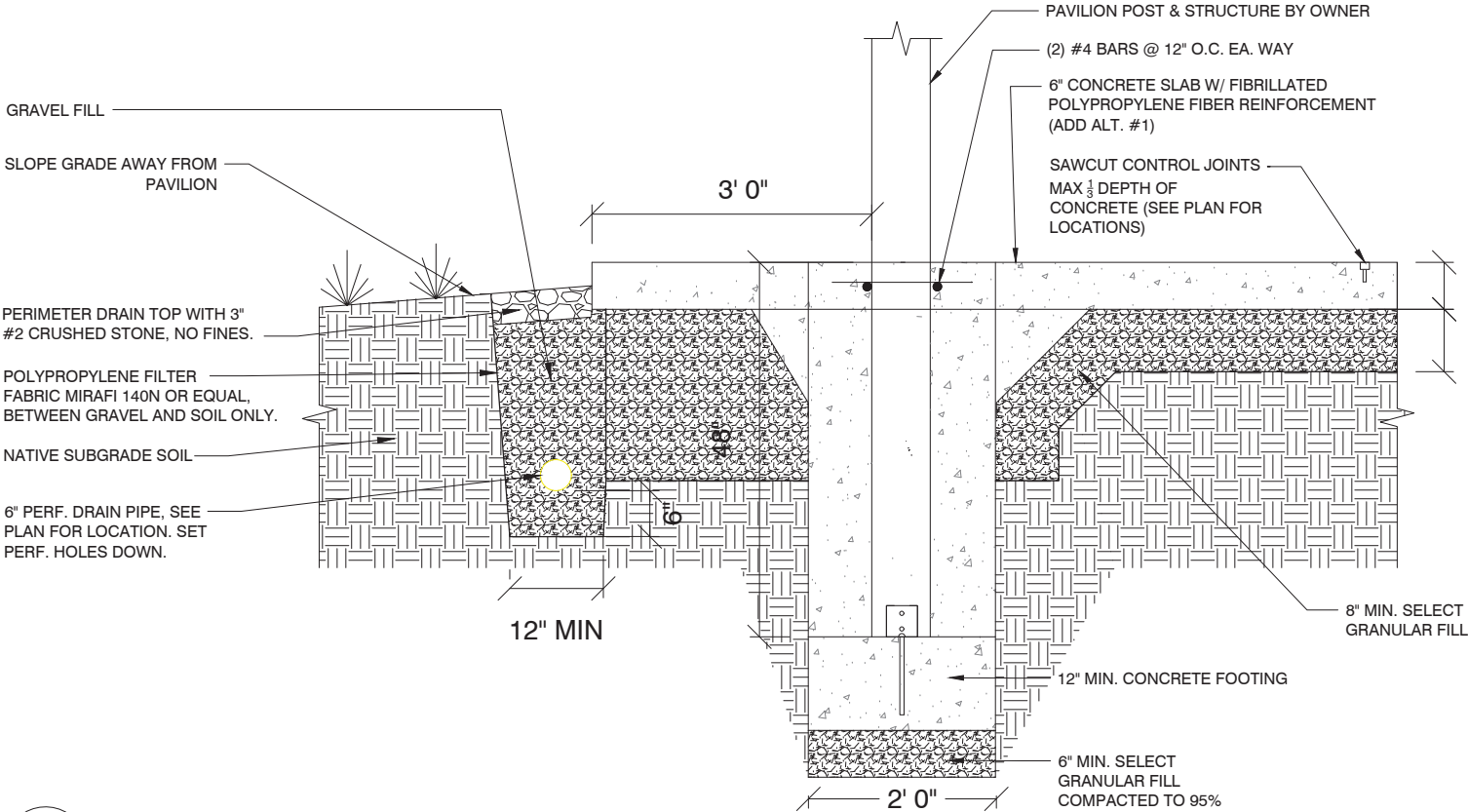
ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST STATE BUILDING CODES AND ALL APPLICABLE MUNICIPAL CODES AND ORDINANCES.
6.

ANY DISCREPANCIES IN THE DRAWINGS SHALL BE REPORTED FOR CLARIFICATION BEFORE COMMENCING WITH THAT WORK.
7.

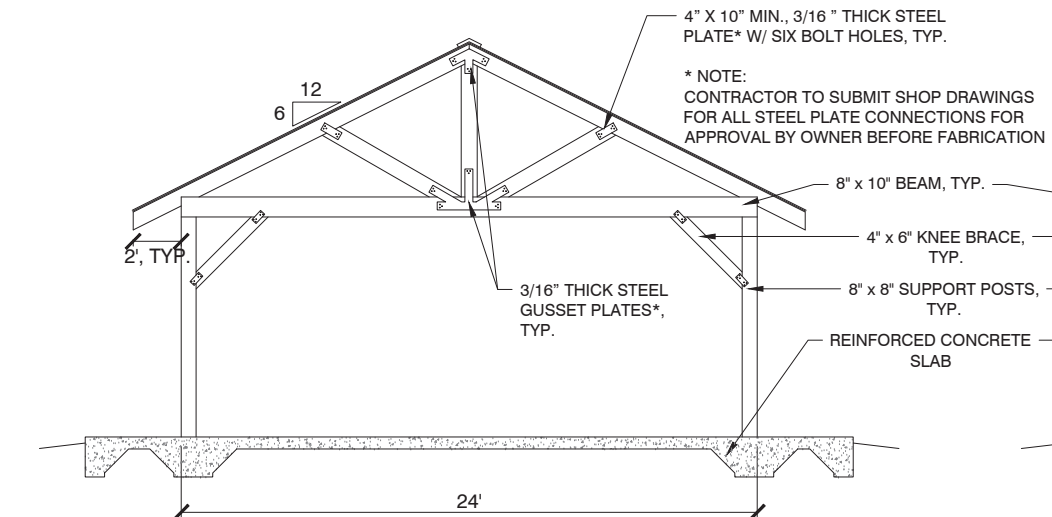
THE RESPONSIBILITY OF ACCURATELY LAYING OUT THE WORK TO BEST FIT WITH THE DETAILS OF EXISTING JOB CONDITIONS RESTS WITH THE GENERAL CONTRACTOR, AND HE SHALL PERFORM ANY REASONABLE VARIATION AND CHANGE THAT MAY BE REQUIRED.
8.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE BUILDING, AND ELECTRICAL CODES; STATE AND/OR LOCALLY ADMINISTERED.
9.

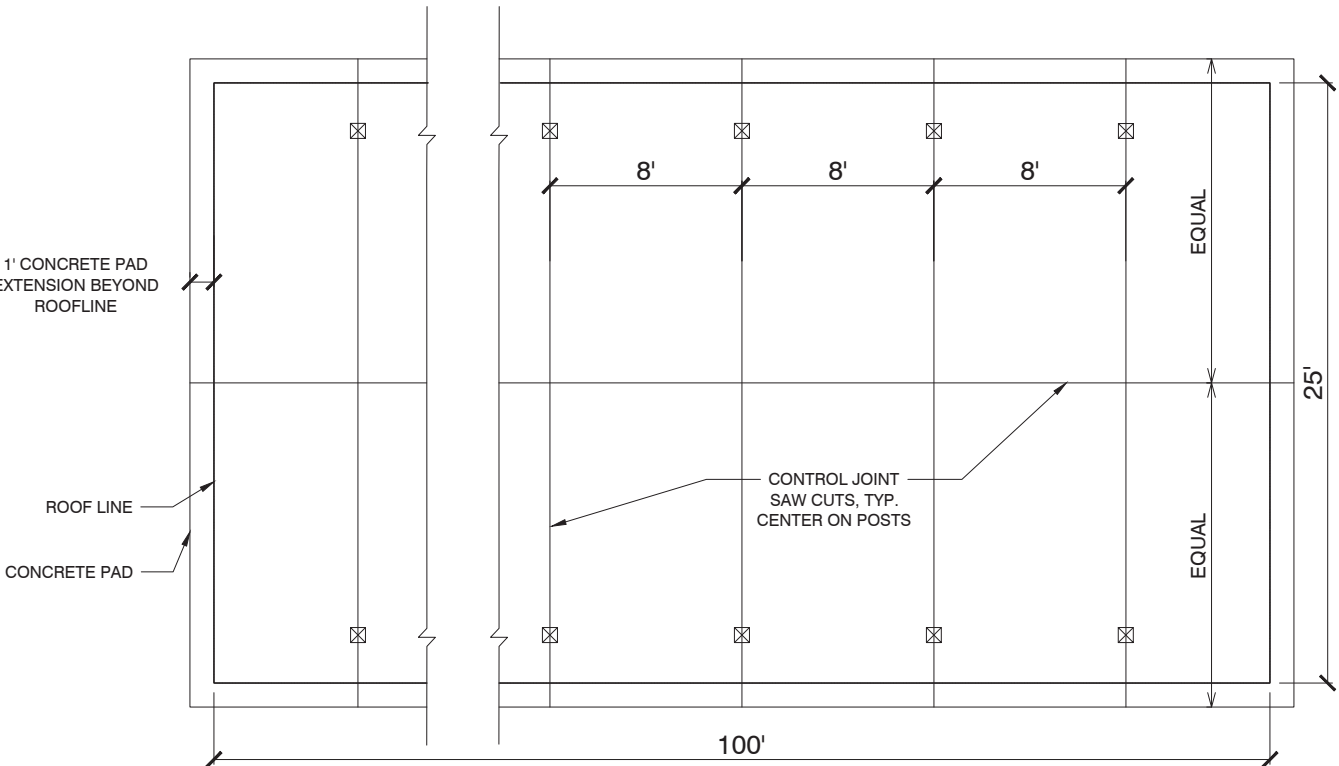
ANY STRUCTURAL RENOVATIONS OR CHANGES TO BE MADE BEYOND THE INTENT OR SCOPE OF THESE DOCUMENTS FOR ANY REASON SHALL BE DIRECTED BY THE MANUFACTURERS' ENGINEER OR ONE OF HIS DESIGNATED REPRESENTATIVES. IF RECALCULATIONS ARE REQUIRED OR SITE VISIT IS NECESSARY THEN COMPENSATION TO THE ENGINEER FOR THESE CHANGES SHALL BE BORNE BY THE GENERAL CONTRACTOR. STAMPED PLANS WITH PROFESSIONAL ENGINEERS SEAL IN THE COMMONWEALTH OF PA SHALL BE PROVIDED BY THE CONTRACTOR FOR MUNICIPAL PERMIT AND STATE (DCNR) APPROVALS PRIOR TO SHIPPING MATERIALS.



1 PAVILION SLAB SECTION
L018 SCALE: 1" = 1'-0"



2 25' x 100' PAVILION SLAB
L018 SCALE: 1/4" = 1'-0"



FOUNDATION NOTES

1.

THE CONTRACTOR SHALL INVESTIGATE THE SITE DURING CLEARING, FILLING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESSPOOLS, CISTERNS, OLD FOUNDATIONS, ETC.. IF ANY SUCH ITEMS ARE FOUND, THE OWNER SHALL BE NOTIFIED IMMEDIATELY AND PROPER STRUCTURAL CORRECTIONS MADE IN ACCORDANCE TO GENERALLY ACCEPTED ENGINEERING PRACTICES.
2.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORT OF ALL TEMPORARY EMBANKMENTS AND EXCAVATIONS.
3.

BACKFILL SHALL CONSIST OF NON-EXPANSIVE, FREE-DRAINING, PREDOMINANTLY GRANULAR MATERIAL, FREE OF DEBRIS AND ORGANIC MATERIAL.
4.

ALL CONCRETE FOR HAUNCHED FOOTINGS AND SLABS SHALL BE 3500 PSI AT 28 DAYS WITH AIR ENTRAINING ADMIXTURES. MAXIMUM SLUMPS SHALL BE 4".
5.

FOOTINGS ARE SIZED FOR A MINIMUM TOTAL SOIL BEARING CAPACITY OF 2500 PSF. IF THE CONTRACTOR HAS ANY DOUBTS AS TO THE EXISTING SOIL BEARING CAPACITY AND FEELS IT MAY BE BELOW THIS MINIMUM SET, THEN HE SHALL NOTIFY THE OWNER AND THE OWNER SHALL HAVE IT TESTED AT THIS QUESTIONABLE AREA IN ACCORDANCE TO GENERALLY ACCEPTED ENGINEERING PRACTICES.
6.

BUILDING FOUNDATION SHALL BE A FLOATING SLAB WITH HAUNCHED FOOTINGS TO REST ON MIN. 8" COMPACTED #2 CRUSHED STONE BASE AND UNDISTURBED DRY SOIL. DO NOT PLACE CONCRETE ON FROZEN OR SATURATED SOILS. PROTECT ALL CONCRETE FROM FREEZING AND/OR FLASH DRYING. THE COMPACTED CRUSHED STONE GRAVEL BASE SHALL SLOPE TO DRAIN.
7.

ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED DURING PLACEMENT.
8.

EXCEPT WHERE DETAILED ON STRUCTURAL DRAWINGS, REINFORCEMENT SHALL NOT BE DISPLACED OR CUT TO PROVIDE CLEARANCE FOR PENETRATIONS, INSERTS, OR EMBEDMENTS.
9.

CONCRETE CONSTRUCTION SHALL CONFORM TO "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301), "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK" (ACI 347), AND "RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE" (ACI 304).

A) MATERIALS FOR CONCRETE:

1) PORTLAND CEMENT - ASTM C 150.

2) AGGREGATES - ASTM C 33.

3) WATER - POTABLE, CLEAN, FREE OF OILS, ACIDS, ALKALI, AND ORGANIC MATTER.

4) AIR ENTRAINING ADMIXTURE - ASTM C 260.

10.

CONCRETE, WHEN PLACED, SHALL HAVE A TEMPERATURE BETWEEN 50 DEG. F AND 70 DEG. F. TEMPERATURES OF CONCRETE DURING MIXING SHALL NEVER BE LOWER THAN 40 DEG. F NOR HIGHER THAN 90 DEG. F. DURING COLD WEATHER (AMBIENT TEMPERATURE BELOW 40 DEG. F), THE CONTRACTOR SHALL MAINTAIN CONCRETE AT A MINIMUM TEMPERATURE OF 50 DEG. F FOR 3 DAYS AND ABOVE 32 DEG. F FOR 14 DAYS FOLLOWING ITS PLACEMENT. FOLLOW ACI 306R RECOMMENDATIONS FOR COLD WEATHER CONCRETING.

11.

DESIGN, FABRICATION, INSTALLATION AND REMOVAL OF CONCRETE FORM WORK IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

12.

ALL FLOOR SLABS SHALL BE STEEL TOWELED FINISH.

13.

LOADS:

SOIL PRESSURE.....2500 PSF

WIND.....20 PSF

CONCRETE SLAB.....4000 PSI

CONCRETE FOUNDATIONS.....3500 PSI

REBARSASTM GRADE 60

ROOF (LL + DL).....60 PSF

14.

MINIMUM FIBER STRESS IN BENDING (FB) FOR ALL WOOD TRUSSES AND BEAMS TO BE USED ON THIS PROJECT SHALL BE 1100 PSI OR GREATER UNLESS NOTED OTHERWISE.
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VILLAGE OF NICHOLS NEW YORK

DELTA

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Date 7/19/2018

Drawing Title

DETAILS - PAVILION

Drawing No.

L018

GENERAL PLANTING NOTES:

1. REFER TO PLANTING DETAILS (SHEET L021) FOR NOTES ON PROPER INSTALLATION OF PLANT MATERIAL.
2. NO PLANTING SHALL OCCUR AFTER OCTOBER 15TH, IF NOT COMPLETED BY THIS DATE, PLANTINGS SHALL OCCUR THE FOLLOWING SPRING AFTER APRIL 15TH.
2. PLANT MATERIAL & LAYOUT TO BE APPROVED IN FIELD BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
3. STAKE LOCATIONS OF SHRUBS FOR REVIEW IN FIELD BY LANDSCAPE ARCHITECT.
4. COORDINATE LOCATIONS OF PLANTINGS WITH UTILITIES. OBTAIN "AS BUILTS" PLAN OF UTILITIES BEFORE BEGINNING PLANTING. REVIEW WITH LANDSCAPE ARCHITECT. NOTIFY VILLAGE'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT OF ANY OBSTRUCTIONS ENCOUNTERED THAT MAY IMPACT PLANT PLACEMENT OR HEALTH.
9. IN THE EVENT OF A DISCREPANCY WITHIN THE LANDSCAPE DOCUMENTS, THE PLANTING PLAN TAKES PRECEDENCE OVER THE PLANT LIST. CONTRACTOR IS RESPONSIBLE FOR PLANTING WHAT IS SHOWN ON THE PLANS.
10. PLANT SUBSTITUTIONS ARE NOT ALLOWED WITHOUT WRITTEN APPROVAL OF THE LANDSCAPE DESIGNER.
11. ALL PLANT MATERIAL SHALL MEET THE AMERICAN STANDARD FOR NURSERY STOCK AND ANSI ZX60.1 STANDARD.
12. INSTALL NATURALLY COLORED SHREDDED BARK MULCH AS A CONTINUOUS BED THROUGHOUT THE ENTIRE PLANT BED AS SPECIFIED.

REQUIRED CONTRACTOR MAINTENANCE FOR 1 YEAR:

FOR ALL MAINTENANCE REQUIREMENTS, IF CONTRACTOR DOES NOT PERFORM WORK, ALTERNATIVE MEANS WILL BE PURSUED BY THE OWNER AT THE EXPENSE OF THE CONTRACTOR.

TREES AND SHRUBS

1. IMMEDIATELY AFTER PLANT INSTALLATION AND FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION, PROVIDE SUPPLEMENTAL WATERING DURING EXTENDED PERIODS OF DROUGHT.
2. CLOSELY MONITOR NEWLY PLANTED TREES AND SHRUBS DURING THE FIRST GROWING SEASON FOR SIGNS OF DROUGHT STRESS, DISEASE, PEST INFESTATION OR STRUCTURAL DEFECTS. ADDRESS ANY AND ALL ISSUES PROMPTLY IN SUCH A MANNER THAT CONTAINS CONTAGIONS AND PREVENTS FUTURE PROBLEMS.

PERENNIAL BEDS AND OTHER HERBACEOUS LANDSCAPE AREAS

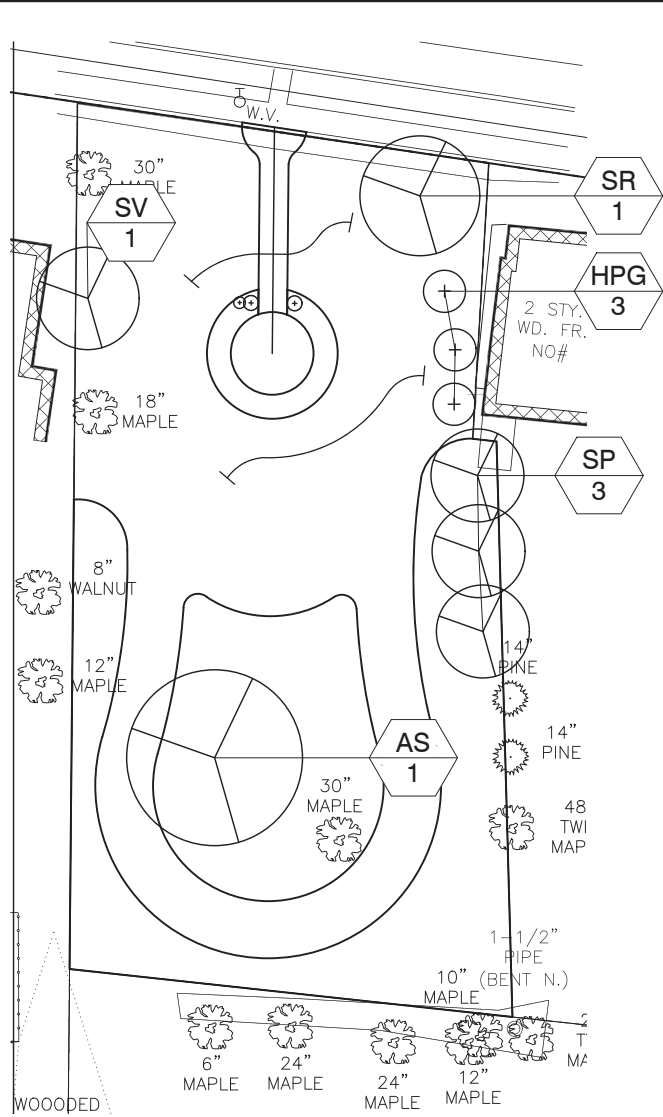
1. WEEDING IS REQUIRED UNTIL VEGETATION IS ESTABLISHED. WEEDS SHOULD BE REMOVED BY HAND.
2. DEBRIS AND TRASH SHALL BE DISPOSED OF AT SUITABLE DISPOSAL/RECYCLING SITE AND MUST COMPLY WITH STATE, LOCAL, AND FEDERAL REGULATIONS.
3. DEBRIS IS TO BE REMOVED APPROXIMATELY TWICE PER YEAR. DEAD OR DISEASED PLANTS SHOULD BE REPLACED AND NOXIOUS INVASIVE PLANT SPECIES SHOULD BE REMOVED. PERENNIAL PLANT SPECIES MAY BE CUT BACK AT THE END OF THE GROWING SEASON, OR BEFORE THE BEGINNING OF THE FOLLOWING GROWING SEASON.
4. MULCH SHOULD BE REPLACED WHEN EROSION IS EVIDENT. MULCH FOR THE ENTIRE PLANTING AREA SHOULD BE REPLENISHED ANNUALLY UNTIL DENSE PLANT COVER IS ESTABLISHED.
5. IMMEDIATELY AFTER PLANT INSTALLATION AND FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION, PROVIDE SUPPLEMENTAL WATERING DURING EXTENDED PERIODS OF DROUGHT.

INVASIVE SPECIES:

1. MONITOR REGROWTH OF KNOTWEED, MULTIFLORA ROSE AND OTHER INVASIVE SPECIES.
2. SEE SPECIFICATIONS FOR MAINTENANCE REQUIREMENTS.
3. SEE SPECIFICATIONS FOR PROPER DISPOSAL METHODS.

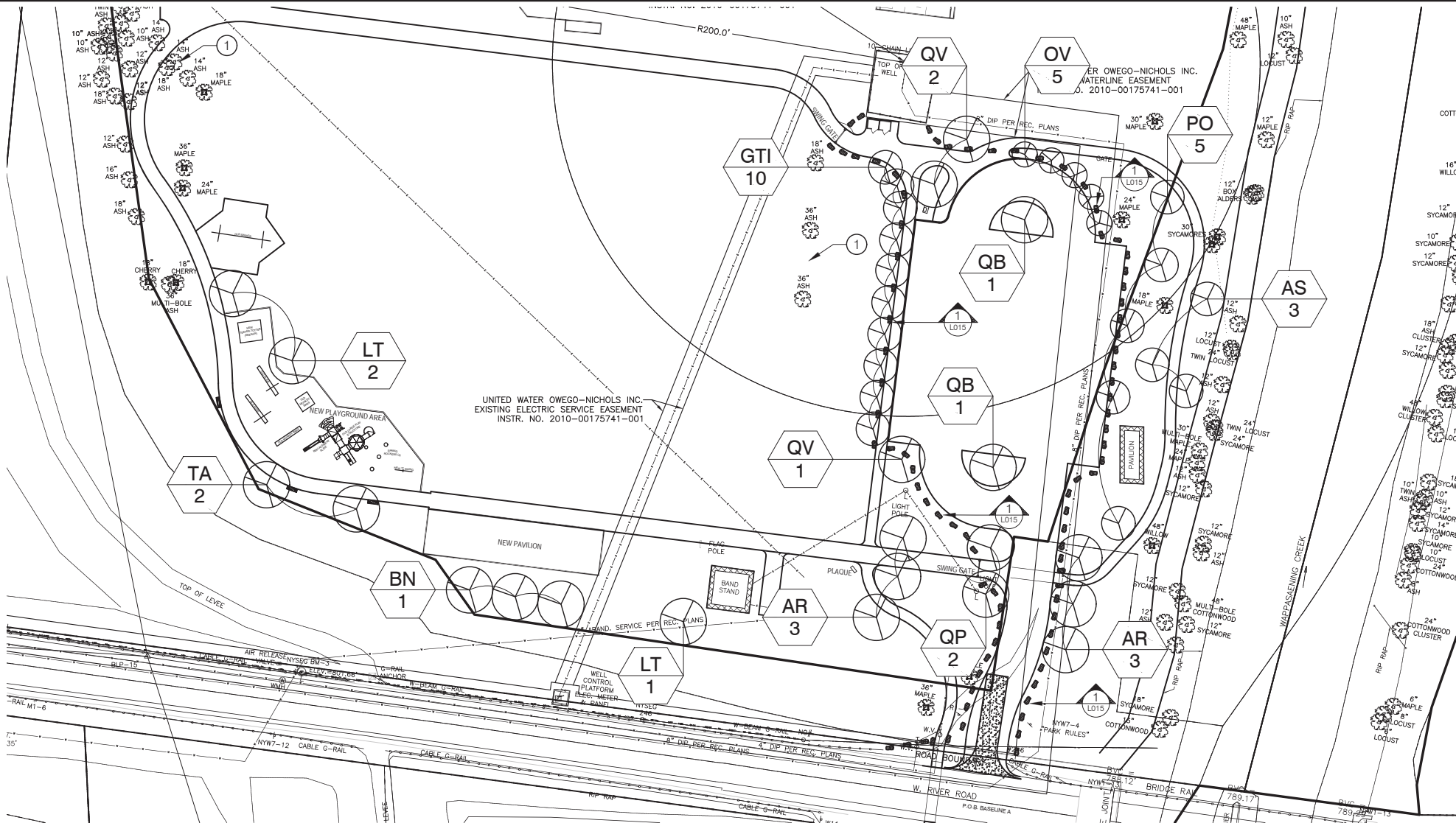
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VILLAGE OF NICHOLSNEW YORK					
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		Date 7/19/2018			
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PLANTING NOTES & SCHEDULES					
Drawing No.					
L019					



2 PLANTING PLAN, VETERAN'S MEMORIAL PARK
L020 SCALE: 1"=20' PLAN

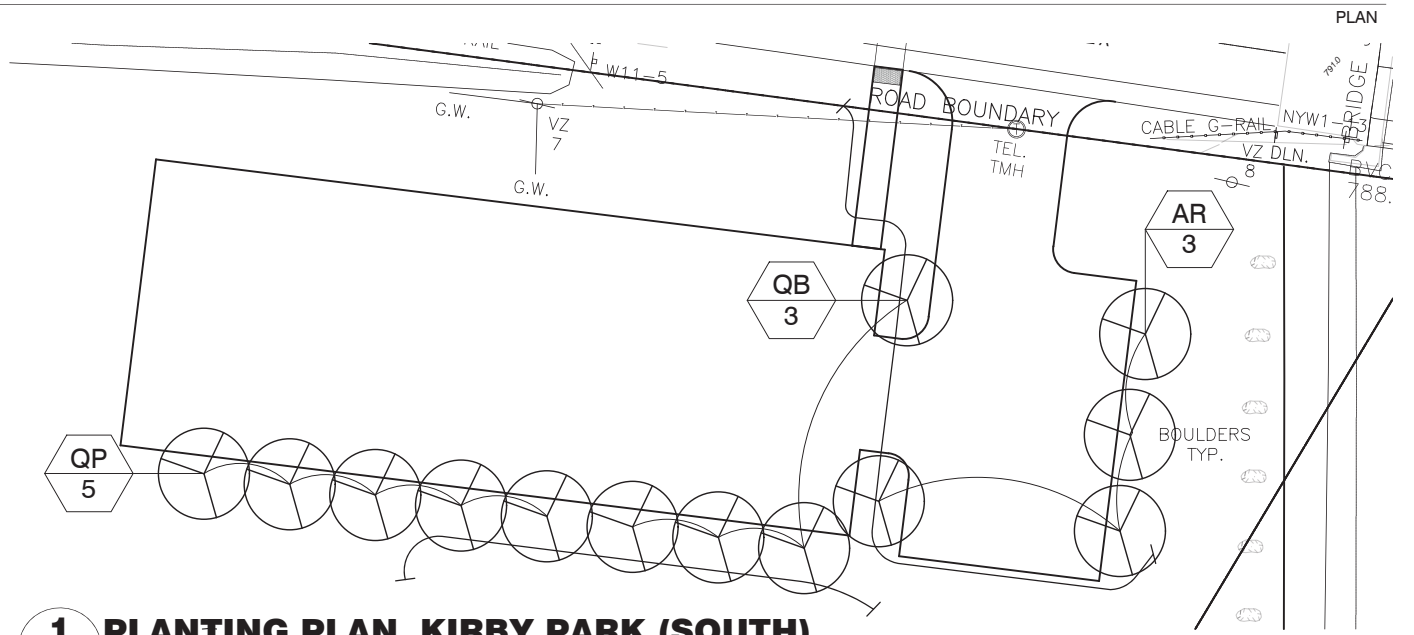
PLANT SCHEDULE, KIRBY PARK (NORTH)								
Key	QTY	Botanical Name	Common Name	Min Ht.	Min Cal.	Root Size	Type	Comments
PLANTING LARGE DECIDUOUS TREE SPECIES								
AK	2	Acer rubrum 'October Glory'	October Glory Red Maple	12'-14' Ht.	2"	28"	B&B	Single trunk.
AS	3	Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	12'-14' Ht.	2"	24"	B&B	Street tree branching.
BN	3	Betula nigra 'Heritage'	River Birch	12'-14'	-	38"	B&B	Multistem clump (min. 3)
GTI	10	Gleditsia triacanthos 'Skyline'	'Skyline' Honeylocust	12'-14' Ht.	2.5"	28"	B&B	Street tree branching.
LT	1	Liriodendron tulipifera	Tulip Tree	16'-18' Ht.	3.5"	38"	B&B	
OV	1	Ostrya virginiana	American Hopbloom	8'-10' Ht.	2"	24"	B&B	
PO	5	Platanus occidentalis	Sycamore	14'-16' Ht.	3"-3.5"	28"	B&B	Single trunk.
QP	2	Quercus palustris	Pin Oak	14'-16' Ht.	3"-3.5"	28"	B&B	Heavy branching.
QB	2	Quercus velutina	Eastern Black Oak	12'-14' Ht.	2.5"	28"	B&B	
QV	2	Quercus bicolor	Swamp White Oak	12'-14' Ht.	2.5"	28"	B&B	Street tree branching.
TA	2	Tilia americana	American Basswood	10'-12' Ht.	2"	24"	B&B	Copicing
PLANT SCHEDULE, KIRBY PARK (SOUTH)								
Key	QTY	Botanical Name	Common Name	Min Ht.	Min Cal.	Root Size	Type	Comments
PLANTING LARGE DECIDUOUS TREE SPECIES								
AR	2	Acer rubrum 'October Glory'	October Glory Red Maple	12'-14' Ht.	2"	28"	B&B	Single trunk.
QP	2	Quercus palustris	Pin Oak	14'-16' Ht.	3"-3.5"	28"	B&B	Heavy branching.
QB	2	Quercus bicolor	Swamp White Oak	12'-14' Ht.	2.5"	28"	B&B	Street tree branching.
PLANT SCHEDULE (VETERAN'S MEMORIAL PARK)								
Key	QTY	Botanical Name	Common Name	Min Ht.	Min Cal.	Root Size	Type	Comments
PLANTING LARGE DECIDUOUS TREE SPECIES								
AS	1	Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	12'-14' Ht.	2"	24"	B&B	Street tree branching.
SR	1	Syringa reticulata 'Ivory Silk'	Ivory Silk Tree Lilac	8'-10' Ht.	2"	24"	B&B	Treeform
PLANTING DECIDUOUS SHRUB SPECIES								
SP		Syringa patula 'Mes Kim'	Manchurian lilac	2'-3' Ht.		No. 3	Cont.	Fragrant Pink flower
SV		Syringa vulgaris	Common Purple Lilac	5'-6' Ht.		No. 3	Cont.	Purple Flowers
HPG		Hydrangea paniculata 'Grandiflora'	Pee Gee Hydrangea	24'-30' Ht.		No. 2	Cont.	



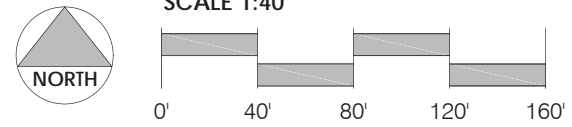
1 PLANTING PLAN, KIRBY PARK (NORTH)
L020 SCALE: 1"=40'

PLANTING PLAN 1 NOTES:

- 1 TWENTY (20) LARGE DECIDUOUS REPLACEMENT TREES FOR DYING/DECLINING ASH TREES TO BE BID AS AN ALTERNATE. REPLACEMENT TREES TBD BY LANDSCAPE ARCHITECT.
- 2
- 3
- 4



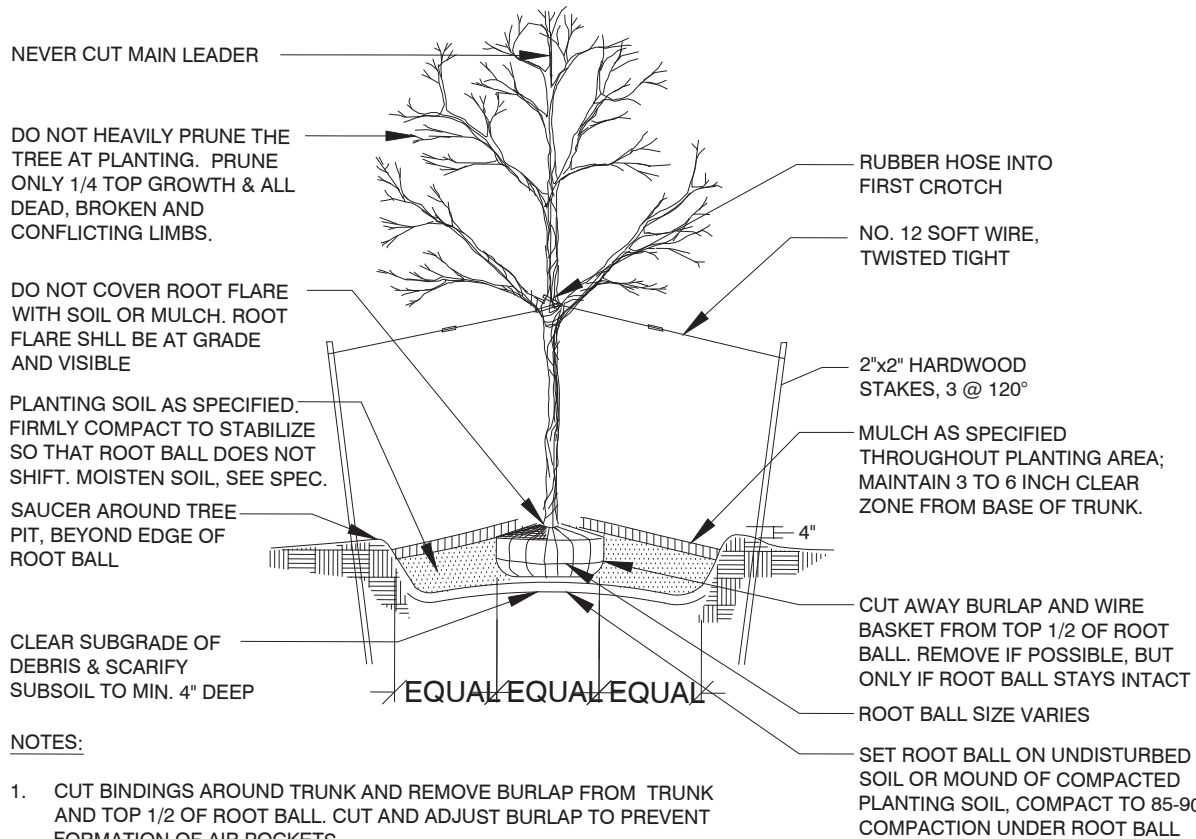
1 PLANTING PLAN, KIRBY PARK (SOUTH)
L020 SCALE: 1"=20'



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Drawing No. L020		



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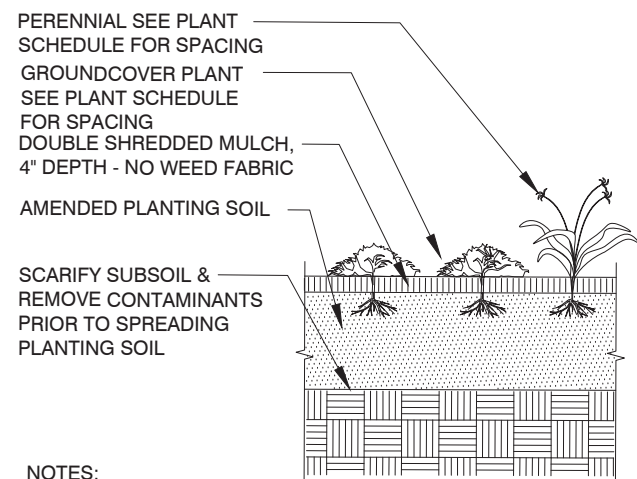
1. CUT BINDINGS AROUND TRUNK AND REMOVE BURLAP FROM TRUNK AND TOP 1/2 OF ROOT BALL. CUT AND ADJUST BURLAP TO PREVENT FORMATION OF AIR POCKETS.
2. REMOVE CONTAINER/WIRE BASKET IF PRESENT.
3. SET ROOTBALL ON UNDISTURBED SUBGRADE LEVEL OR ON SLIGHTLY RAISED MOUND OF COMPACTED PLANTING SOIL.
4. STAKE TREE ONLY UPON APPROVAL OF THE LANDSCAPE ARCHITECT.
5. MULCH GROUPINGS OF TREES, SHRUBS AND PERENNIALS AS A CONTINUOUS BED.

1 DECIDUOUS TREE PLANTING, (TYP)

L021

SCALE: NOT TO SCALE

SECTION



NOTES:

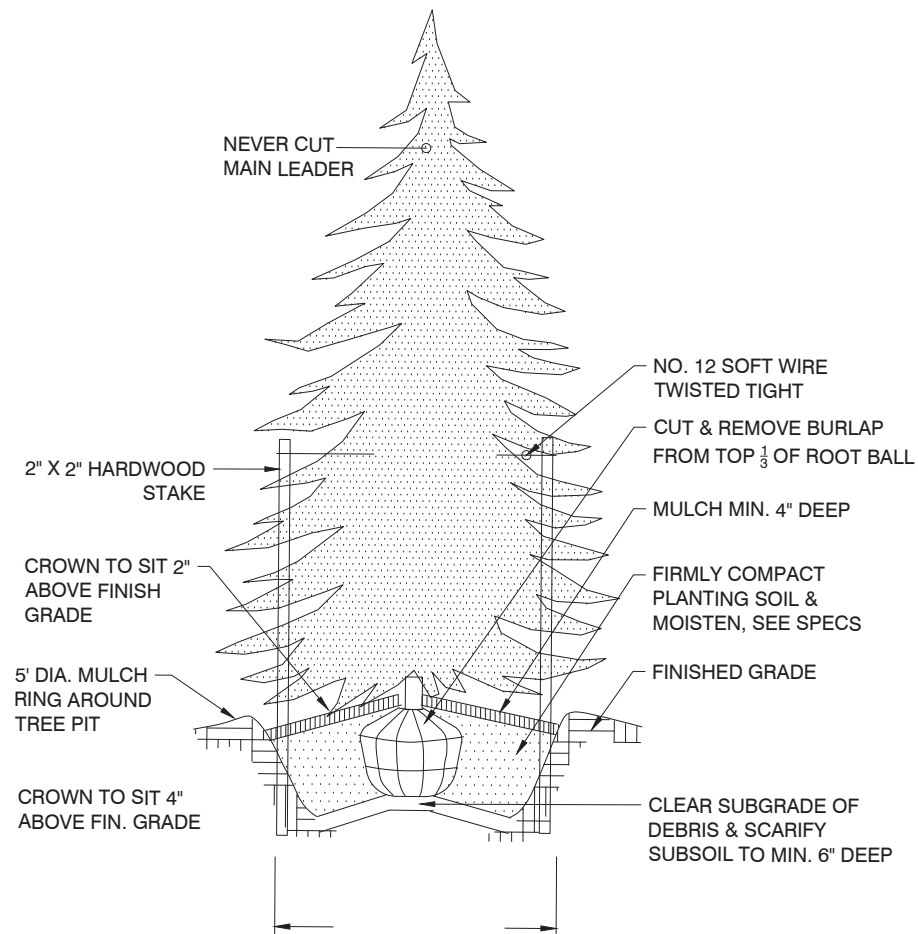
1. SEPARATE AND SPREAD OUT POT-BOUND ROOTS.
2. MULCH GROUPINGS OF TREES, SHRUBS AND PERENNIALS AS A CONTINUOUS BED.

4 PERENNIAL PLANTING, (TYP)

L021

SCALE: NOT TO SCALE

SECTION

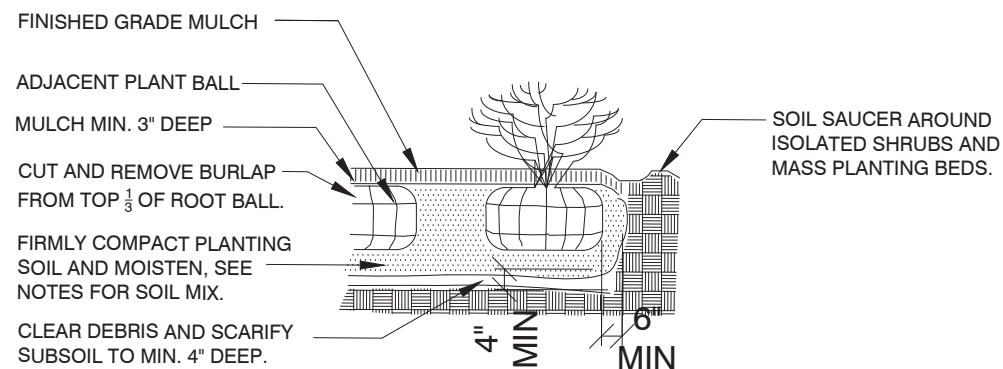


2 EVERGREEN TREE PLANTING, (TYP)

L021

SCALE: NOT TO SCALE

SECTION



NOTES:

1. PLACE SHRUBS PLUMB IN HOLE.
2. BROADLEAF EVERGREEN SHRUBS SHALL BE PLANTED HIGH, SO CROWN IS 2-3" ABOVE GRADE; BRING SOIL UP TO COVER, OTHER SHRUBS SHALL BEAR SAME RELATION TO FINISHED GRADE AS PREVIOUSLY EXISTED.
3. THIN BRANCHES AND FOLIAGE (NOT ALL ENDS) BY 1/4, RETAINING NORMAL PLANT SHAPE.

3 SHRUB PLANTING, (TYP)

L021

SCALE: NOT TO SCALE

SECTION

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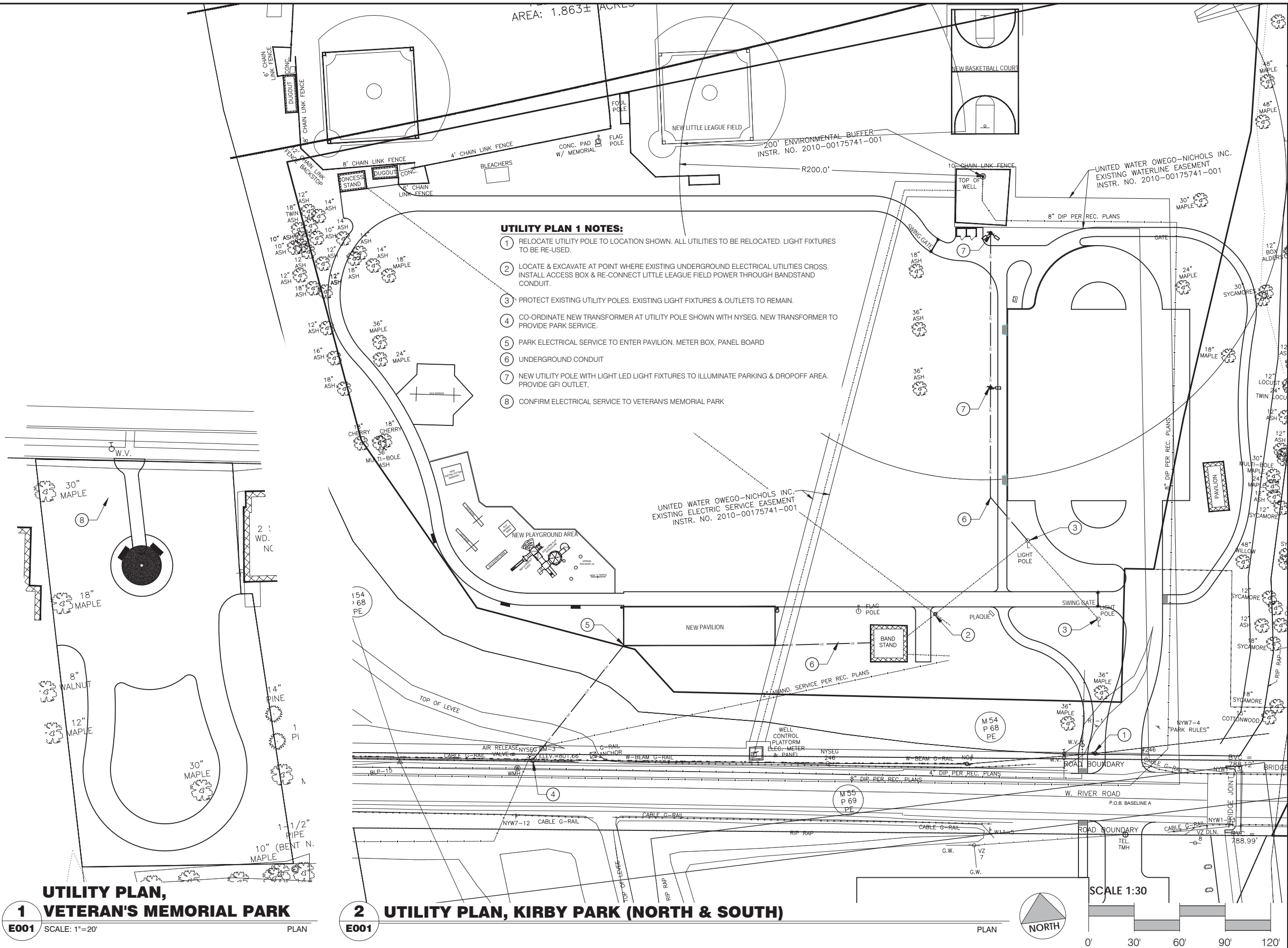
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Drawing Title

PLANTING DETAILS

Drawing No.

L021















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		7/19/2018
Drawing Title		
UTILITY PLAN 1		
Drawing No.		

E001



PANEL DESIGNATION:			PANEL NAME			SERVICE:			120/208V, 3Ø, 4W		
LOCATION:			ELECTRICAL ROOM			MAIN:			200 AMP M.C.B.		
EQUIPMENT/AREA SERVICED	CKT. BRK. AMP	CKT. #	PHASE LOAD VOLT-AMPS						CKT. #	CKT. BRK. AMP	EQUIPMENT/AREA SERVICED
			A		B		C				
SPARE	20	1	0000	0000					2	20	SPARE
SPARE	20	3			0000	0000			4	20	SPARE
SPARE	20	5					0000	0000	6	20	SPARE
SPARE	20	7	0000	0000					8	20	SPARE
SPARE	20	9			0000	0000			10	20	SPARE
SPARE	20	11					0000	0000	12	20	SPARE
SPARE	20	13	0000	0000					14	20	SPARE
SPARE	20	15			0000	0000			16	20	SPARE
SPARE	20	17					0000	0000	18	20	SPARE
SPARE	20	19	0000	0000					20	20	SPARE
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SPARE	20	27			0000	0000			28	20	SPARE
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SPARE	20	31	0000	0000					32	20	SPARE
SPARE	20	33			0000	0000			34	20	SPARE
SPARE	20	35					0000	0000	36	20	SPARE
SPARE	20	37	0000	0000					38	20	SPARE
SPARE	20	39			0000	0000			40	20	SPARE
SPARE	20	41					0000	0000	42	20	SPARE
TOTAL PHASE LOAD:			0		0		0		0 / (1.73 X 208V)		
TOTAL PANEL LOAD:			0						PANEL AMPS =		0.00

LIGHTING LEGEND	
SYMBOL	DESCRIPTION
	SQUARE DOWNLIGHT
	SQUARE DOWNLIGHT - EMERGENCY
	ROUND DOWNLIGHT
	ROUND DOWNLIGHT - EMERGENCY
	BUILDING MOUNTED LUMINAIRE
	BUILDING MOUNTED EMERGENCY LUMINAIRE
	WALL SCONCE
	WALL-MOUNT EXIT SIGN - REFER TO PLANS FOR CHEVRONS
	CEILING EXIT SIGN - REFER TO PLANS FOR CHEVRONS AND SINGLE/DOUBLE FACE
	EMERGENCY LIGHTING BATTERY UNIT
	EMERGENCY LIGHTING REMOTE HEADS
\$	LIGHT SWITCH
\$ ^K	KEY-OPERATED LIGHT SWITCH
\$ ³	3-WAY LIGHT SWITCH
	PHOTOCELL

POWER LEGEND	
SYMBOL	DESCRIPTION
	NON-FUSED SAFETY SWITCH
	FUSED SAFETY SWITCH
	CONTACTOR
	RELAY
	HARDWIRED EQUIPMENT CONNECTION
	JUNCTION BOX
	FLOORBOX
	SPECIAL RECEPTACLE
	DUPLEX RECEPTACLE
	SIMPLEX RECEPTACLE
	GROUND FAULT DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE (INSTALLED ABOVE CASEWORK)
	BONDING CONNECTION
	HANDHOLE
	CONDUIT SLEEVE
	MANUAL SWITCH
	PANELBOARD

LINETYPE LEGEND	
_____	EXISTING TO REMAIN
_____	REMOVED EQUIPMENT/ EQUIPMENT TO BE RELOCATED
_____	ITEM TO BE PROVIDED
_____UE_____	UNDERGROUND ELECTRIC
_____UT_____	UNDERGROUND TELCO
_____UL_____	UNDERGROUND LIGHTING
_____OE_____	OVERHEAD ELECTRIC
_____OT_____	OVERHEAD TELCO

WIRE LEGEND	
#X	CONDUIT / HOMERUN TO PANEL #12 AWG UNLESS NOTED OTHERWISE PROVIDE NEUTRAL CONDUCTOR UNLESS NOTED OTHERWISE #X INDICATES WIRE SIZE OTHER THAN #12 AWG

A. GENERAL ELECTRICAL WORK: THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE CONTRACT DOCUMENTS AND PERFORM ALL WORK SHOWN ON THE CONTRACT DOCUMENTS OR MENTIONED IN THESE SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION, NATIONAL ELECTRICAL CODE, NEW YORK STATE BUILDING CODE AND THE LOCAL AUTHORITY HAVING JURISDICTION.

B. CONDUITS: ALL CONDUIT SHALL BE IN ACCORDANCE WITH THE SIZES SPECIFIED AND SHOWN ON CONTRACT DOCUMENTS. CONDUIT SHALL BE SURFACE MOUNTED AS SHOWN IN STRAIGHT LINES, RIGHT ANGLES OR PARALLEL WITH BEAMS. CONDUIT WHICH CAN BE MOVED OR ROTATED BY MANUAL PRESSURE SHALL NOT BE ACCEPTED. RIGID STEEL CONDUIT SHALL BE PROVIDED WHEN EXPOSED TO WEATHER OR FEEDERS TO PANELBOARDS. EMT MAY BE USED IN DRY LOCATIONS FOR ABOVE CONCEALED OR EXPOSED WORK.

C. WIRES AND CABLES: ALL WIRING SHALL BE IN ACCORDANCE WITH SIZES SPECIFIED. ALL CONDUCTORS SHALL BE MADE OF COPPER OF NOT LESS THAN 98% CONDUCTIVITY. WIRING SHALL BE USED IN INDOOR FEEDERS AND BRANCH CIRCUITS, SINGLE CONDUCTOR, STANDED COPPER, 60KV INSULATION, HEAT RESISTANT THERMOPLASTIC APPROVED BY NEC FOR OPERATING TEMPERATURE OF 90 DEGREES CELSIUS AND FOR INSTALLATION IN DRY LOCATIONS. NM (ROMEX) CABLE SHALL BE USED INSIDE APARTMENT UNITS FOR BRANCH CIRCUITY. ALL OTHER SPACES SHALL USE MC FOR BRANCH CIRCUITY. POWER FEEDS TO EQUIPMENT AND UNIT PANELS SHALL BE CONDUIT AND WIRE. TYPE FEEDS TO EQUIPMENT AND UNIT WIRING TO ALL CONVEYORS SHALL BE CONDUIT FOR DRY LOCATIONS AND RIGID STEEL CONDUIT FOR OUTDOOR AND WET LOCATIONS. MOISTURE AND HEAT RESISTANT THERMOPLASTIC APPROVED FOR OPERATING TEMPERATURE OF 75 DEGREES CELSIUS. COLOR CODING SHALL BE AS FOLLOWS: PHASE A - BLACK, PHASE B - RED, PHASE C - BLUE, NEUTRAL - WHITE, GROUND - GREEN OR BARE. FIRE ALARM CABLE SHALL BE PLENUM RATED. ALL COMMUNICATION CABLE SHALL BE CAT-5 AND PLENUM RATED.

D. PULL AND JUNCTION BOXES: JUNCTION AND PULL BOXES SHALL BE PROVIDED WHERE REQUIRED TO FACILITATE PULLING OF WIRES AND CABLES. ALL BOXES FOR CONCEALED WIRING SHALL BE OF CONSTRUCTION TO MEET UL94 CLASS GAUGE SHEET STEEL MINIMUM. ALL BOXES SHALL BE SIZED AND INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND NATIONAL ELECTRICAL SAFETY CODE.

E. WIRING DEVICES: ALL WIRING DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC). WIRING DEVICES SHALL BE DELIVERED TO JOB IN FACTORY PACKAGING WITH MANUFACTURER'S NAME, TYPE AND PART NUMBER. CONVENIENCE OUTLETS SHALL BE SPECIFICATION GRADE, DUPLEX, RATED 20A AT 125 VOLTS, CIRCUT, 3-WIRE, GROUNDING TYPE, SURFACE MOUNTED. LIGHT SWITCHES SHALL BE SPECIFICATION GRADE, TOGGLE TYPE, RATED 20A AT 125 VOLTS AND WORK STATE ENCLOSED. EQUIPMENT GROUND CONDUCTORS SHALL BE CONNECTED TO ALL SWITCHES AND RECEPTABLES. MANUFACTURER SHALL BE HUBBELL, PAS OR LEVITON. DEVICE SHALL BE INSTALLED LEVEL AND PLUMB. SWITCHES SHALL BE INSTALLED WITH OFF POSITION DOWN. RECEPTABLES SHALL BE INSTALLED WITH GROUNDING POLE ON TOP. WALL SWITCHES SHALL BE MOUNTED AT 48" AFF AND RECEPTABLES SHALL BE MOUNTED AT 16" AFF UNLESS NOTED OTHERWISE.

F. GROUNDING: THE ENTIRE ELECTRICAL SYSTEM SHALL BE MAINTAINED AT A REASONABLE GROUND LEVEL TO PROTECT AGAINST A BUILD UP OF STATIC ELECTRICAL CHARGES. ALL ELECTRICAL EQUIPMENT SHALL BE INDIVIDUALLY GROUNDING WITH WIRE OF APPROPRIATE SIZE. EQUIPMENT GROUND CONDUCTORS SHALL BE CONNECTED TO THE GROUND BUS. GROUND WIRES SHALL BE BARE. GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250 OF THE NEC.

G. PANELBOARDS: THE AC POWER PANELBOARD SHALL BE MOUNTED IN AN ENCLOSING CABINET CONSISTING OF A SHEET STEEL BOX WITH TRIM AND DOOR. PANELS SHALL BE CONSTRUCTED IN ACCORDANCE WITH UNDERWRITER'S LABORATORIES, INC. SPECIFICATIONS. PANEL SHALL BE EQUIPPED AS SHOWN ON THE PANEL SCHEDULES AND ONE-LINE RISER DIAGRAM. PANEL SHALL HAVE SHORT CIRCUIT CURRENT RATING AT LEAST 10 KA. PANEL SCHEDULES SHALL BE PROVIDED FOR ALL AUTOMATIC CIRCUITS SHALL BE EQUIPPED WITH MOLDED CASE CIRCUIT BREAKERS, HAVING COMBINATION THERMAL MAGNETIC TRIP ELEMENTS, QUICK-MAKE, QUICK-BREAK TOGGLE MECHANISM AND ARC CHUTES. MANUFACTURER SHALL BE SQUARE D, CLASS 1170, 1640 OR 2110.

H. LIGHTING FIXTURES: ALL LIGHTING FIXTURES SHALL BE PROVIDED AS SHOWN ON LIGHTING FIXTURE SCHEDULE AND SITE PLAN. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL OF THE ENGINEER, MANUFACTURER'S DETAILED CUT SHEETS SHOWING ALL PHOTOMIC DATA. ANY FIXTURE SUBMITTED OTHER THAN THE FIXTURE SPECIFIED SHALL HAVE FULL PHOTOMIC DATA SHOWING CANAL POWER DISTRIBUTION, LIGHTING FIXTURE SCHEDULE, EQUIPMENT GROUNDING AND WIRING. LAMPS SHALL BE SUPPLIED BY GENERAL ELECTRIC OR SYLVANIA, FOUR FOOT FLUORESCENT LAMPS SHALL BE OF THE ENERGY EFFICIENT TYPE AND SHALL COMPLY WITH NEW YORK STATE ENERGY CODE REQUIREMENTS. FIXTURES SHALL BE SUPPLIED WITH LAMPS, BALLASTS AND MOUNTING ACCESSORIES.

I. EXIT LIGHT FIXTURES: ALL EXIT LIGHT FIXTURES SHALL BE PROVIDED AS SHOWN ON PLANS. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO ENGINEER, MANUFACTURER'S DETAILED CUT SHEETS SHOWING WATTAGE, LAMP TYPE, ENCLOSURE MATERIALS, SEALERS COVERED NICKEL, CADMIUM BATTERY AND CHARGING SYSTEM, UL94 CLASS CUL, EXIT LIGHT TO BE UNIVERSAL MOUNT TYPE - INFINITY MODEL, EXIT R-EM-WHT OR EQUAL.

J. HANDHOLES: HANDHOLES FOR EXTERIOR UNDERGROUND WIRING SHALL BE PROVIDED AS SHOWN. CONTRACTOR SHALL SUBMIT FOR APPROVAL OF THE ENGINEER, MANUFACTURER'S DETAILED CUT SHEETS SHOWING COMPLIANCE WITH SICE 77. HANDHOLES SHALL BE MOLDED WITH REINFORCED POLYMER RESIN, LAMPS SHALL BE CONSTRUCTED OF SAND AND AGGREGATE MOLDED AND BOUND TOGETHER WITH POLYMER RESIN, AND REINFORCED WITH STEEL, FIBERGLASS, OR A COMBINATION OF THE TWO. DESIGNED FOR FLUSH BURIAL WITH INTEGRAL CLOSED BOTTOM. COVER SHALL BE WATERPROOF, SECURED BY TAMPER-RESISTANT LOCKING DEVICES AND HAVING STRUCTURAL LOAD RATING CONSISTENT WITH HANDHOLE LOCATION. COVER FINISH SHALL BE NON-SKID WITH A MINIMUM COEFFICIENT OF FRICTION OF 0.50. COVER SHALL BE MOLDED WITH REINFORCED POLYMER RESIN, LAMPS SHALL BE CONSTRUCTED OF SAND AND AGGREGATE MOLDED AND BOUND TOGETHER WITH POLYMER RESIN, AND REINFORCED WITH STEEL, FIBERGLASS, OR A COMBINATION OF THE TWO. DESIGNED FOR FLUSH BURIAL WITH INTEGRAL CLOSED BOTTOM. 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A.	ELECTRICAL PLANS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO DEPICT ALL OF THE ARCHITECTURAL DETAIL OR SPECIFIC ROUTING OF CONDUITS, WIRING, ETC. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ROUTING ONSITE WITH ACTUAL CONDITIONS.
B.	ALL EQUIPMENT AND MATERIALS SHALL SHOW EVIDENCE OF LISTING OR LABELLING BY AN AGENCY ACCEPTABLE TO THE BUILDING CODE OF NEW YORK STATE.
C.	PROVIDE ALL NECESSARY ANCHORS, SUPPORTS, STRAPS, BOXES, FITTINGS AND OTHER APPEARANCES NOT INDICATED ON THE DRAWINGS BUT REQUIRED FOR A COMPLETE SYSTEM.
D.	INSTALL ALL BRANCH CIRCUITRY WITHIN RACEWAY UNLESS NOTED OTHERWISE. MINIMUM DIAMETER OF RACEWAY IS: 3/4 IN.
E.	ALL CONDUIT SHALL BE SUPPORTED BY PIPE STRAPS, SUITABLE CLAMPS OR HANGERS ATTACHED TO THE BUILDING STRUCTURE. CONDUIT SHALL NOT BE SUPPORTED FROM ADJOINING PIPE OR INSTALLED IN SUCH A MANNER AS TO PREVENT THE READY REMOVAL OF OTHER EQUIPMENT FOR REPAIRS.
F.	CONDUCTORS #12 AND SMALLER SHALL BE SOLID COPPER TYPE XHHW, THHN OR THWN. CONDUCTORS #8 AND LARGER SHALL BE STRANDED COPPER TYPE XHHW, THHN OR THWN. CONDUCTORS INSTALLED IN DAMP OR WET LOCATIONS SHALL BE TYPE XHHW.
G.	IDENTIFY ALL CONDUCTORS AT BOTH ENDS AND WITHIN CABINETS AND JUNCTION BOXES WITH PREMAKED, SELF-ADHESIVE, WRAP AROUND TYPE LABELS.
H.	PROVIDE A SEPARATE NEUTRAL CONDUCTOR WITH EACH BRANCH CIRCUIT. SHARED NEUTRAL CONDUCTORS ARE NOT PERMITTED.
I.	GROUNDING CONDUCTORS ARE GENERALLY NOT SHOWN. GROUND AND BOND ALL EQUIPMENT, RACEWAYS, MOTORS, PANELEBOARDS, SWITCHBOARDS, ETC. IN ACCORDANCE WITH NEC ARTICLE 250.
J.	CONDUIT SYSTEMS SHALL BE ELECTRICALLY CONTINUOUS. ALL LOCK NUTS SHALL CUT THROUGH ENAMELED OR PAINTED SURFACES OR ENCLOSURES. WHERE ENCLOSURES AND NON-CURRENT CARRYING METALS ARE ISOLATED FROM THE CONDUIT SYSTEM, USE BONDING JUMPERS WITH APPROVED CLAMPS. WHERE REDUCING WASHERS ARE USED AND WHERE CONCENTRIC OR ECCENTRIC KNOCKOUTS ARE NOT COMPLETELY REMOVED BONDING BUSHINGS ARE REQUIRED.
K.	SIZE ALL MOTOR OVERLOADS OR FUSES WITH THE ACTUAL EQUIPMENT NAMEPLATE. FUSES FOR MOTOR AND TRANSFORMER CIRCUITS SHALL BE DUAL ELEMENT. FUSES FOR "NON-BURST" EQUIPMENT SHALL BE FAST ACTING. ALL FUSES SHALL BE CURRENT LIMITING CLASS RK1 OR CLASS L UNLESS OTHERWISE NOTED.
L.	CONNECTIONS TO MECHANICAL EQUIPMENT SHALL BE MADE WITH A MINIMUM OF 24-IN. FLEXIBLE CONDUIT TO PREVENT SOUND AND VIBRATION TRANSMISSION.
M.	CORE DRILL OPENINGS IN FLOOR SLABS/WALLS/FOUNDATIONS AS REQUIRED TO INSTALL CONDUITS.
N.	SEAL ALL PENETRATIONS THROUGH NON-FIRE RATED CONSTRUCTION WITH MORTAR.
O.	MAINTAIN NEC MANDATED MINIMUM WIRING AND DEDICATED EQUIPMENT SPACE AT ALL PANELEBOARDS, SWITCHBOARDS AND MOTOR CONTROL CENTERS.
P.	PROVIDE ADEQUATE SPACE AROUND EQUIPMENT THAT REQUIRES MAINTENANCE OR ADJUSTMENT.
R.	PROVIDE ALL RACEWAYS IN ALL RACEWAYS.
S.	LABEL ALL JUNCTION BOX COVERS INDICATING THE PANEL NAME AND CIRCUIT NUMBER CONTAINED WITHIN.
T.	PROVIDE CLEAR LABELS ON ALL RECEPTACLE AND LIGHT SWITCH COVERPLATES INDICATING THE PANEL NAME AND CIRCUIT NUMBER.

##AF	ARC FAULT CIRCUIT BREAKER. ## INDICATES BREAKER SIZE
'A' SERIES	ARCHITECTURAL DRAWINGS
'C' SERIES	CIVIL DRAWINGS
'E' SERIES	ELECTRICAL DRAWINGS
'H' SERIES	HVAC DRAWINGS
'S' SERIES	STRUCTURAL DRAWINGS
AF	ABOVE FINISHED FLOOR
AMP	AMPERAGE
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
CB	CIRCUIT BREAKER
CKT	CIRCUIT
DIA	DIAMETER
DISC	DISCONNECT
DM	DIMMER
EMT	ELECTRICAL METALLIC TUBING
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GRC	GALVANIZED RIGID CONDUIT
J-BOX	JUNCTION BOX
MCB	MAIN CIRCUIT BREAKER
MFR	MANUFACTURER
MLO	MAIN LUG ONLY
NIC	NOT IN CONTRACT
RECPTS	RECEPTACLES
SPEC	SPECIFICATION
SR	SURFACE RACEWAY
SW	SWITCH
TELCO	TELECOMMUNICATIONS
TSP	TWISTED, SHIELDED PAIR
TYP	TYPICAL
UE	UNDERGROUND ELECTRIC
UNO	UNLESS NOTED OTHERWISE
WP	WEATHERPROOF
Ø	ELECTRICAL PHASE

PRELIMINARY
NOT FOR CONSTRUCTION

No.	Revision	Date
Project Name		

VILLAGE OF NICHOLS NEW YORK



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Seal	Scale
	AS SHOWN
	Project No.
	2018.057.001
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	Date
	7/19/2018

Drawing Title

UTILITY PLAN 2

Drawing No.

E002



PRELIMINARY
NOT FOR CONSTRUCTION



No.	Revision	Date
Project Name		

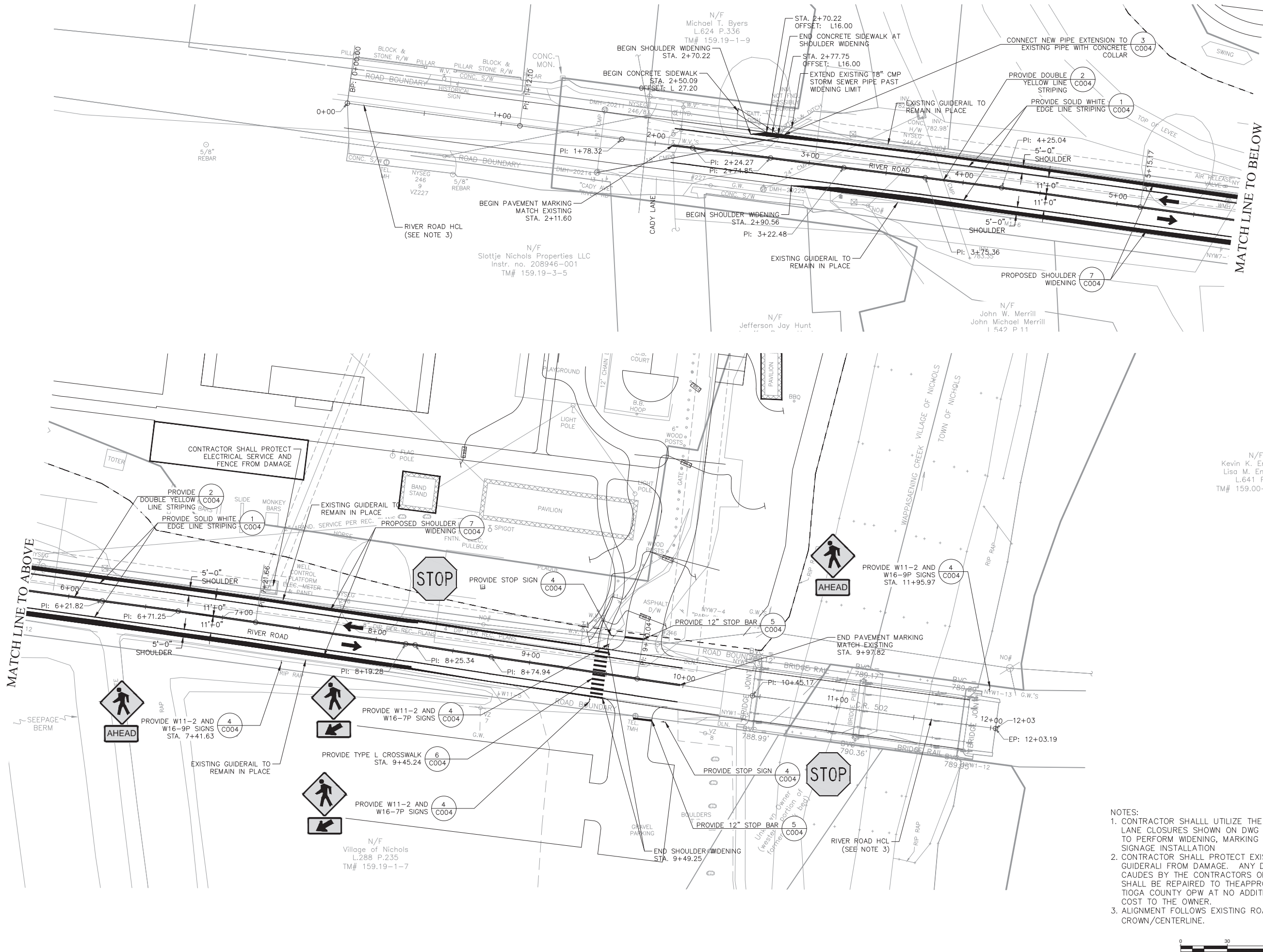
KIRBY PARK
IMPROVEMENTS
VILLAGE OF NICHOLS NEW YORK



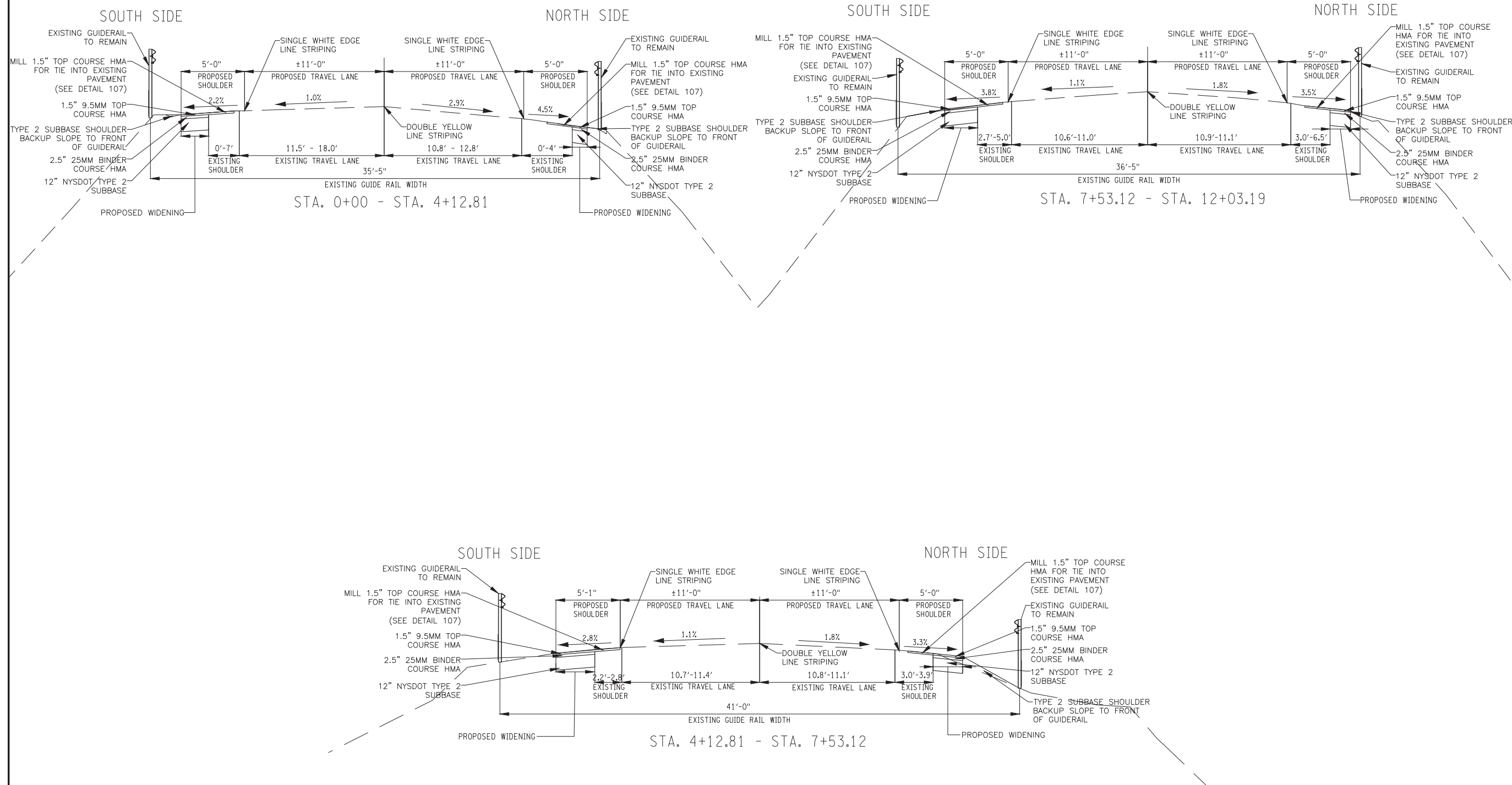
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	Project No. 2018.057.001
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	Date 7/19/2018

Drawing Title
EAST RIVER ROAD
IMPROVEMENTS

Drawing No.
C001



- NOTES:
1. CONTRACTOR SHALL UTILIZE THE DAILY LANE CLOSURES SHOWN ON DWG NO.C003 TO PERFORM WIDENING, MARKING AND SIGNAGE INSTALLATION.
 2. CONTRACTOR SHALL PROTECT EXISTING GUIDERAIL FROM DAMAGE. ANY DAMAGE CAUSES BY THE CONTRACTORS OPERATIONS SHALL BE REPAIRED TO THEAPPROVED TIOGA COUNTY OPW AT NO ADDITIONAL COST TO THE OWNER.
 3. ALIGNMENT FOLLOWS EXISTING ROADWAY CROWN/CENTERLINE.



PRELIMINARY
NOT FOR CONSTRUCTION



No.	Revision	Date
Project Name		

KIRBY PARK
IMPROVEMENTS

VILLAGE OF NICHOLS NEW YORK



Seal	Scale
	AS SHOWN
	Project No. 2018.057.001
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Date 7/19/2018	

Drawing Title
TYPICAL SECTIONS

Drawing No.
C002

PRELIMINARY
NOT FOR CONSTRUCTION



No.	Revision	Date

Project Name

KIRBY PARK IMPROVEMENTS

VILLAGE OF NICHOLS NEW YORK



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Seal	Scale
	AS SHOWN
	Project No. 2018.057.001
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	Date 7/19/2018

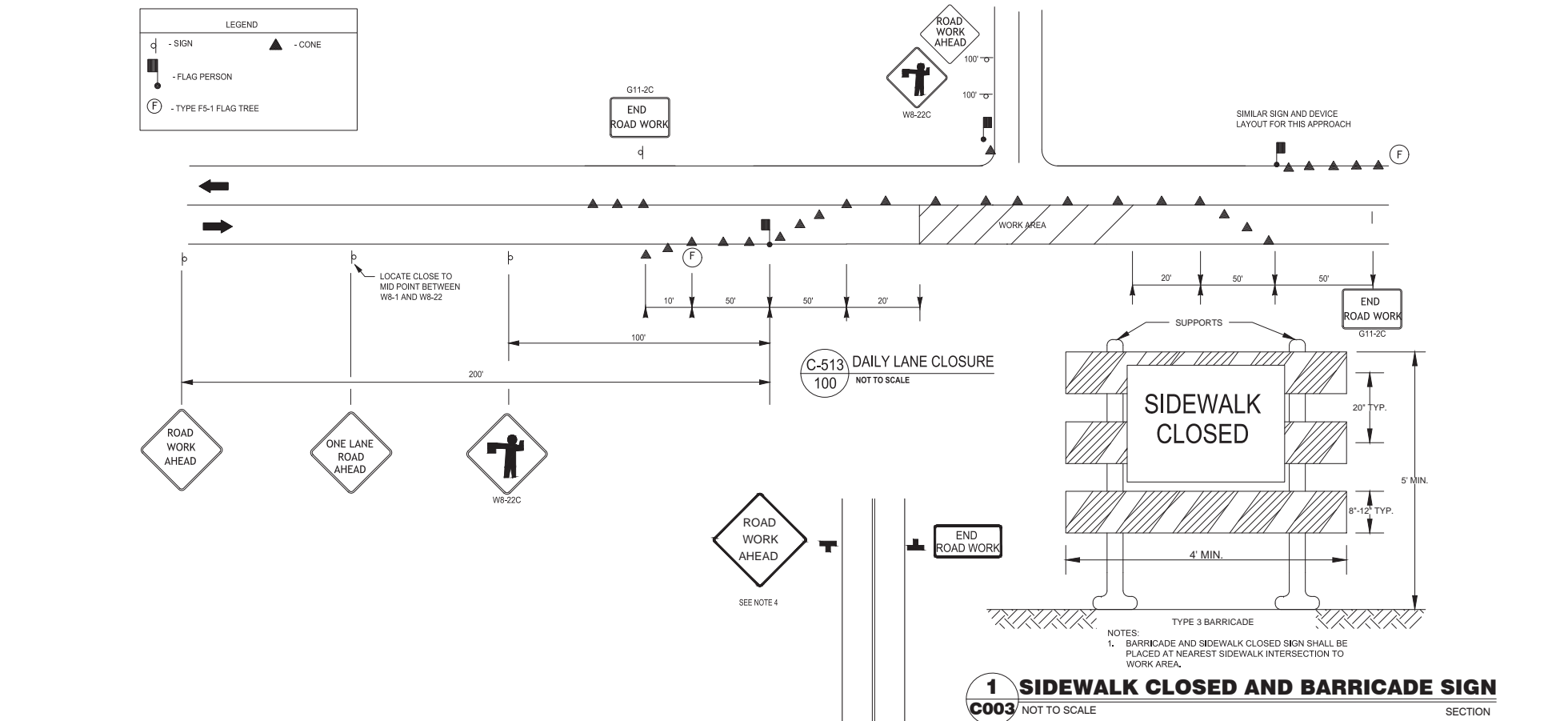
Drawing Title
WORK ZONE TRAFFIC CONTROL

Drawing No.

C003

NOTES:

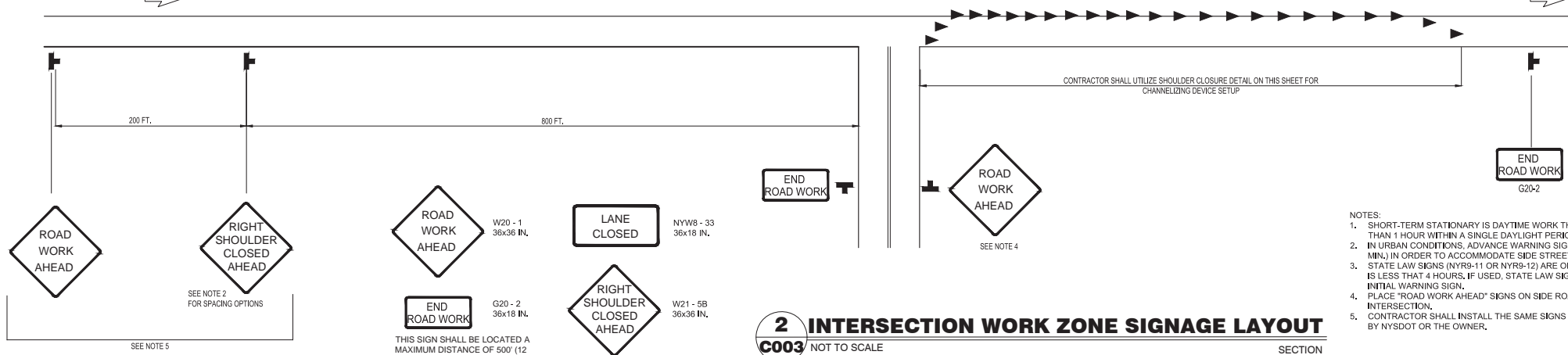
- IN ORDER TO MAINTAIN EFFECTIVE TRAFFIC CONTROL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF VEHICULAR AND PEDESTRIAN TRAFFIC. HE SHALL MAKE SURE ALL SIGNS, CONES, BARRICADES, ETC. ARE IN PLACE AND IN GOOD CONDITION. CONTRACTOR SHALL COMPLY FULLY WITH THE SPECIFICATIONS. IF THE OWNER NOTIFIES THE CONTRACTOR OF ANY HAZARDOUS TRAFFIC CONTROL PRACTICES, ALL OPERATIONS IN THAT AREA SHALL BE DISCONTINUED AND IMMEDIATE REMEDIAL ACTION SHALL BE TAKEN TO CORRECT THE SITUATION TO THE SATISFACTION OF THE OWNER BEFORE WORK IS RESUMED.
- VEHICLES AND/OR EQUIPMENT BELONGING TO THE CONTRACTOR OR HIS WORKERS SHALL NOT BE PARKED ON THE PAVEMENT, SHOULDERS OR SIDEWALKS ALONG A ROADWAY BEING USED BY THE GENERAL PUBLIC WITHIN THE PROJECT LIMITS. ALSO THE CONTRACTOR SHALL NOT PARK EQUIPMENT NOR STORE MATERIAL OVERNIGHT WHERE IT IS DEEMED A SAFETY HAZARD TO TRAFFIC BY THE OWNER.
- THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO AVOID DAMAGING EXISTING PAVEMENT, CURBS, AND SIDEWALKS WHEN IT IS NECESSARY FOR THE CONTRACTOR TO MOVE EQUIPMENT THROUGH THE STREETS. THE CONTRACTOR SHALL OBSERVE ALL OF THE RULES AND REGULATIONS AND DIRECTIONS OF THE LOCAL MUNICIPALITIES (INCLUDING THE OWNER) RELATIVE TO SUCH OWNER, LOCAL MUNICIPALITY OR HANDLING OF EQUIPMENT AND TAKE SUCH PROTECTIVE MEASURES AS MAY BE ORDERED BY THE OWNER. STREET PAVEMENTS, CURBS, SIDEWALKS, ETC. LOCATED WITHIN THE CONTRACT LIMITS THAT ARE NOT SCHEDULED TO BE REPLACED AND ARE DAMAGED BY THE CONTRACTOR THROUGH DISREGARD OF THESE PROVISIONS SHALL BE RESTORED AT HIS/HER SOLE COST AND EXPENSE.
- THE OWNER AND TIOGA COUNTY DPW SHALL BE NOTIFIED BY THE CONTRACTOR OF CHANGES TO THE TRAFFIC PATTERNS AND OF ANY OTHER INFORMATION FOR COORDINATION THEY MAY REQUIRE.
- PEDESTRIAN TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.
- WORK ZONES SHOULD BE LIMITED TO ONE SIDE OF THE TRAVELED WAY AT A TIME. WORK ZONES ON OPPOSITE SIDES OF THE ROAD SHALL NOT OVERLAP. WORK ZONE IS DEFINED AS THAT AREA IN WHICH TRAFFIC IS RESTRICTED BECAUSE OF CONSTRUCTION ACTIVITIES OR THAT AREA WHICH INVOLVES A DROP-OFF NEXT TO THE PAVEMENT.
- THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN NEW PAVEMENT, TEMPORARY CONNECTIONS, ETC., AND ADJACENT EXISTING PAVEMENT. NO DROP OFF GREATER THAN TWO (2) INCHES SHALL BE ALLOWED. A DROP OFF IS CONSIDERED ELIMINATED IF TAPERED AWAY BY A ONE ON FOUR SLOPE OR FLATTER.
- ADVANCE WARNING - WHEN ANY POTENTIAL HAZARD TO TRAFFIC EXISTS, A "ROAD CONSTRUCTION AHEAD" SIGN SHALL BE PLACED 200' (MIN.) AHEAD OF THE WORK ZONE AS AN ADVANCED WARNING. FOR APPROPRIATE DISTANCES FOR SPECIFIC WORK TYPES, CONSULT M.U.T.C.D. WHEN A "ROAD CONSTRUCTION AHEAD" SIGN IS USED, AN "END CONSTRUCTION" SIGN SHALL BE PLACED AT THE ENDS OF THE CONSTRUCTION AREA.
- LANE SHIFTS & OBSTRUCTIONS - TRAFFIC CONES SHALL BE PLACED IN THE OBSTRUCTED LANE AT 20 FOOT INTERVALS (MAX.) FROM THE ADVANCED WARNING TO THE WORK AREA TO GUIDE THE FLOW OF VEHICULAR TRAFFIC AROUND THE WORK AREA. THE CONTRACTOR SHALL MAINTAIN ROADWAYS, SIDEWALKS, & CROSSWALKS TO SUCH AN EXTENT AS WILL GIVE SAFE, UNIMPEDED, PRACTICAL USE. THE WORK SHALL BE CONDUCTED AS TO CAUSE A MINIMUM OF INCONVENIENCE TO PUBLIC TRAVEL AND TO PERMIT SAFE AND CONVENIENT TRAVEL AROUND THE LINE OF WORK.
- ROAD CLOSURES SHALL BE COORDINATED WITH THE OWNER AND TIOGA COUNTY DPW AT THE START OF CONTRACTOR'S SCOPE FOR BEST SCHEDULE. WHENEVER IT BECOMES NECESSARY TO CLOSE A STREET COMPLETELY TO VEHICULAR TRAFFIC, THE FOLLOWING CONDITIONS SHALL BE MET:
A) THE CONTRACTOR SHALL SUBMIT A FORMAL WRITTEN REQUEST TO THE OWNER SPECIFYING REASON FOR THE CLOSING, THE PERIOD OF TIME FOR WHICH THE CLOSING SHALL BE NECESSARY, AND THE PROPOSED DETOUR TO BE USED.
B) AN AFFIRMATIVE WRITTEN REPLY FROM THE OWNER MUST BE OBTAINED PRIOR TO THE CLOSING OF THE STREET. IN THE EVENT THAT TRAFFIC IS NOT MAINTAINED ADEQUATELY AND/OR SAFELY ON ANY PART OF THE CONTRACT THE OWNER SHALL DIRECT THE CONTRACTOR TO TAKE THE NECESSARY CORRECTIONS AT NO COST TO THE OWNER.
- WHEN THE VISIBILITY OF THE TRAVELING PUBLIC IS RESTRICTED DUE TO WEATHER CONDITIONS AND/OR THE WORK OPERATIONS COMMENCE PRIOR TO DAWN OR CONTINUE BEYOND DUSK, AND WHEN ANY HAZARDS OR OBSTRUCTIONS EXIST AT NIGHT, FLASHING BEACONS AND STEADY BURNING LIGHTS ON SUPPORTS OR BARRICADES ALONG WITH APPROPRIATE SIGNAGE SHALL BE PROVIDED BY THE CONTRACTOR AND PLACED AT ALL OBSTRUCTIONS AND HAZARDS.
- THE CONTRACTOR SHALL NOT LEAVE ANY OPEN TRENCHES DURING NON WORKING HOURS. TRENCHES SHALL BE EITHER BACKFILLED OR ADEQUATELY PROTECTED WITH STEEL ROAD PLATES DURING WORKING HOURS.
- THE CONTRACTOR SHALL SCHEDULE OPERATIONS SO THAT TRAFFIC WILL BE MAINTAINED ON A PAVED SURFACE DURING ANY TIME THE CONTRACT IS SUSPENDED IN EXCESS OF TWO WEEKS. HARD SURFACED PAVEMENT SHALL BE CONSIDERED THE EXISTING PAVEMENT OR THE NEW PAVEMENT COMPLETED TO AT LEAST THE BINDER COURSE.
- WHENEVER TRAFFIC IS LIMITED TO ANY ONE-WAY OPERATION, FLAGGERS SHALL BE UTILIZED. THE FLAGGERS WILL BE REQUIRED TO USE RADIO OR FIELD TELEPHONE CONTACT WHEN THEY ARE MAINTAINING ONE-WAY TRAFFIC AND ONE FLAGGER IS NOT VISIBLE TO THE OTHER OR IF, IN THE OPINION OF THE OWNER, THIS COMMUNICATION IS NECESSARY. THE CONTRACTOR SHALL SUPPLY THIS EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER.
- ALL ROADWAY AREAS TEMPORARILY CLOSED FOR EXCAVATION SHALL BE REOPENED AT THE END OF THE WORK DAY. AT ALL TIMES WHEN WORK IS NOT IN PROGRESS, ALL OPENINGS SHALL BE COVERED WITH STEEL PLATES OR SHALL BE BACKFILLED IN ACCORDANCE WITH THE PAVEMENT RESTORATION, EXCAVATION AND BACKFILL DETAILS TO A DEPTH AS ORDERED BY THE OWNER. IF ANCHORED STEEL PLATES ARE THE CHOSEN OPTION, THE CONTRACTOR SHALL SUBMIT THE PROPOSED METHOD OF ANCHORING THE STEEL PLATES TO THE OWNER FOR APPROVAL PRIOR TO STARTING ANY ROADWAY EXCAVATION. THE STEEL PLATES SHALL BE RAMPED WITH ABUTMINOUS MATERIAL PRIOR TO OPENING THE LANE. THE COST OF THIS WORK, INCLUDING ALL LABOR, MATERIALS, EQUIPMENT AND ANY RE-EXCAVATION OF TEMPORARY RESTORED AREAS SHALL BE INCLUDED IN THE BID PRICE FOR THE WORK ONE TRAFFIC CONTROL.
- THE CONTRACTOR SHALL PROVIDE AN ADEQUATE NUMBER OF SURPLUS CONES (20 MIN.), BARRICADES (5 MIN.), DRUMS (10 MIN.), LIGHTS (5 MIN.), AND SIGNAGE, ETC. LOCATED CENTRALLY ON THE JOB SITE FOR USE IN EMERGENCY SITUATIONS.
- CONSTRUCTION DRUMS MUST BE PLASTIC AND OF AN APPROVED DESIGN ACCORDANCE WITH THE NATIONAL MUTCD. THE DRUMS AND VERTICAL PANELS SHALL BE PLACED ACCORDING TO THE NATIONAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND NYSDOT SPECIFICATION SECTION 619.
- SIGNS INTENDED FOR USE AT NIGHT SHALL BE REFLECTORIZED OR ILLUMINATED.
- ALL SIGNS SHALL CONFORM TO, AND SHALL BE ERECTED IN ACCORDANCE WITH THE NATIONAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND NYSDOT SPECIFICATION SECTION 619.
- CONTRACTOR SHALL SUPPLY FLAGGERS AS NEEDED TO ASSIST WITH VEHICULAR AND PEDESTRIAN TRAFFIC AROUND WORK AREAS.



1 SIDEWALK CLOSED AND BARRICADE SIGN

C003 NOT TO SCALE

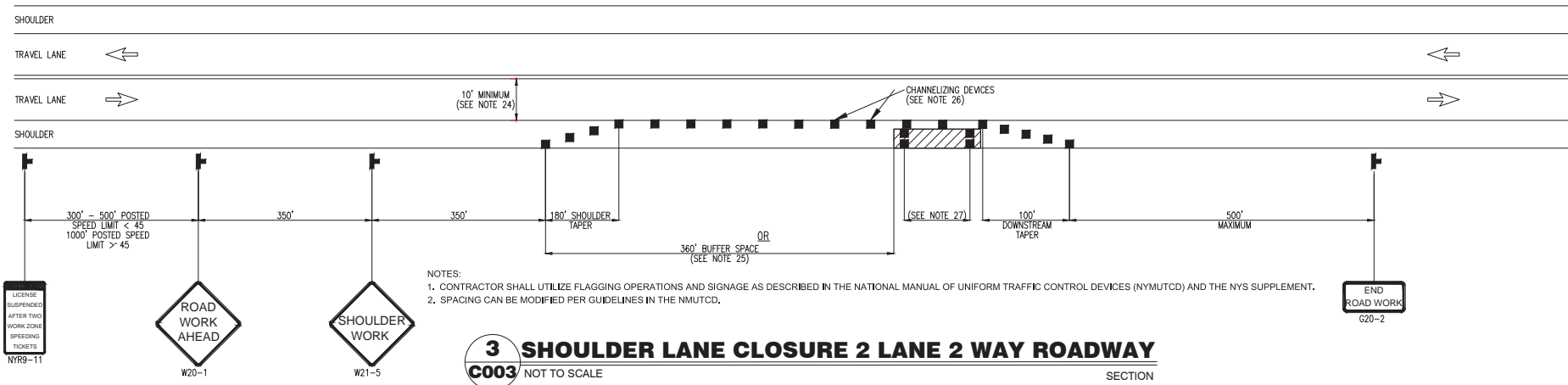
SECTION



2 INTERSECTION WORK ZONE SIGNAGE LAYOUT

C003 NOT TO SCALE

SECTION



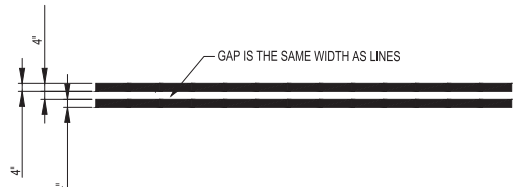
3 SHOULDER LANE CLOSURE 2 LANE 2 WAY ROADWAY

C003 NOT TO SCALE

SECTION



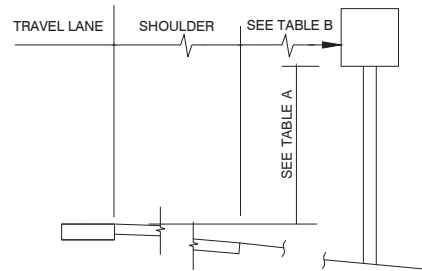
1 SINGLE WHITE EDGE LINE
C004 NOT TO SCALE SECTION



2 DOUBLE YELLOW LINE STRIPING
C004 NOT TO SCALE SECTION

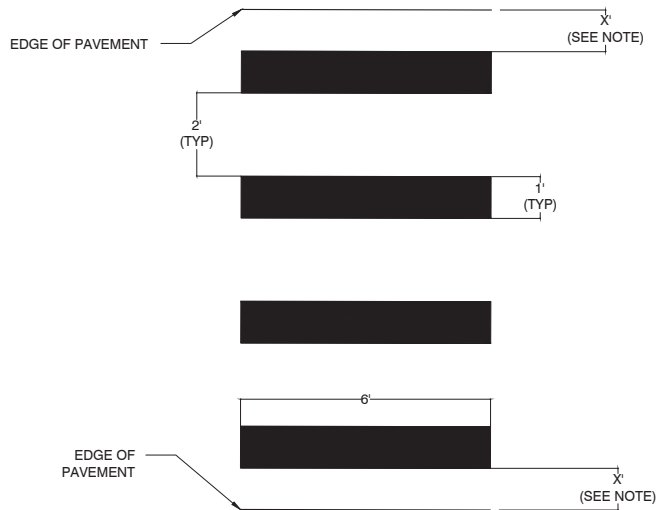
VERTICAL DISTANCE TO THE BOTTOM OF THE SIGN		
TABLE A	LOCAL ROADS AND CONNECTORS	
	NO PARKED VEHICLES OR PEDESTRIANS	PARKED VEHICLES OR PEDESTRIANS
M.U.T.C.D. CODE R,P,W,M	5'-0"	7'-0"

LATERAL CLEARANCE TO THE EDGE OF THE SIGN			
TABLE B	LOCAL ROADS AND CONNECTORS		
	SHOULDER WIDTH OF LESS THAN 6'-0"	SHOULDER WIDTH OF 6'-0" OR GREATER	CURBED SECTIONS
M.U.T.C.D. CODE R,P,W, M,G, & I	12'-0" FROM THE EDGE OF TRAVEL LANE WHERE FEASIBLE OR 2'-0" MIN.	6'-0" MIN. FROM THE SHOULDER EDGE WHERE FEASIBLE OR 2'-0" MIN.	2'-0" MIN. FROM THE CURB FACE



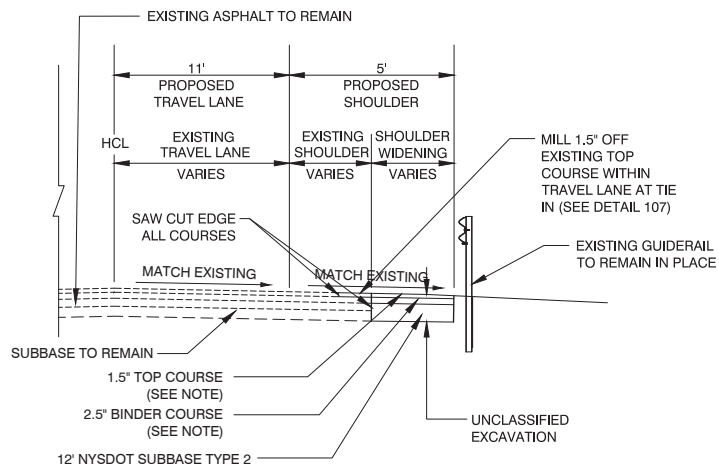
SHOULDER SECTION

4 TYPICAL SIGNAGE INSTALLATION DETAIL
C004 NOT TO SCALE SECTION



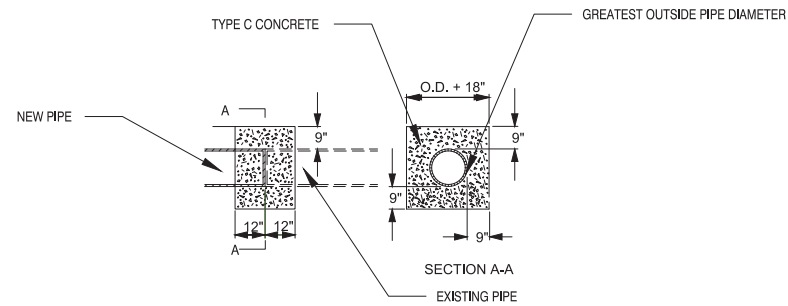
6 TYPICAL LADDER BAR CROSSWALK
C004 NOT TO SCALE SECTION

NOTE:
END BARS OF THE CROSSWALK
ARE TO BE EQUAL DISTANCE FROM
EDGES OF PAVEMENT TO CENTER
THE CROSSWALK.

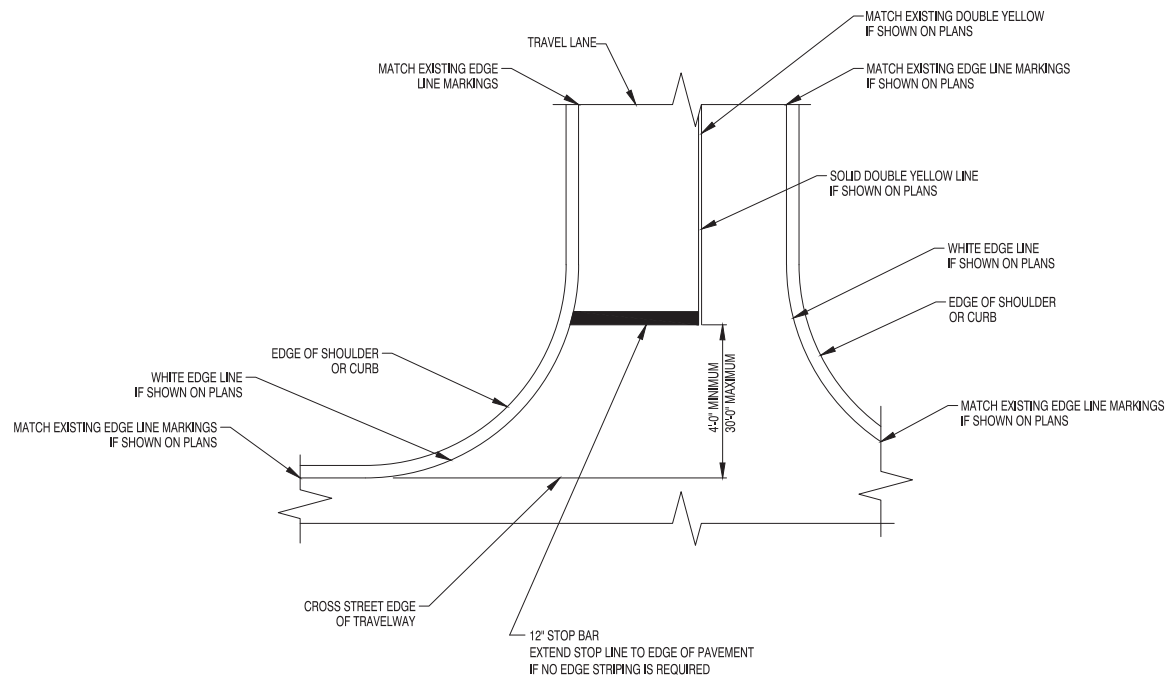


7 TYPICAL WIDENING DETAIL
C004 NOT TO SCALE SECTION

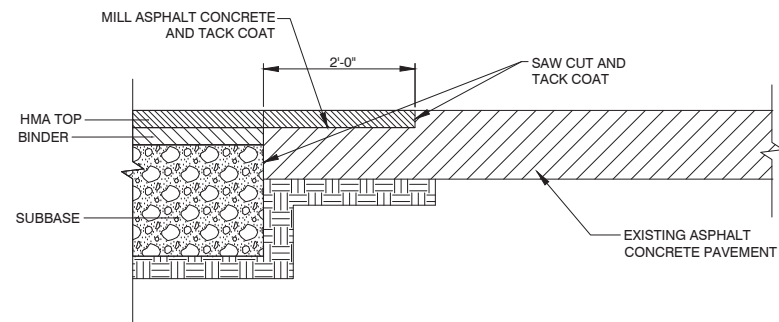
NOTE:
TACK COAT SHALL BE APPLIED
BETWEEN ALL ASPHALT LAYERS



3 CONCRETE COLLAR
C004 NOT TO SCALE SECTION



5 INTERSECTION LAYOUT
C004 NOT TO SCALE SECTION



8 MATCH EXISTING ASPHALT PAVEMENT DETAIL
C004 NOT TO SCALE SECTION

PRELIMINARY
NOT FOR CONSTRUCTION



No. Revision Date
Project Name

KIRBY PARK
IMPROVEMENTS

VILLAGE OF NICHOLS NEW YORK



860 Hooper Road
Endwell, New York 13760
Tel: 607.231.6600
Fax: 607.231.6650
Email: mail@delta-eas.com
www.delta-eas.com

Seal Scale
AS SHOWN
Project No.
2018.057.001
UNAUTHORIZED ALTERATION OF
THIS DRAWING IS A VIOLATION OF
THE NEW YORK STATE EDUCATION
LAW, SECTION 7209, SUBDIVISION 2.
Date
7/19/2018

Drawing Title

TRAFFIC DETAILS

Drawing No.

C004



May 7th, 2018

Mr. Michael Haas, RLA
Delta Engineers, Architects, and Land Surveyors, DPC
860 Hooper Road
Endwell, NY 13760

Re: Kirby Park Recreational Improvements – Hydraulic Recommendations

Mr. Haas,

As discussed during our call on May 4, 2018, Woidt Engineering and Consulting (WEC) has completed preliminary hydraulic modeling of Wappasening Creek and the Susquehanna River to support Delta Engineers, Architects, and Land Surveyors (Delta) with the design of Kirby Park Recreational Improvements Project (Project). Based on these preliminary results, WEC has developed several recommendations to decrease the frequency of inundation and improve the flood resiliency of Kirby Park. This letter provides interim documentation of WEC's recommendations; its contents will be consolidated into the hydrologic and hydraulic modeling report (H&H Report) that WEC will prepare at a future phase of design.

Conceptual Recommendations

The following recommendations are conceptual in nature and as such, may require changes to the Schematic Plans prepared by Delta on April 4, 2018:

1. WEC recommends conceptualizing Kirby Park as a "floodable park" as backwater resulting from high water on the Susquehanna River is anticipated to inundate varying portions of the park on a near-annual basis. Otsiningo Park in Binghamton, NY can serve a useful, local example of such a park.
2. Consider re-locating park facilities (pavilion, playground equipment, parking lot, etc.) to the west of the United Water enclosure. This recommendation is predicated on the observation that overtopping of the low point of River Road near the entrance to Kirby Park and rapid expansion of flow out of Wappasening Creek downstream of the park entrance are the primary factors contributing to potentially-erosive velocities within Kirby Park. Re-locating park facilities which are anticipated to be costlier to maintain, repair, or replace outside of this area will reduce the likelihood of future damage.
3. Consider elevating park facilities sensitive to flooding to reduce their frequency of inundation. Any fill to elevate sensitive facilities should be limited to the western side of Kirby Park as fill along the eastern portion is less likely to receive Article 16 approval from the New York State Department of Environmental Protection's Flood Protection Group and Section 408 approval from the US Army Corps of Engineers.

4. Consider planting a double-row of trees along the streambanks of Wappasening Creek to "strain" larger floating debris conveyed during floods by Wappasening Creek. The roots of the trees will also reduce streambank erodibility. To reduce impacts of the trees during flooding, the trees should be maintained so no obstructing branches are within approximately 6 feet of existing ground.
5. Per USACE regulations, no woody vegetation should be planted within 15 feet of the toe of the existing levee.

Design Recommendations:

The following recommendations are anticipated to not require changes to the Schematic Plans prepared by Delta on April 4, 2018 and instead will be addressed as part of the detailed design of the project:

1. Proposed structures and utilities should be designed in anticipation of flood and debris loads. Federal and state guidelines on dry- and wet-floodproofing may be used to support the design of such structures. Where structures or utilities can tolerate temporary flooding, wet-floodproofing is recommended as dry-floodproofing generally requires a more robust, and costlier, structural design.
2. Select plant species that are tolerant of relatively infrequent flooding during the growing season. More flood-tolerant species may be necessary in lower-lying areas of the park, such as the northeast corner.
3. Consider the re-grading of the park or installation of underdrains to promote the drainage of low-lying areas in the park, particularly the soccer fields which appear to not have positive drainage to Wappasening Creek.
4. Consider the use of concrete in lieu of asphalt for the parking lot and sidewalks. In general, concrete is less susceptible to "peeling" or failure during a flood.
5. Integrate deeper foundations, cutoff walls, and/or other protection to prevent the scour or undermining of proposed structures, particularly at transitions between material types. For example, concrete or Belgian block curbing may be used to prevent floodwater from scouring beneath and causing the failure of proposed pavement.
6. Consider the use of high-strength turf reinforcement mat to protect areas most prone to erosive velocities, such as the downstream face of River Road. High-strength TRM will be required if mowers will be used.
7. Consider the use of drop fencing that is hinged at the ground and can be automatically- or manually- lowered to ground level to reduce the impedance of flow and collection of debris.

Contingent Recommendations

The following recommendations are contingent on the selection of a preferred alternative, work by others, and/or may not be compatible with the scope and budget for the Project:

1. Pending the finalization of the conceptual layout of the proposed park amenities, consider a guide bank downstream of the River Road bridge that can re-direct flow towards less flood-sensitive portions of Kirby Park. Additional modeling of this

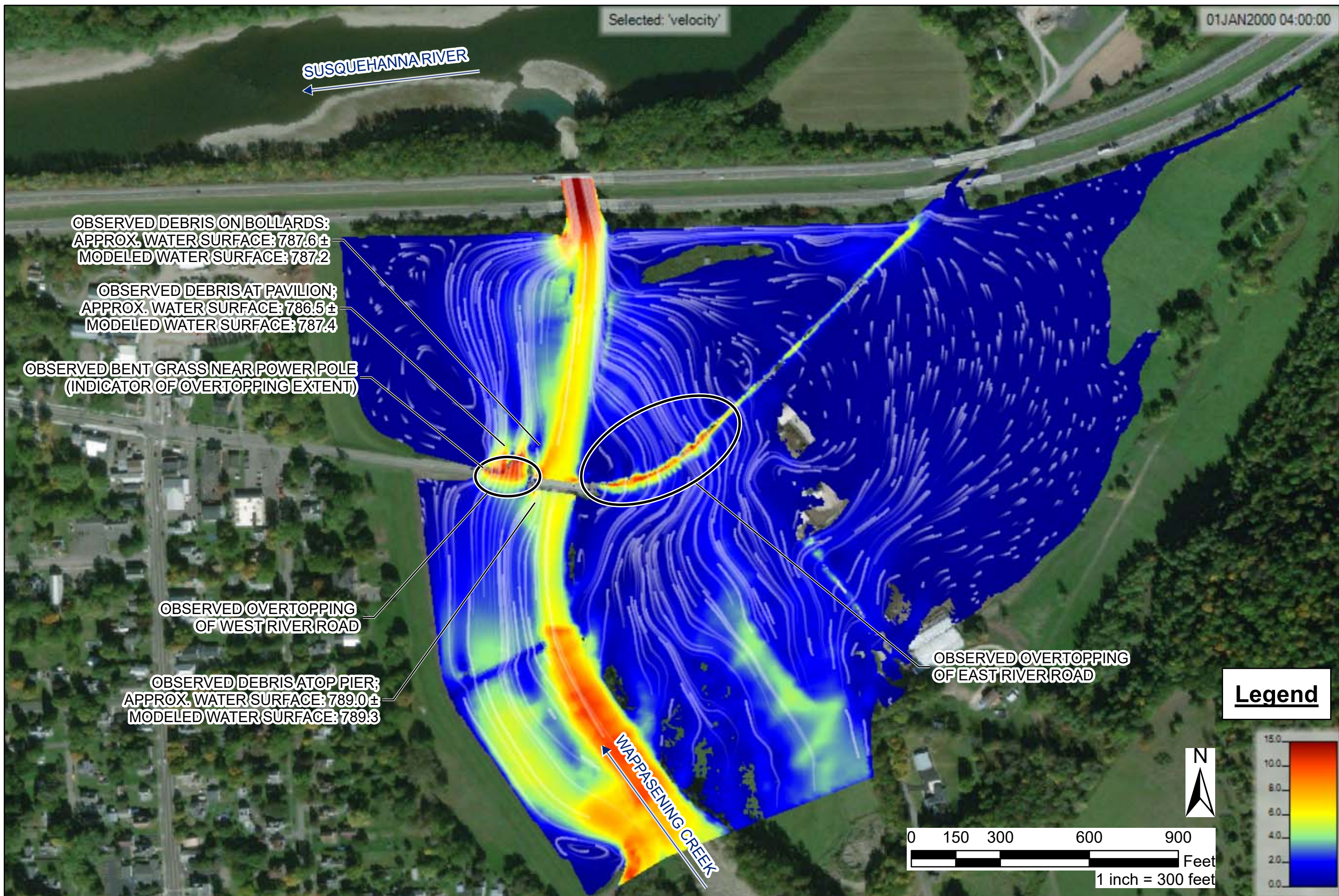
- alternative will be necessary to assess whether such a guide bank will adversely impact adjacent properties or the conveyance capacity of Wappasening Creek.
2. Pending NYSDOT and USACE improvements, provide additional erosion protection along Wappasening Creek to reduce streambank erosion which contributes to deposition and debris generation.
 3. Investigate the feasibility of elevating the profile of River Road west of the bridge. Increasing the profile may reduce the frequency of erosive velocities within Kirby Park, but additional modeling will be necessary to assess whether adverse impacts to the River Road bridge and/or adjacent properties would be anticipated.
 4. Investigate the feasibility of lowering the profile of River Road west of the bridge or integrating floodplain relief culverts beneath the road. Either option may reduce the water surface differential across River Road and decrease the erosive velocities on the backslope of River Road during overtopping conditions. However, additional coordination with the Village and Town of Nichols will be necessary to assess whether River Road is used for emergency services during flood events.

As additional modeling and discussion yields revised or new recommendations, WEC will communicate these recommendations to Delta and integrate these into the anticipated H&H report. We look forward to continuing to support Delta with this exciting project and please feel free to contact me directly should you have any questions on this letter.

Sincerely,



James Woidt
Senior Project Engineer



EXISTING MODEL VALIDATION - JULY 2017 EVENT (~0.5% ANNUAL CHANCE EXCEEDANCE)

PREPARED BY:

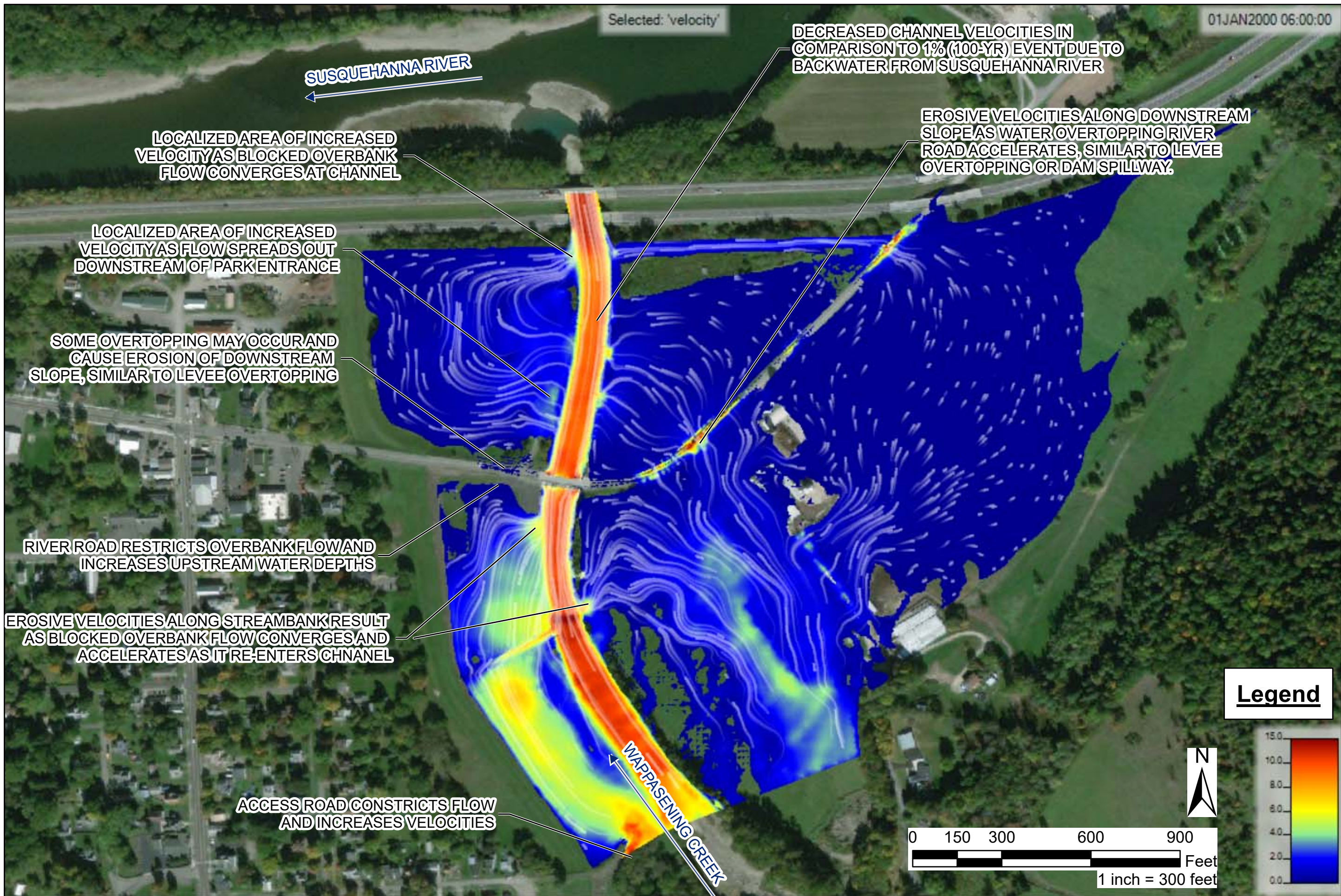


PREPARED FOR:

Village of Nichols, NY and
New York Governor's Office
of Storm Recovery (GOSR)

PROJECT INFORMATION:

Kirby Park Recreational Improvements
Hydrology and Hydraulics Report
May 9, 2018



EXISTING MODEL RESULTS - WAPPASENING 1% ACE (100-YR) AND SUSQUEHANNA 80% ACE (1.25-YR)

PREPARED BY:



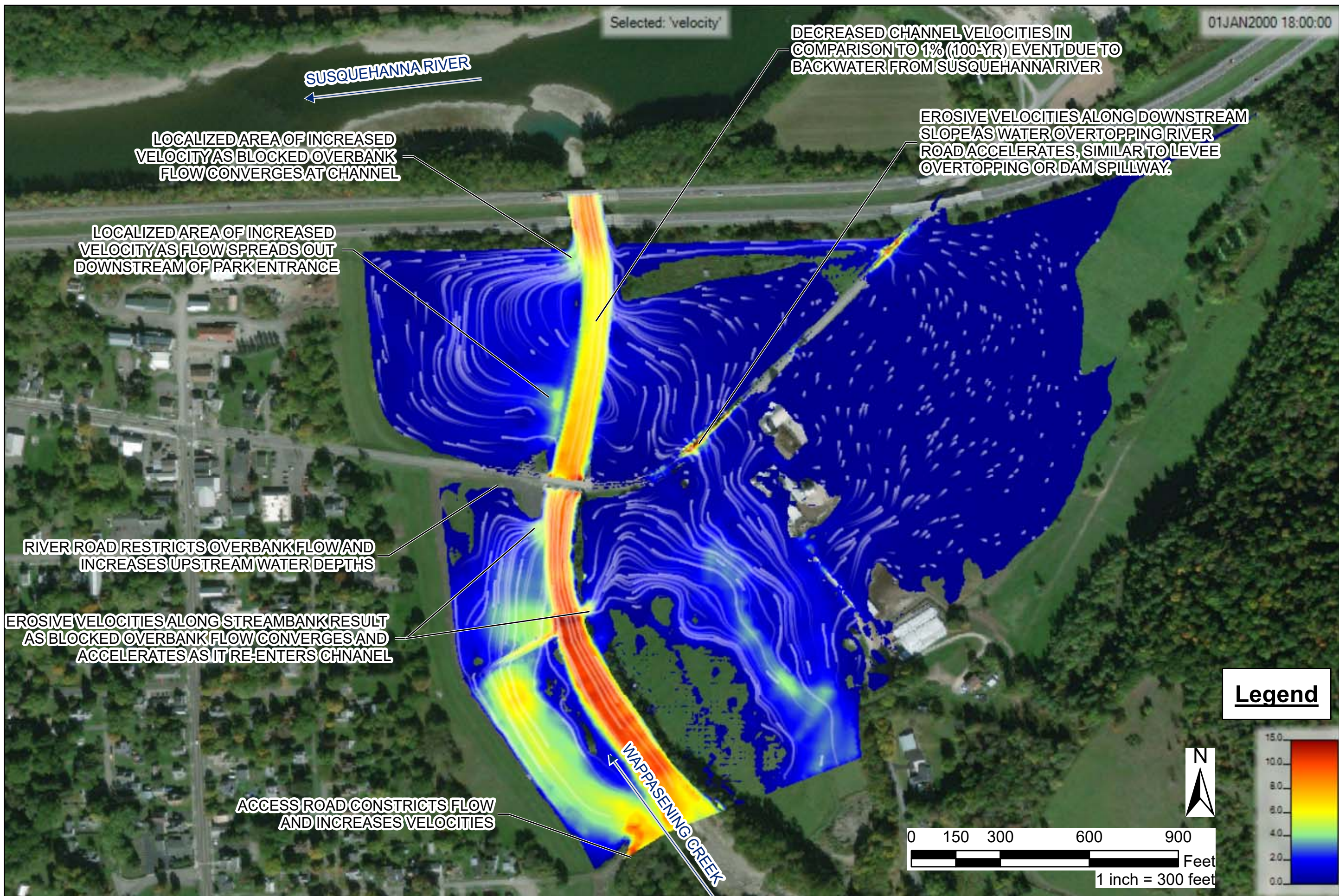
PREPARED FOR:

Village of Nichols, NY and
New York Governor's Office
of Storm Recovery (GOSR)

PROJECT INFORMATION:

Kirby Park Recreational Improvements
Hydrology and Hydraulics Report
May 9, 2018





EXISTING MODEL RESULTS - WAPPASENING 2% ACE (50-YR) AND SUSQUEHANNA 50% ACE (2-YR)

PREPARED BY:



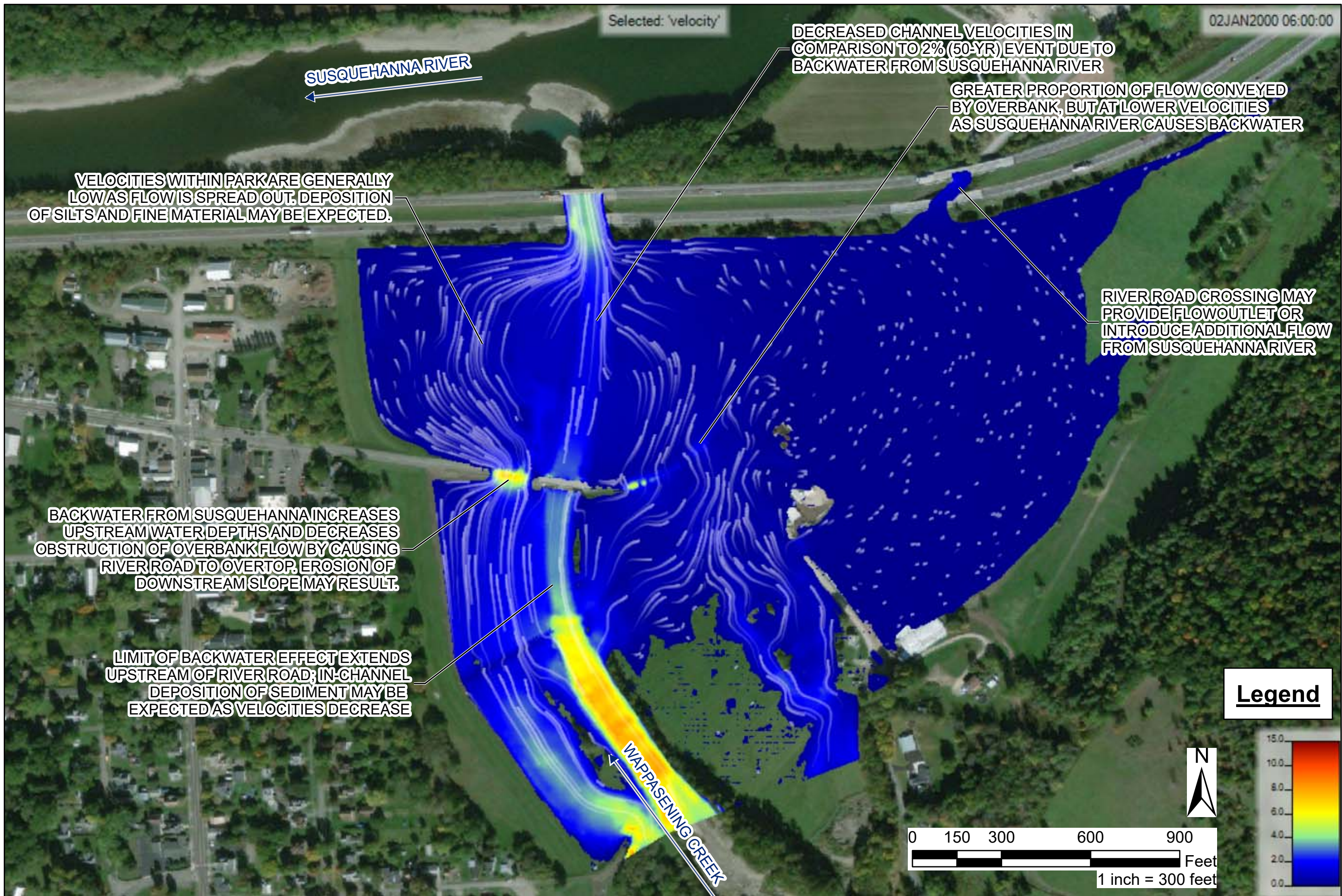
PREPARED FOR:

Village of Nichols, NY and
New York Governor's Office
of Storm Recovery (GOSR)

PROJECT INFORMATION:

Kirby Park Recreational Improvements
Hydrology and Hydraulics Report
May 9, 2018





EXISTING MODEL RESULTS - WAPPASENING 10% ACE (10-YR) AND SUSQUEHANNA 10% ACE (10-YR)

PREPARED BY:

DELTA

W Woidt Engineering

PREPARED FOR:

Village of Nichols, NY and
New York Governor's Office
of Storm Recovery (GOSR)

PROJECT INFORMATION:

Kirby Park Recreational Improvements
Hydrology and Hydraulics Report
May 9, 2018

F:\Dropbox\Woidt\Engineering Projects\2017 EPIN\Y E038\2017 Kirby Park and Stream Stabilization\ArcGIS\2Dmodel\Exst-10@10.mxd 5/10/2018 8:42:36 AM;

Attachment 3

Project Reference maps

Airport Hazards Map

USFWS Coastal Barrier Resources System Mapper

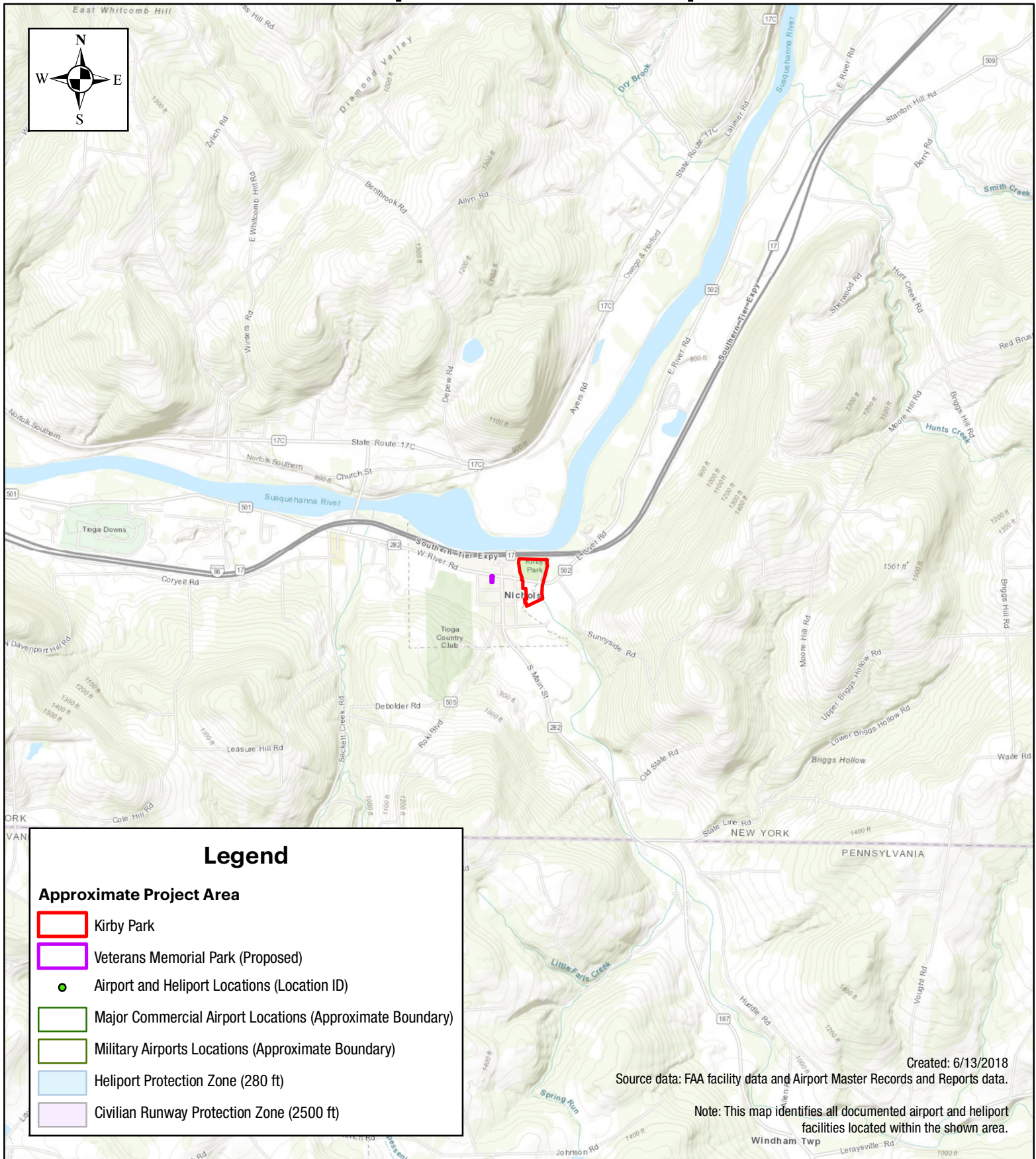
NYS DOS Coastal Boundary Map

NYSDEC & NPS Wild and Scenic Rivers Map

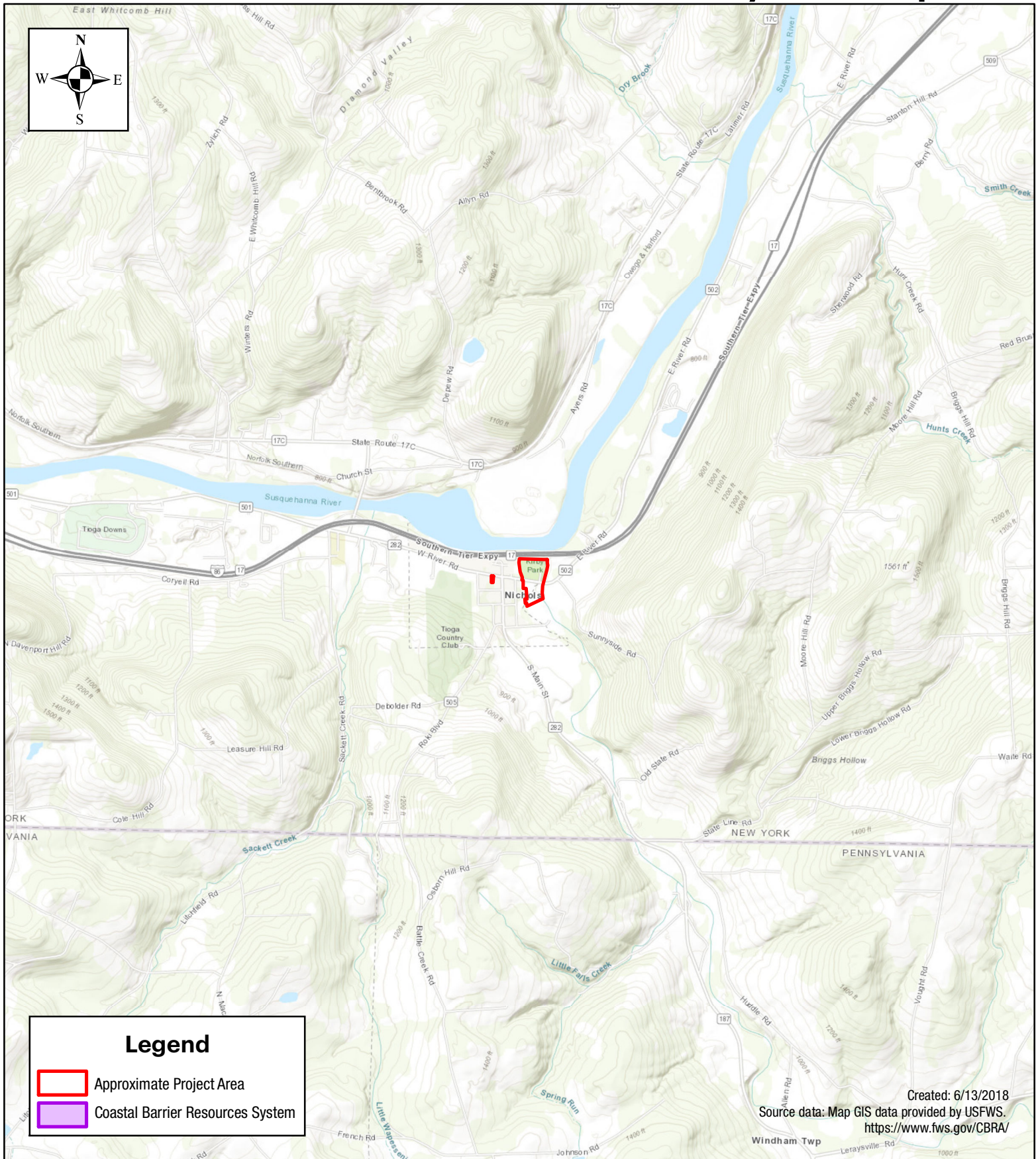
NYSDEC Environmental Resource Map

NYSDEC Critical Environmental Areas Map

Airport Hazards Map



USFWS Coastal Barrier Resources System Map



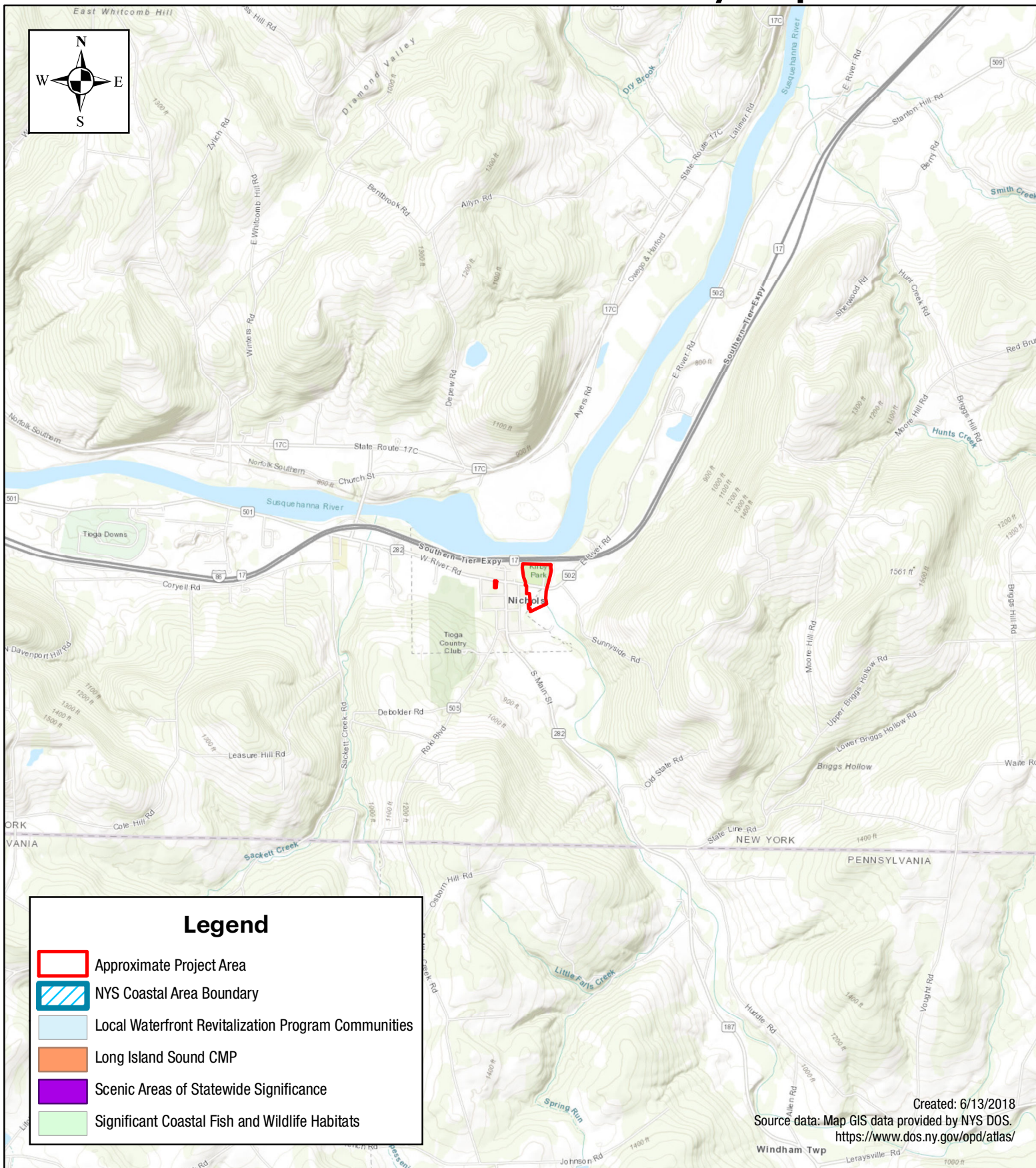
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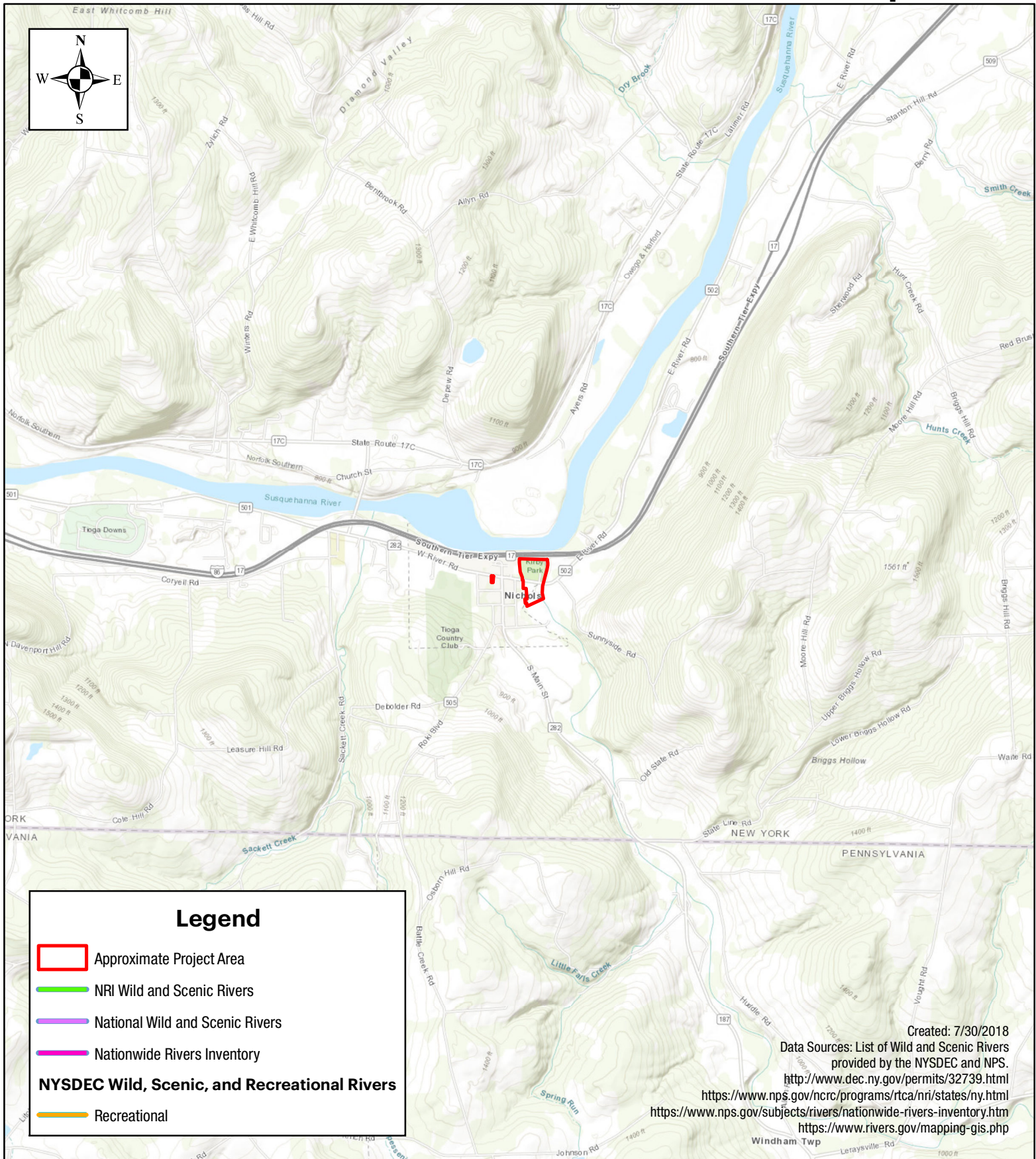
0 2,500 5,000 10,000 Feet

Nichols Recreation Improvements Project
Village of Nichols
Town of Nichols
Tioga County, New York

NYS DOS Coastal Boundary Map



NYSDEC & NPS Wild and Scenic Rivers Map





Environmental Resource Mapper

Base Map: Topographical [Using this map](#)

Search

Tools

Layers and Legend

☐ All Layers☒ Unique Geological Features☐ Waterbody Classifications for Rivers/Streams ☐ Waterbody Classifications for Lakes☐ State Regulated Freshwater Wetlands☐ State Regulated Wetland Checkzone ☒ Significant Natural Communities☐ Natural Communities Near This Location ☒ Rare Plants or Animals

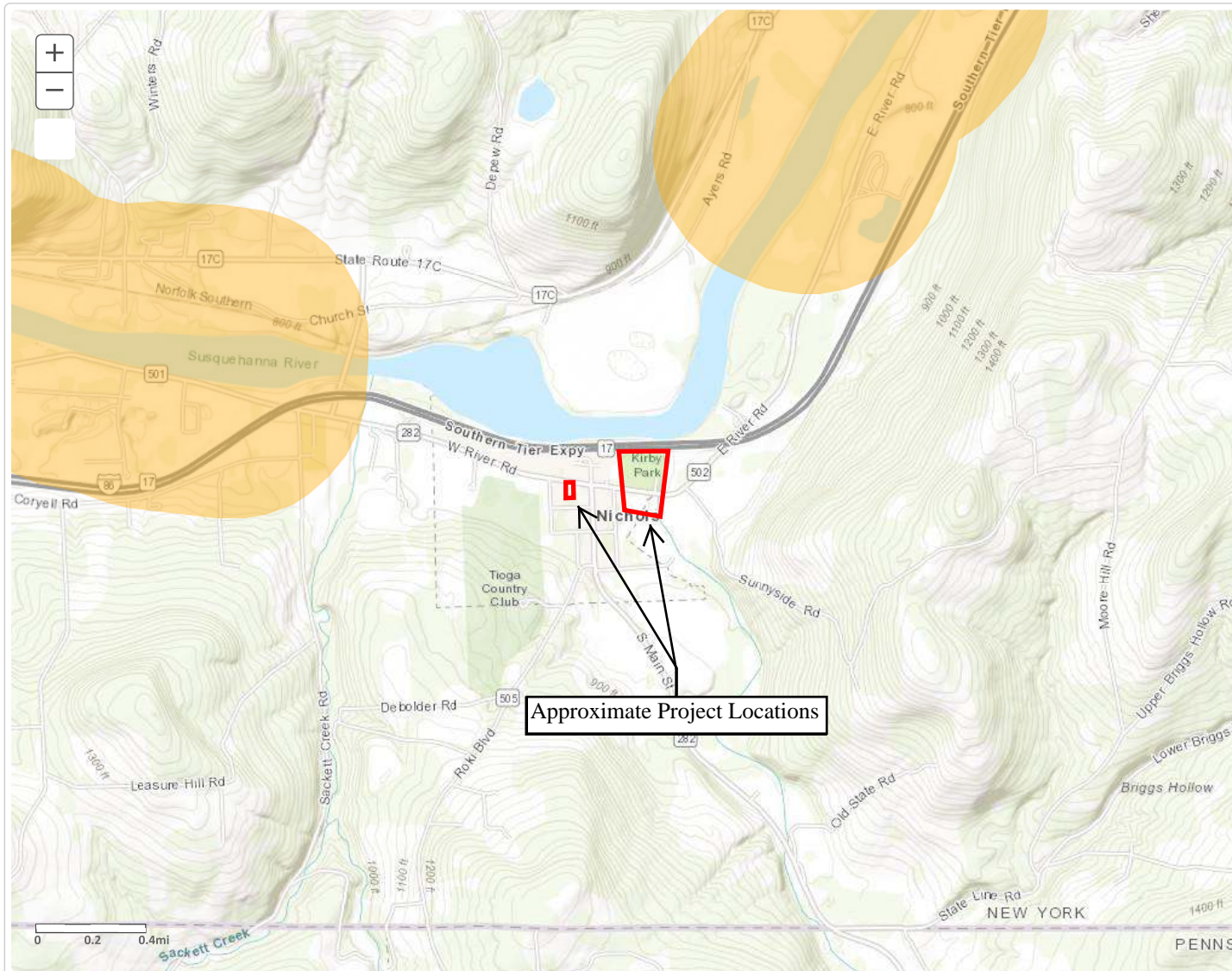
Other Wetland Layers

Reference Layers

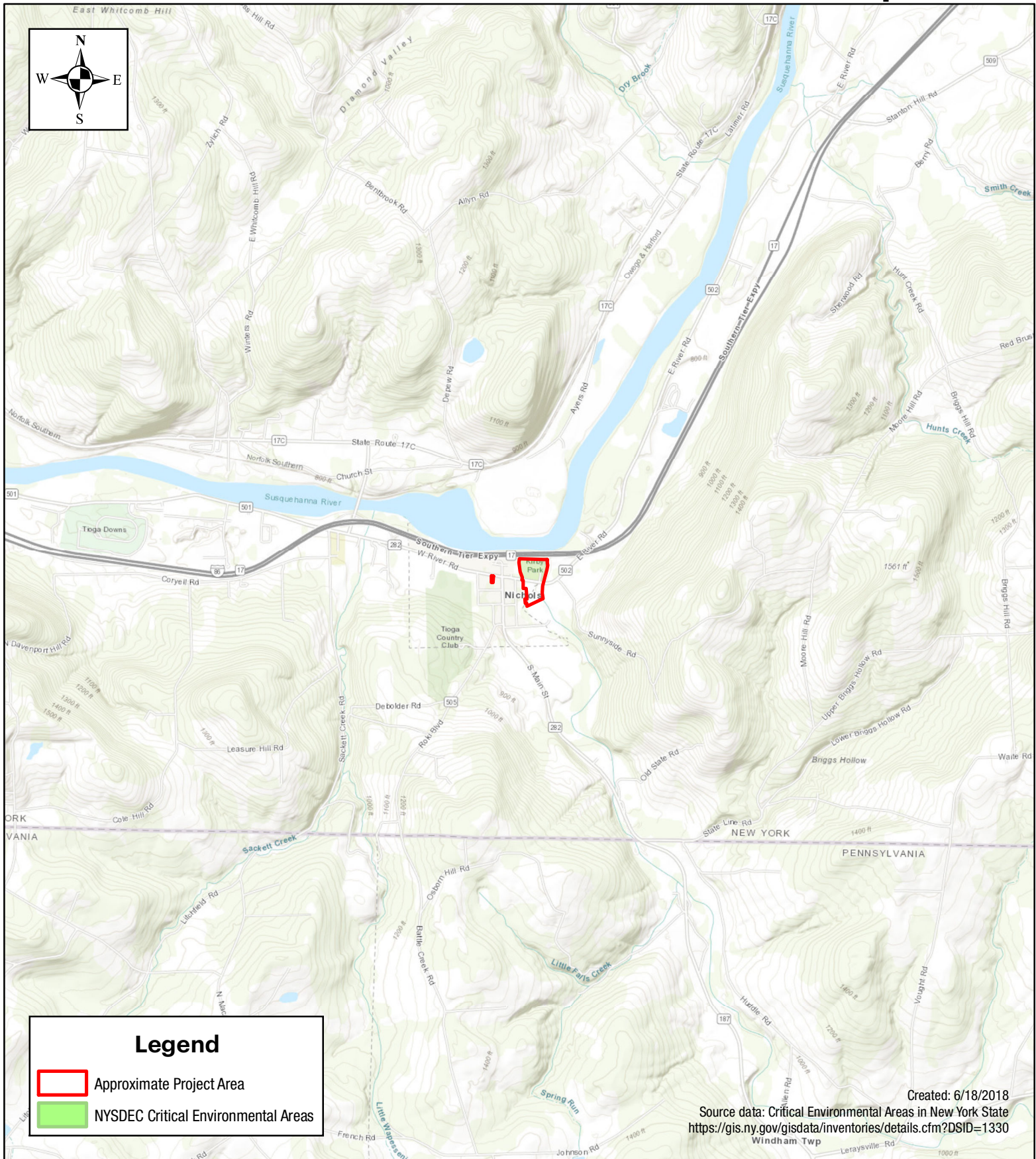
Tell Me More...

Need A Permit?

Contacts



NYSDEC Critical Environmental Areas Map



Attachment 4

Floodplain Management & Wetlands Protection Determination

Nichols Recreation Improvements Project
Floodplain Management and Wetlands Protection Determination
Community Reconstruction Program within NY State Community Development Block
Grant Disaster Recovery Program
May 31, 2018

Introduction & Overview

The purpose of Executive Order (EO) 11988 Floodplain Management is “to avoid to the extent possible the long- and short-term adverse impacts associated with occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.” The purpose of EO 11990 Protection of Wetlands is “to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.” This report contains the analysis prescribed by 24 CFR Part 55.

This project involves U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Program – Disaster Recovery (CDBG-DR) funding for recreational improvements to Kirby Park and the creation of a new village park, Veterans Memorial Park. The analysis that follows focuses primarily on floodplain impacts, as there are no direct wetland impacts associated with this project. The analysis that follows focuses on floodplain impacts, as there are no direct wetland impacts associated with this project. Based on the type of land use and other case characteristics described herein, it is concluded that there is a reasonable basis to proceed with funding for this project/ activity within floodplain. The CDBG-DR funding is administered through the New York State Rising Community Reconstruction Program which is using bottom-up community participation and State-provided technical expertise to develop resilient and sustainable communities. Thus, alternatives preventing or impeding the development of resilient and sustainable communities are not considered reasonable alternatives.

Description of Proposed Action & Land Use

The Village of Nichols: Recreation Improvements involves construction at two locations: Kirby Park at East River Road/ NYS Route 502 and at a Village of Nichols owned parcel at West River Road/ NYS Route 282, Village of Nichols, Town of Nichols, Tioga County, New York 13812. The Village of Nichols is requesting CDBG-DR funding for recreational improvements to Kirby Park and the creation of a new village park, Veterans Memorial Park, at the village owned property. The proposed recreational work at Kirby Park will be performed on the following parcels designated as Section-Block-Lot (SBL) 159.19-1-5, 159.19-1-6, and 159.19-1-7, while the proposed Veterans Memorial Park will be created on parcel designated SBL 159.19-2-5.

The recreational improvements to Kirby Park will include the following: installation of new park signs and lighting, multi-use trails, a pedestrian walkway, a children's play area, portable toilet facilities, constructing new parking in the northern portion of Kirby Park with increased handicapped accessible parking, resiliency landscaping, upgrading Kirby Park's perimeter and entrance, improving the southern parcel of Kirby Park with secondary parking, and repositioning the practice baseball field, pavilion, and basketball court.

The project will also involve the creation of a new village park called Veterans Memorial Park, to be located on another village owned parcel of property located in the Village of Nichols. The Veterans Memorial Park will be a small outdoor space that conserves the existing landscape and supports the surrounding landscape and local wildlife. The new public park area will improve the overall fitness of the Village of Nichols. The creation of the park will involve the installation of a landscaped park entrance with a park sign along West River Road, benches, and a five to six foot-wide park walkway along a loop

configuration that will be approximately 65 feet long. Additional amenities will potentially include lighting and a Veteran's Memorial with a flagpole. The Park site will be limited to the Village-owned parcel. A safe and feasible pedestrian link along West River Road from the Village to the park entrance is also proposed, if funding allows.

Ground disturbance will be associated with the installation of footings for the new pavilion location, appropriate grading for the installation of new or existing structures, the installation of signs, the installation of utilities and associated infrastructure, and installation of plants and trees for resiliency landscaping. The parcels are currently owned by the Village of Nichols and contain NYSDEC, NYSDOT and Water Well easements.

Applicable Regulatory Procedure Per EO 11988 and EO 11990

The proposed action corresponds with a noncritical action not excluded under 24 CFR §55.12(b) or (c). Funding is permissible for the use in the floodplain if the proposed action is processed under §55.20 and the findings of the determination are affirmative to suggest that the project may proceed.

Based on online data, including data managed and updated by the U.S. Fish & Wildlife Service (USFWS) and New York Department of Environmental Conservation (NYSDEC), there are National Wetlands Inventory (NWI) mapped riverine wetlands and NYSDEC classified waterways immediately adjacent to Kirby Park, as shown in **Appendix I**. There are no state regulated wetlands on or adjacent to Kirby Park. There are no state or federally designated wetlands on or adjacent to the proposed Veterans Memorial Park. While NWI mapped riverine wetlands and NYSDEC waterways are present immediately adjacent to Kirby Park, no project activities are proposed to occur within these areas. Thus, there will be no direct construction (new or existing) within wetlands or waterways present at Kirby Park. Thus, in accordance with the decision-making process set forth in 24 CFR Part 55, this analysis focuses exclusively on floodplains.

According to 24 CFR §55, the proposed activity for recreational improvements occurs in a community (Village of Nichols) that is in the regular program of the National Flood Insurance Program (NFIP); this community is currently in good standing with the NFIP. The proposed recreational improvements do not involve activities or structures that would be included in a substantial improvement calculation and the proposed project does not significantly increase the footprint of the structures or net paved areas on the two properties. As such, the abbreviated five-step floodplain determination process in §55.20 is allowed. The following analysis examines each step in a floodplain management determination process.

Step 1. Determine Whether the Proposed Action is Located in the 100-year Floodplain (500-year for Critical Actions) or results in New Construction in Wetlands.

The location of the proposed action within Kirby Park, per the applicable FEMA flood map Firmette, is within the 100-year floodplain (SFHA - AE Zone). There is an established Base Flood Elevation (BFE) of approximately 795 feet across the proposed project area, as shown in **Appendix II**.

The proposed Veterans Memorial Park is not located within the 100-year floodplain. As such, the following analysis focuses only on the Kirby Park location, as the Veterans Memorial Park is not within floodplain.

Per the USFWS and NYSDEC, there are no regulated wetlands within the proposed action area at Kirby Park, though the park does contain NWI mapped riverine wetlands and NYSDEC classified waterways. This action does not require a Section 404 permit under the Clean Water Act (see 55.20(a)(1)).

As this project triggers an abbreviated review process, there was not a requirement to perform ***Step 2. Initiate Public Notice for Early Review of Proposal*** and ***Step 3. Identify and Evaluate Practicable***

Alternatives to Locating the Proposed Action in a 100-year Floodplain (or 500-year Floodplain for a Critical Action) or Wetland.

Step 4. Identify & Evaluate Potential Direct & Indirect Impacts Associated with Occupancy or Modification of 100-year Floodplain and Potential Direct & Indirect Support of Floodplain and Wetland Development that Could Result from Proposed Action.

The focus of floodplain evaluation should be on adverse impacts to lives and property, and on natural and beneficial floodplain values. Natural and beneficial values include consideration of potential for adverse impacts on water resources such as natural moderation of floods, water quality maintenance, and groundwater recharge.

According to the FEMA Report - A Unified National Program for Floodplain Management, two definitions commonly used in evaluating actions in floodplains are “structural” and “non-structural” activities. Per the report, structural activity is usually intended to mean adjustments that modify the behavior of floodwaters through the use of measures such as public works dams, levees and channel work. Non-structural is usually intended to include all other adjustments (e.g., regulations, insurance, etc.) in the way society acts when occupying or modifying a floodplain. These definitions are used in describing impacts that may arise in association with potential advancement of this case.

Natural moderation of floods

The proposed project occurs on village-owned land in an area that has been developed for a long time; the proposed project will increase the area’s resiliency to resist damage in future flood events. Kirby Park is located east of the levee, within the floodplain associated with Wappasening Creek and the Susquehanna River. The proposed work will not significantly increase impervious surfaces, nor does it introduce structures that would impede the ability for floodwaters to flow naturally or raise the current base flood elevation. As such, while the project may potentially result in future indirect impacts to property during certain severe floods and related natural disasters, the project is designed to overall alleviate the impacts from future severe floods.

Living resources such as flora and fauna

The proposed project area is located within an area with agricultural land use to the north and east and mixed commercial and residential land use to the west. The proposed work involves recreational improvements at a park often used by the local community. These improvements will include planting of new trees and shrubs around the project area, and removing approximately 20 large ash trees that are either declining or dying and replacing them with large deciduous trees. The project does not expand the footprint of the existing park, and does not decrease the amount of available flora for the surrounding area. However, it is possible that materials on site during construction could migrate off-site during storm events and impact the surrounding area’s water quality maintenance and ecological resources. This would be more likely if there are not construction best management practices (BMP) implemented during the construction period and the return of disturbed areas to pre-existing and/or improved conditions upon completion of project activities. However, a qualitative evaluation suggests the potential would be relatively minor, and if such releases do occur, it would likely be part of an area wide impact. Given the nature of the project, the potential for an acute or chronic level of water quality impact from this proposed project is low.

Impacts to Property & Lives

The action does not present potential to impact occupancy of floodplain as no new construction would be performed that affected the local commercial or residential structures. The proposed construction consists of recreational improvements in a park that is already well traveled by the surrounding community. As such, the project is not expected to significantly modify property in floodplains.

Occupancy of this floodplain in this village area has taken place over an extended period of history. According to Tioga County's [Multi-Jurisdictional Hazard Mitigation Plan](#), 2013, Tioga County has had eight Presidential Disaster Declarations for Flooding Events between 1953 and 2010. A review of the same Plan shows there is an documented average of 2.2 flash floods and 0.2 floods that have occurred annually in Tioga County between 1950 and 2011. Approximately 16.7% of the Village of Nichols is considered to be within 100-year floodplain, while 66.7% is located within 500-year floodplain. Considering the context of the area—this action represents an activity one small area among many others that are located within contiguous floodplain. Thus, funding this project activity does constitute indirect continued support of floodplain occupancy and development.

The rehabilitation and improvements at the project area sustains area property values and community character within a developed village and community. This work will provide a place for the community to come together and enjoy the area while increasing the resiliency of the park against future flood events. If this project were not funded, there probably would be other undefined, undesirable indirect impacts to resident's quality of life, ease of accessibility to surrounding residences, and emergency service access in the event they are needed.

Cultural resources such as archaeological, historic & recreational aspects

The New York State Historic Preservation Office has determined that this project will have No Impact upon cultural resources in or eligible for inclusion in the State and National Register of Historic Places. The letter documenting this determination and supporting studies are included in the environmental review record in **Attachment 9** of *Village of Nichols: Recreation Improvements Project* Environmental Assessment document.

Agricultural, aquacultural, & forestry resources

Tioga County has several agricultural sites located in flood zone as well as undeveloped woodland. According to the County's Multi-Jurisdictional Hazard Mitigation Plan, the Census of Agriculture (2007) indicated that agricultural products sold from Tioga County accounted for greater than \$36.7 million dollars with 8.7% of the 151.75 square miles of farmland in Tioga County located in floodplain. Tioga County also had 327.98 square miles of forested lands. It is possible that if there is a materials release from this property, it could potentially affect natural resources including agricultural and forestry. However, a qualitative analysis suggests that the impact would be very small as mitigative measures and BMPs will be utilized during construction. These measures include, but are not limited to, installing temporary silt fencing on land to prevent soil and/or debris from being washed off-site and installing turbidity curtains in the water to minimize sediment transportation from the area of disturbance to the larger body of water per the soil erosion control plan. Project activities will be completed in accordance with all applicable federal, state and local permit requirements and conditions. Thus, no or minor temporary impacts from the proposed project activities are anticipated.

Step 5. Where Practicable, Design or Modify the Proposed Action to Minimize the Potential Adverse Impacts To and From the 100-Year Floodplain and to Restore and Preserve its Natural and Beneficial Functions and Values.

The proposed action involves recreational improvements at an existing park in the Village of Nichols; no habitable structures will be involved during construction, the amount of impermeable surface will not be significantly increased in the course of the proposed work, and the park infrastructure is not included as part of substantial improvement calculations. As such, it is not financial feasible to specify additional mitigation measures other than those already in place to provide future stormwater run-off and storm surge protection for the surrounding area. However, it is still reasonable to promote awareness of future risks of natural hazards, including flooding, plus the physical, social, and economic impacts that potential storm events could convey, including the potential for future physical damage to the surrounding property.

Step 6. Reevaluate the Alternatives and Proposed Action.

The “no action” alternative for not funding this project would not address the purpose and need of the proposed action. Without the proposed action, the impacted community would be left with a recreational area more susceptible to future flooding events than it would after the implementation of the proposed action. Therefore, the “no action” alternative examined is not considered desirable and the proposed action is still practicable in light of exposure to flood hazards in floodplain, possible adverse impacts on floodplain, the extent to which it may aggravate current hazards to other floodplains, and the potential to disrupt natural and beneficial functions and values of floodplains. Additionally, implementation of the proposed action will abide by all applicable state and local codes for floodplain development. As such, the impact of the proposed action on a floodplain would be less than the “no action” alternative.

As this project triggers abbreviated process, there was not a requirement to perform ***Step 7. Issue Findings and Public Explanation.*** This means that a final notice, formally known as a “Notice of Policy Determination” will not be published.

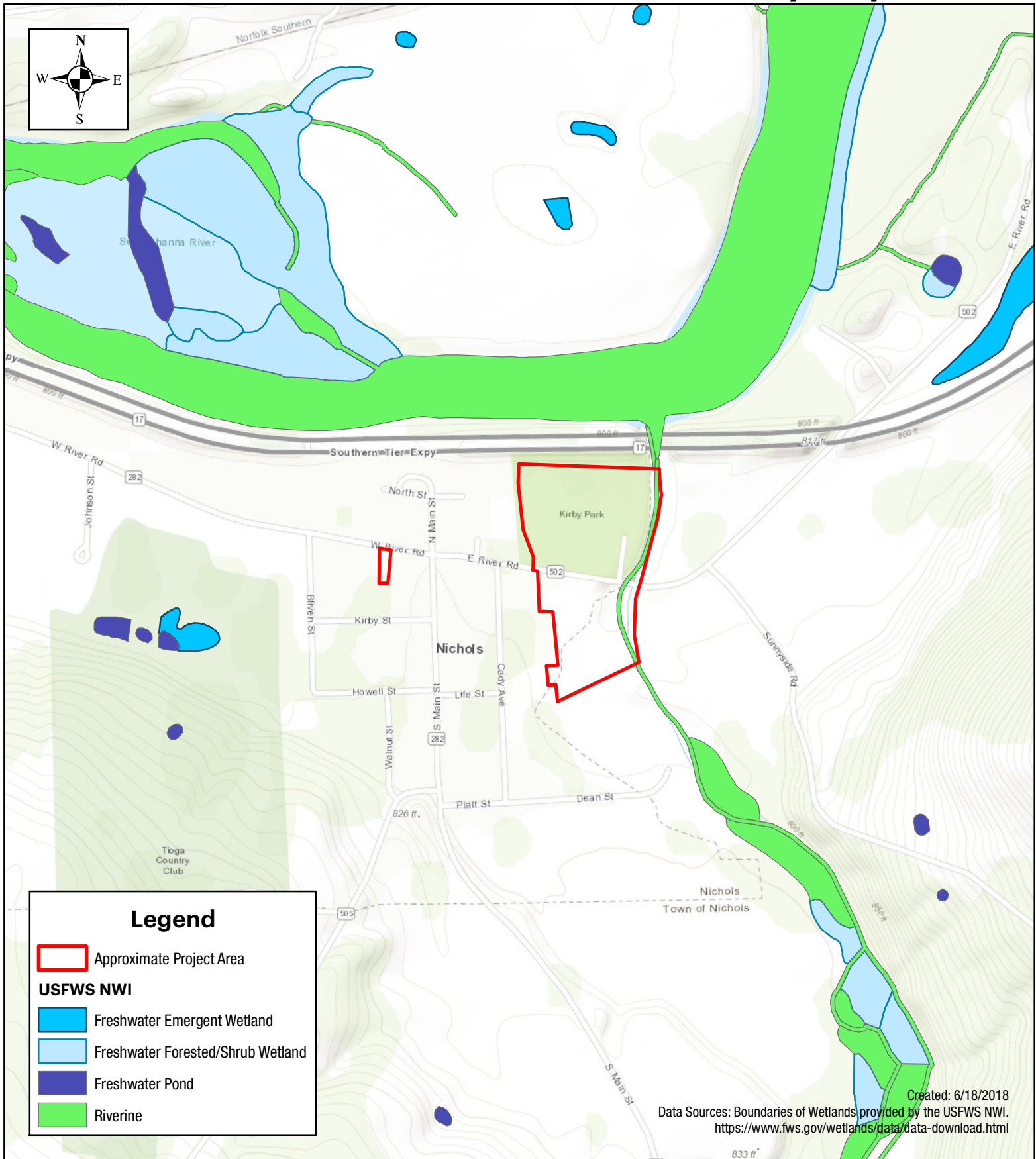
Step 8. Continuing Responsibility of Responsible Entity & Recipient.

The Governor's Office of Storm Recovery (GOSR), operating under the auspices of the New York State Homes and Community Renewal's (NYSHCR) Housing Trust Fund Corporation, is the responsible entity. The responsible entity will make available educational materials regarding best practices for any structures located in floodplains. It is acknowledged there is a continuing responsibility by the responsible entity to ensure, to the extent feasible and necessary, compliance with the steps herein.

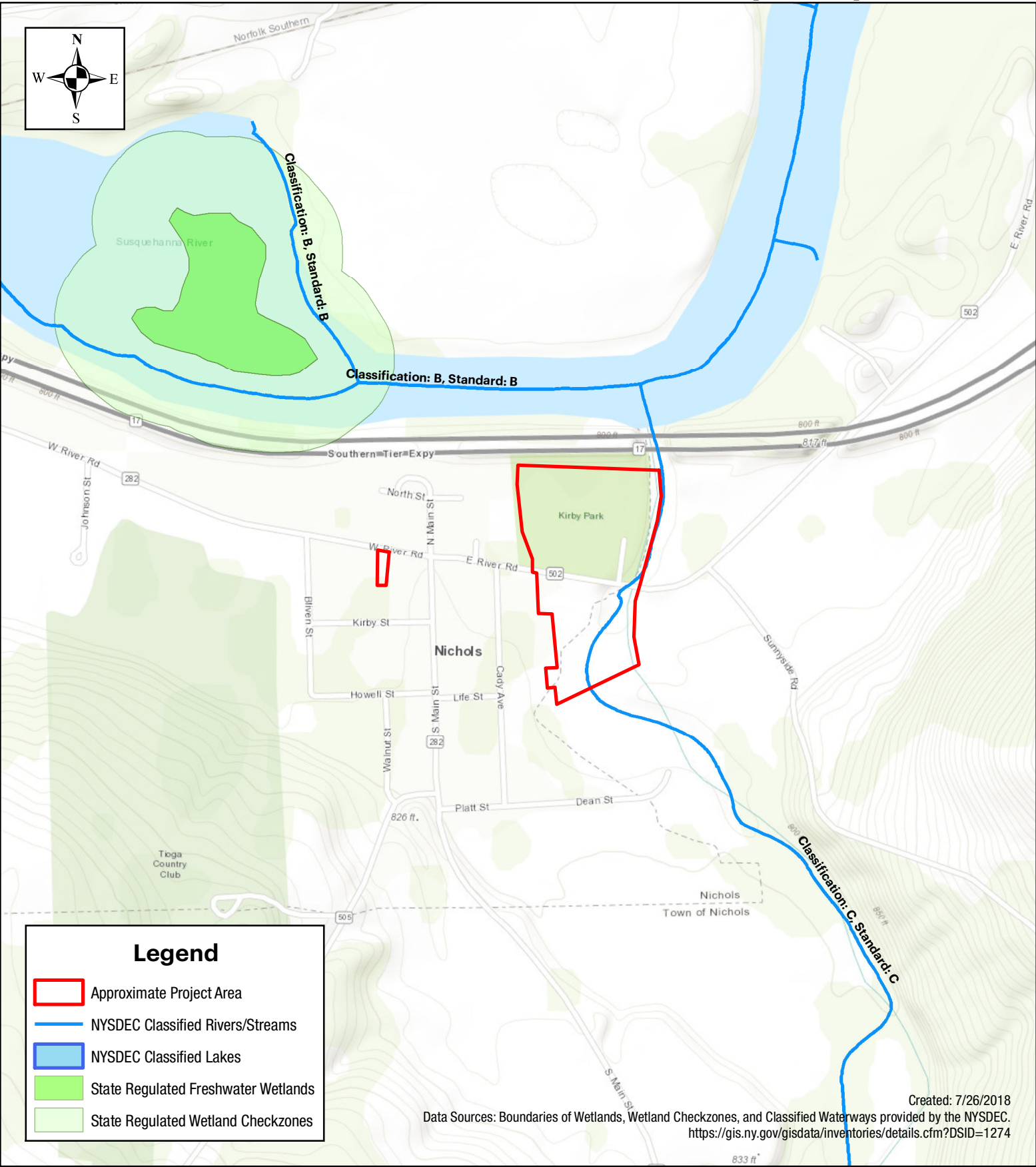
Appendix I

USFWS National Wetlands Inventory Map
NYSDEC Wetlands and Waterways Map
NYSDEC Tidal Wetlands Map

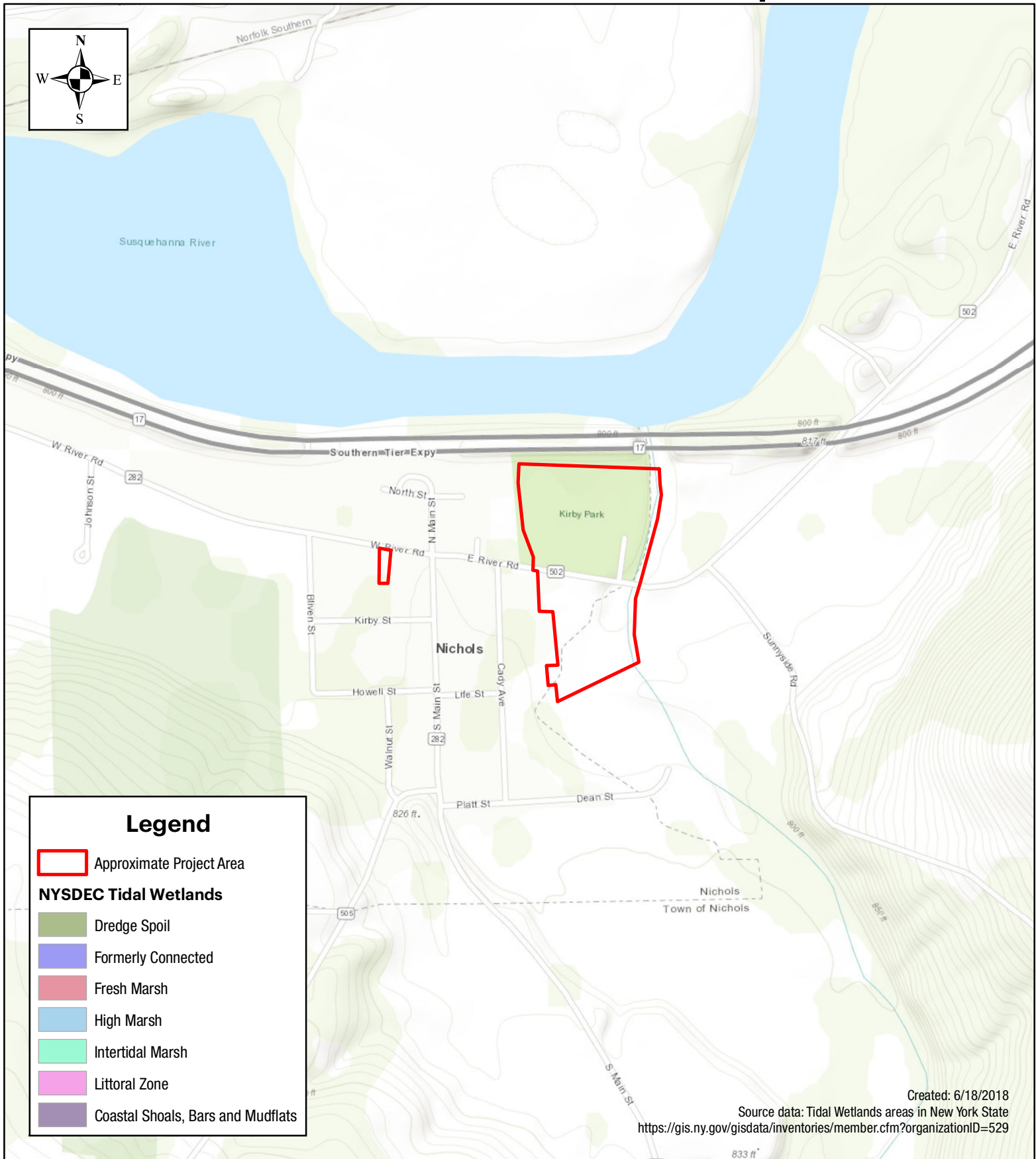
USFWS National Wetlands Inventory Map



NYSDEC Wetlands and Waterways Map



NYSDEC Tidal Wetlands Map

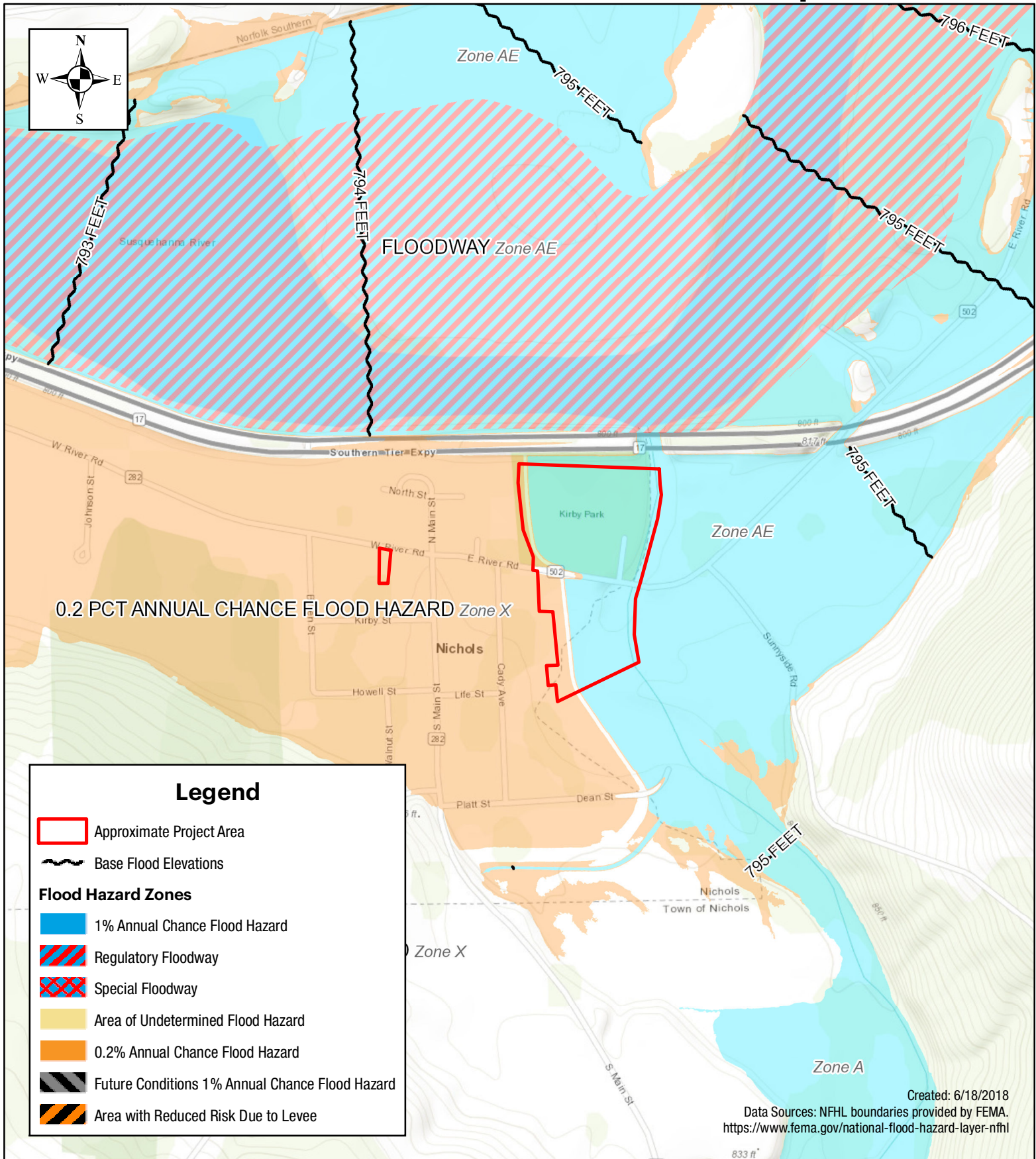


Created: 6/18/2018
 Source data: Tidal Wetlands areas in New York State
<https://gis.ny.gov/gisdata/inventories/member.cfm?organizationID=529>

Appendix II

FEMA Firmette Map

FEMA National Flood Hazard Map



Attachment 5

HUD Environmental Standards Review

The Village of Nichols: Recreation Improvements Project **HUD Environmental Standards Review**

Project Sites: Kirby Park at East River Road and a village owned parcel located on West River Road
Village of Nichols, Town of Nichols, Tioga County, New York 13812

Introduction:

The purpose of this review is to ensure that the project complies with U.S. Department of Housing and Urban Development (HUD) environmental standards in relation to 24 CFR Part 58.5. Properties that are proposed for use in HUD programs “must be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of occupants or conflict with the intended utilization of the property.”

A desktop review was performed to identify whether the Project Sites referenced in the title of this document complies with the following criteria:

- i. is not Listed on an U.S. Environmental Protection Agency (EPA) Superfund National Priorities or Comprehensive Environmental Response Superfund National Priorities or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) List, or equivalent State list;
- ii. is not located within 3,000 feet of a toxic or solid waste landfill site;
- iii. does not have an underground storage tank; and
- iv. is not known or suspected to be contaminated by toxic chemicals or radioactive materials.

Summary of Findings

Project Sites Records Review

Project Sites: The Village of Nichols: Recreation Improvements involves construction at two locations: Kirby Park at East River Road and at a Village of Nichols owned parcel at West River Road, Village of Nichols, Town of Nichols, Tioga County, New York 13812. The proposed recreational work at Kirby Park will be performed on the following parcels designated as Section-Block-Lot (SBL) 159.19-1-5, 159.19-1-6, and 159.19-1-7, while the proposed Veterans Memorial Park will be created on parcel designated SBL 159.19-2-5. These two locations will be collectively known as the Project Sites within this HUD Environmental Standards Review.

New York State Department of Environmental Conservation (NYSDEC) Records: The Project Sites are not listed on the NYSDEC Bulk Storage, Environmental Site Remediation, or Spill Incidents Databases. A review of the NYSDEC databases provided no indication of past uses of the Project Sites that could contaminate the Project Sites or conflict with the intended utilization of the Project Sites. The Project Sites are not located within 3,000 feet of a toxic or solid waste landfill site.

EPA Records: The Project Sites are not listed on an EPA Superfund National Priorities or CERCLA list or equivalent State list or EPA Resource Conservation and Recovery (RCRA) database. The Project Sites are not known or suspected to be contaminated by toxic chemicals or radioactive materials.

Surrounding Properties Records Review

NYSDEC Records: A search of the NYSDEC Spill Incidents Database resulted in the identification of 23 spills within 1,000 feet of the Project Sites; all 23 spills have been closed by the NYDEC. A spill closure means that the records and the data submitted indicate that the necessary cleanup and removal actions have been completed and no further remedial actions are necessary or the case was closed for administrative

reasons (e.g. multiple reports of a single spill consolidated into a single spill number). As such, these spill reports are not considered a hazard that could conflict with the intended utilization of the Project Sites.

According to the NYSDEC Environmental Site Remediation Database, there is one (1) environmental remediation site within 3,000 feet of the Project Sites. **South Main Street Dry Cleaners** (Site Code: 754014) is a NYS Superfund site located at 37 South Main Street. This site is located adjacent to the east and southern borders of the proposed Veterans Memorial Park, with the South Main Street Dry Cleaners facility located approximately 200ft east of the proposed park. This site is located approximately 750 feet west and cross-gradient of Kirby Park. Tetrachloroethylene (PCE or 'perc') was used at this facility for dry cleaning services within the village of Nichols; after use on site, spent PCE was disposed of into an on-site dry well located behind the laundromat. While the laundromat closed in 1968, the total duration of spent PCE disposal on site is unknown. Two rounds of sampling have occurred at this site: the first round of groundwater sampling associated with a leaking underground storage tank at a neighboring gas station occurred in 1990 and while the second round of groundwater and soil sampling occurred in 2000. The first round of sampling in 1990 discovered PCE in the groundwater at 220 parts-per-billion (ppb). Further evaluation of groundwater data showed that there was a low-level contaminant plume moving toward a public water supply well located less than 1,500 feet down-gradient of the contamination source area. The second round of groundwater sampling in 2000 was taken from the dry well suspected to be the point source on 37 South Main Street; this sampling indicated that PCE contaminant levels in the plume have diminished to levels below groundwater standards for PCE for all locations except one, which was at 18 ppb for PCE. No additional VOCs were detected. The soil sample results were non-detect, suggesting a source of contamination no longer exists. A "No Further Action" ROD was signed in March 2002 for this site. As such, this site is not considered a hazard that could conflict with the intended utilization of the Project Sites.

According to NYSDEC Bulk Storage Database, there are three (3) Petroleum Bulk Storage (PBS) sites located within 3,000 feet of the Project Sites. The first PBS site, **Great American #485** (Site No. 7-006858), is located at the intersection of River and Cady Street, approximately 700 feet east and cross-gradient from the proposed Veterans Memorial Park and approximately 270 feet west and cross-gradient of Kirby Park. This facility had a single 4,000 gallon underground storage tank (UST) that was closed prior to March 1991.

The second PBS site, **Nichols One Stop** (Site No. 7-129151), is located at the intersection of River and Main Street, approximately 270 feet east and cross-gradient from the proposed Veterans Memorial Park and approximately 660 feet west and cross-gradient of Kirby Park. This facility had four (4) 3,000 gallon USTs on site that were closed prior to March 1991, and one in-service 1,000 gallon #1 fuel oil UST for on-site use. There was one (1) closed spill reported for the site from May 31, 1987; NYSDEC closed the spill on December 1, 2005.

The third PBS site, **Nichols Fire Station** (Site No. 7-422096), is located on River Street, approximately 250 feet west and cross-gradient from the proposed Veterans Memorial Park and approximately 1,300 feet west and cross-gradient of Kirby Park. This facility had two (2) 1,000 gallon USTs that have been closed and removed and has one in-service 1,000 gallon Aboveground Storage Tank on the property.

These bulk storage sites are not considered a hazard that could conflict with the intended utilization of the Project Sites due to the distance and cross-gradient locations of these facilities from the Project Sites, the reported status of the permitted tanks, and the status of the existing spill report and lack of any open spills or releases to the environment from these facilities.

EPA Records: According to the EPA's Enforcement and Compliance History Online (ECHO) search, there are four (4) EPA permitted hazardous waste facilities located within 3,000 feet of the Project Sites. All 4 facilities have no reported violations. Facilities with no violations are not considered a hazard as the facilities are in compliance with permit conditions that are enforced and meet standards that protect public

health and the environment by preventing releases to the environment. As such, these facilities are not considered a hazard that could affect the health and safety of occupants or conflict with the intended utilization of the Project Sites.

Conclusion

Based on a review of available environmental records for the Project Sites and surrounding area, the Project Sites are unlikely to contain hazardous materials, contamination, toxic chemicals and gases, or radioactive substances, which would constitute a hazard that could affect the health and safety of occupants or conflict with the intended utilization of the Project Sites. Therefore, a Phase I Environmental Site Assessment (ESA) or Phase II Investigation is not warranted. Maps and NYSDEC reports are included at the end of this report.

Data Sources

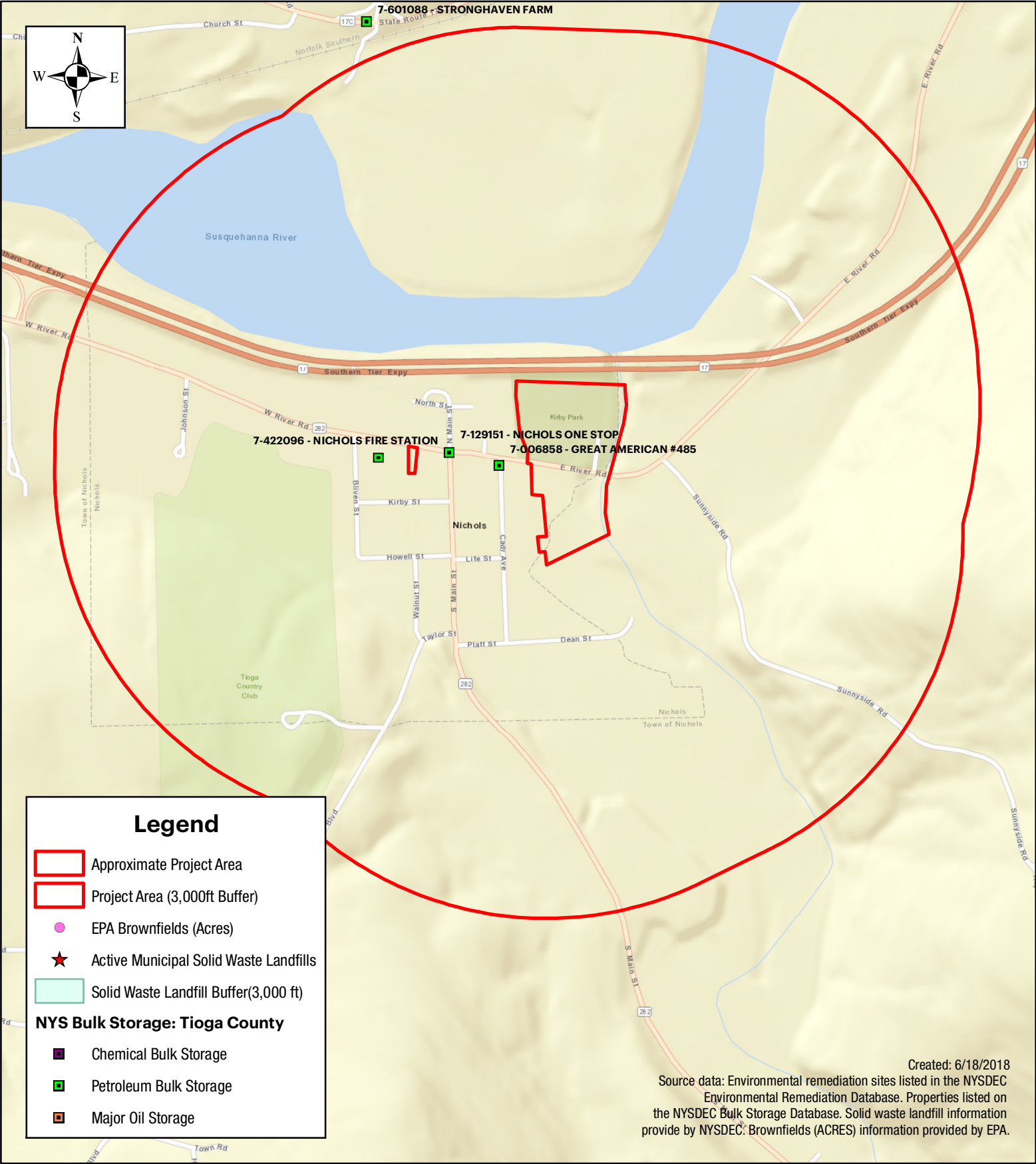
Tectonic Engineering and Surveying Consultants, P.C. (Tectonic) has reviewed the following sources to make the above determinations: Hazardous Waste records contained in the RCRA Information System, the Superfund Enterprise Management System (SEMS) for sites listed under CERCLA (otherwise known as Superfund), EPA's Toxic Release Inventory database (TRI), and the EPA Radiation Information Database (RADInfo). RCRA includes data on small and large quantity hazardous waste material generators and handlers. EPA's Toxic Release Inventory provides information on toxic chemical releases and waste management activities by certain industries. The RADInfo database provides information about facilities that are regulated by the U.S. EPA for radiation and radioactivity.

Tectonic reviewed the NYSDEC Environmental Site Remediation Database to assess whether the sites are registered as a NYS Superfund or Environmental Restoration site. The NYSDEC Environmental Site Remediation Database includes records of sites that are part of the NYS Superfund, Brownfield Cleanup, Environmental Restoration, and Voluntary Cleanup Programs. The Database also includes a Registry of Inactive Hazardous Waste Disposal Sites. The NYSDEC Bulk Storage Database was reviewed for records of facilities that are or have been regulated according to one of the Bulk Storage Programs - Petroleum Bulk Storage, Chemical Bulk Storage, or Major Oil Facility. The NYSDEC Spill Incidents Database was used to determine the potential effects of spills on or near the Project Sites. A desktop review of Google Earth was used in conjunction with a map of active municipal landfills (provided by the NYSDEC), and a list of landfills provided by the NYSDEC to determine whether a non-active or active landfill is located within 3,000 feet of the Project Sites.

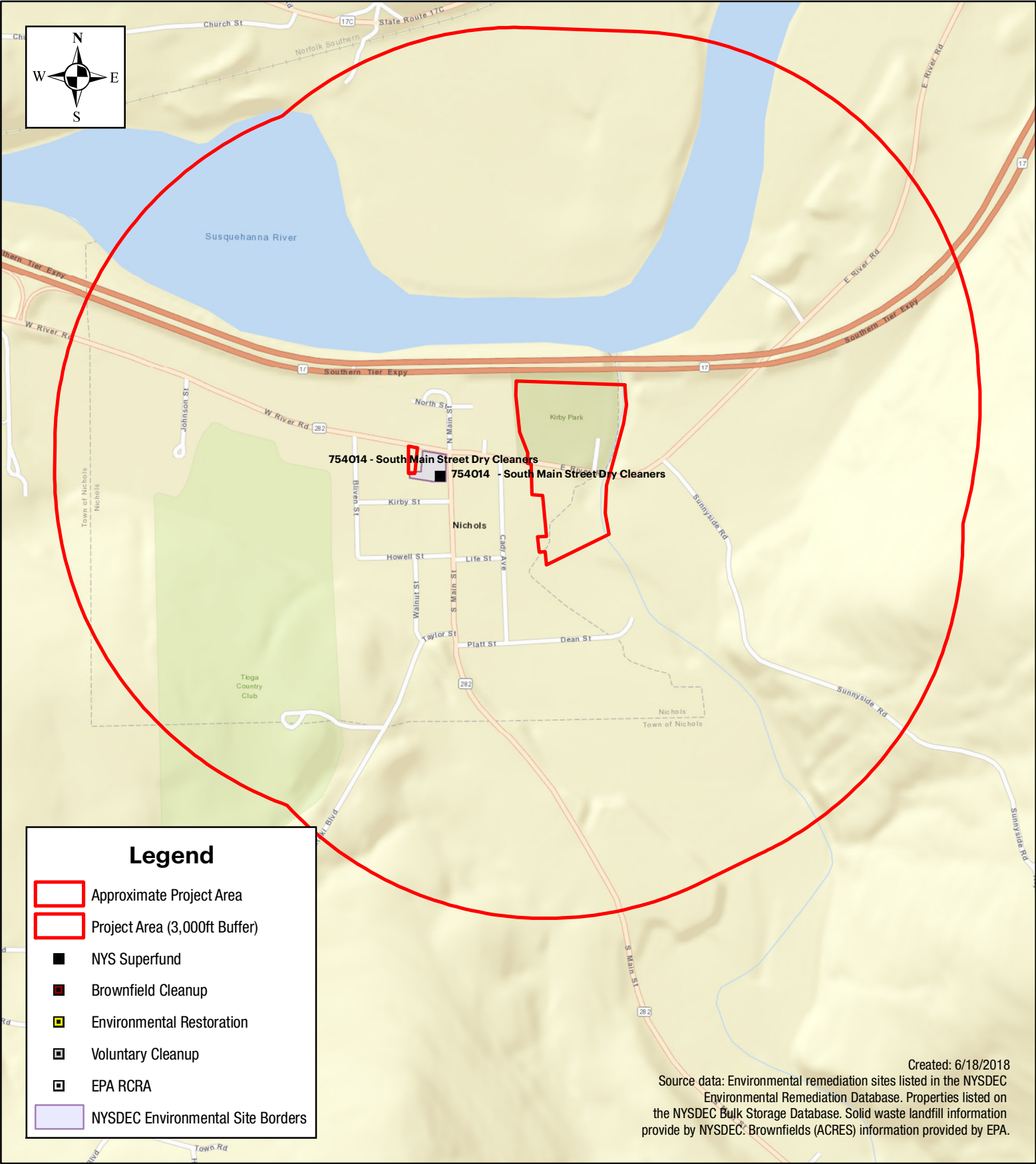
Maps

NYS Bulk Storage Map
NYS Environmental Remediation Map
EPA NEPAAssist Map

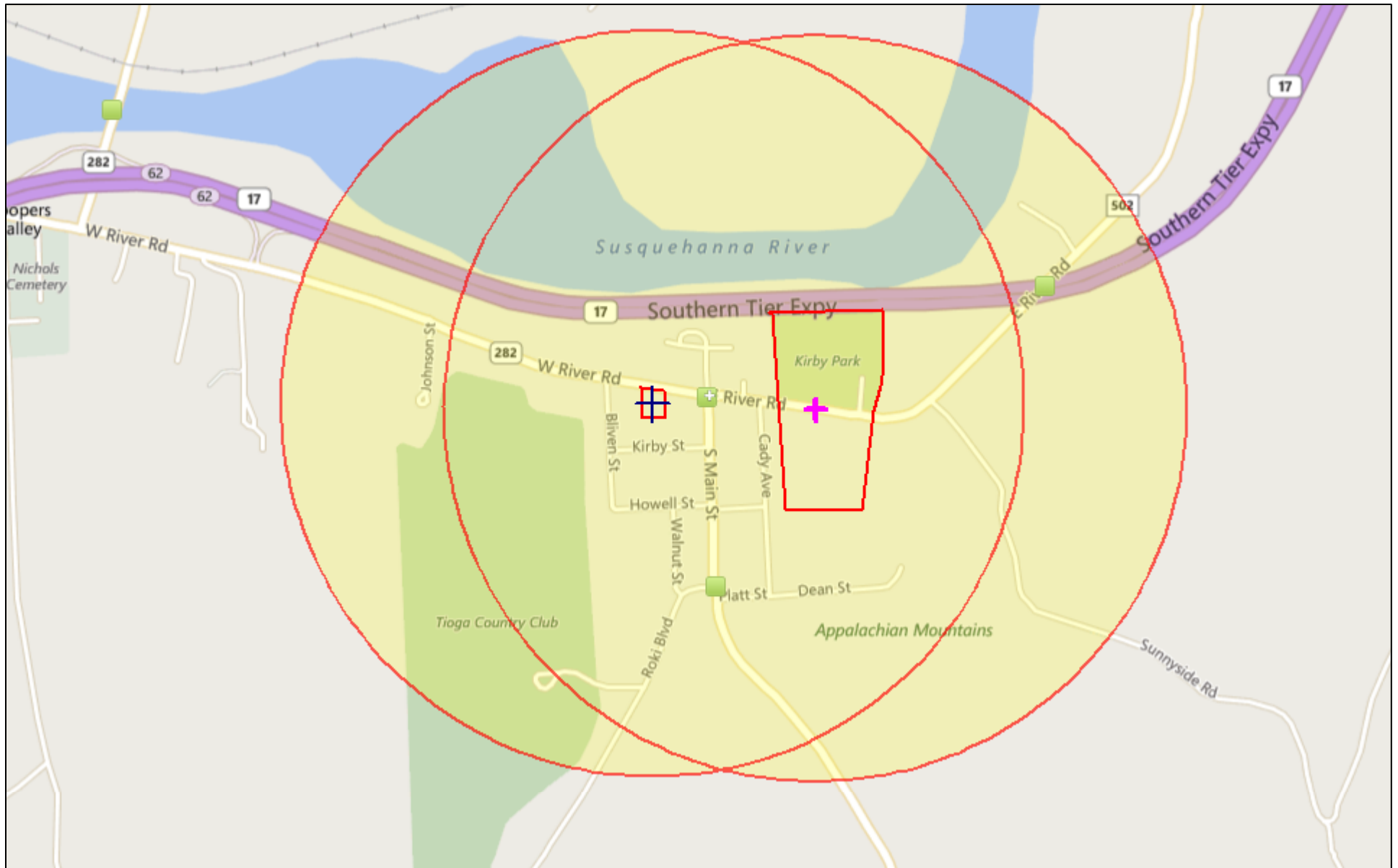
HUD Environmental Report Maps









HUD Environmental Report Maps

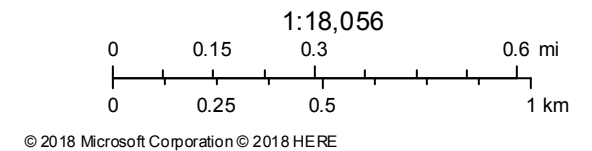


The Village of Nichols: Recreation Improvements Project



May 7, 2018

-  Project 4
-  RCRAINFO (clustered)
-  Search Result (point)
-  Buffer Area
-  Project 2
-  Project 1



Environmental Reports

NYSDEC Reports for Spills, Environmental
Remediation Sites, or Bulk Storage Sites Located
on, or within close proximity to, the Project Sites



Spill Incidents Database Search Results

Record Count: 26 Rows: 1 to 26

[Export XLS](#)

[Export CSV](#)

	Spill Number	Date Spill Reported	Spill Name	County	City/Town	Address
1.	8701700	05/31/1987	NICHOLS ONE STOP	Tioga	NICHOLS	RIVER AND MAIN STREETS
2.	8903924	07/17/1989	MITCH RAMSEY	Tioga	NICHOLS (T)	EASR RIVER RD.
3.	9102867	01/03/1991	PERC - NICHOLS	Tioga	NICHOLS	RIVER RD.
4.	9300269	04/05/1993	HAAHR RESIDENCE	Tioga	NICHOLS	56 WEST RIVER
5.	9810826	11/27/1998	TIOGA PARK	Tioga	NICHOLS	RIVER ROAD
6.	0002315	05/24/2000	PL 2 - LN 3746	Tioga	NICHOLS	RIVER ROAD
7.	0002708	06/03/2000	DANDY MINI MART	Tioga	NICHOLS	820 WEST RIVER RD
8.	0205114	08/14/2002	EAST RIVER ROAD	Tioga	NICHOLS	EAST RIVER ROAD
9.	0310541	12/12/2003	VILLAGE AUTO SALES	Tioga	NICHOLS	145 WEST RIVER ROAD
10.	0310602	12/13/2003	VILLAGE AUTO SALES	Tioga	NICHOLS	145 WEST RIVER ROAD
11.	0312493	02/10/2004	NYSEG - LINE236 - POLE 7	Tioga	NICHOLS	MAIN & RIVER ROAD
12.	0485620	03/04/2005	PHELAN RESIDENCE	Tioga	NICHOLS	6584 RIVER ROAD
13.	0651050	07/06/2006	NELS ROUGHT	Tioga	NICHOLS	1566 WEST RIVER ROAD
14.	0613868	03/27/2007	DANDEE TRUCK STOP	Tioga	NICHOLS	814 WEST RIVER ROAD
15.	0808787	11/04/2008	TIOGA DOWNS RACE TRACK	Tioga	NICHOLS	2384 WEST RIVER RD
16.	1000317	04/06/2010	SOPRANO'S	Tioga	NICHOLS	543 WEST RIVER RD.
17.	1107920	09/15/2011	SCRIBNER (TAMMY) RESIDENCE	Tioga	NICHOLS	2148 WEST RIVER ROAD
18.	1108115	09/15/2011	MILLS (TIMOTHY) RESIDENCE	Tioga	NICHOLS	2243-3 WEST RIVER ROAD
19.	1108117	09/15/2011	FRANK (ARTHUR) RESIDENCE	Tioga	NICHOLS	2571 WEST RIVER ROAD
	1108902					6111 WEST

20.		10/14/2011	PRIVATE RESIDENCE	Tioga	NICHOLS	RIVER RD
21.	1206490	10/01/2012	PVT DWELLING	Tioga	NICHOLS	3124 EAST RIVER RD
22.	1206774	10/09/2012	TOWN OF NICHOLS	Tioga	NICHOLS	54 EAST RIVER RD
23.	1304774	08/01/2013	DANDY MINI MART GAS STATION	Tioga	NICHOLS	814 WEST RIVER RD
24.	1502469	06/04/2015	STATE BOAT LAUNCH	Tioga	NICHOLS	WEST RIVER RD
25.	1510167	01/13/2016	TOWN OF NICHOLS HIGHWAY DEPARTMENT	Tioga	NICHOLS	742 EAST RIVER RD
26.	1704247	07/31/2017	PARKING LOT - HOME	Tioga	NICHOLS	543 WEST RIVER RD

Refine This Search



Spill Incidents Database Search Results

Record Count: 3 Rows: 1 to 3

[Export XLS](#) [Export CSV](#)

	Spill Number	Date Spill Reported	Spill Name	County	City/Town	Address
1.	<input type="text" value="0002107"/>	05/19/2000	POLE #6 LINE 239	Tioga	NICHOLS	CADY AVENUE
2.	<input type="text" value="0513100"/>	02/13/2006	NOE RESIDENCE	Tioga	NICHOLS	42 CADY AVE
3.	<input type="text" value="0907365"/>	09/29/2009	MANUEL RESIDENCE	Tioga	NICHOLS	263 CADY AVENUE

[Refine This Search](#)



Spill Incidents Database Search Results

Record Count: 2 Rows: 1 to 2

[Export XLS](#) [Export CSV](#)

	Spill Number	Date Spill Reported	Spill Name	County	City/Town	Address
1.	9707113	09/16/1997	HALL RESIDENCE	Tioga	NICHOLS	163 BLIVEN ST
2.	1108163	09/26/2011	BOWMAN RESIDENCE	Tioga	NICHOLS	133 BLIVEN ST

[Refine This Search](#)



Spill Incidents Database Search Results

Record Count: 5 Rows: 1 to 5

[Export XLS](#) [Export CSV](#)

	Spill Number	Date Spill Reported	Spill Name	County	City/Town	Address
1.	8701700	05/31/1987	NICHOLS ONE STOP	Tioga	NICHOLS	RIVER AND MAIN STREETS
2.	9011185	01/21/1991	AGWAY - NICHOLS	Tioga	NICHOLS	MAIN ST.
3.	0312493	02/10/2004	NYSEG - LINE236 - POLE 7	Tioga	NICHOLS	MAIN & RIVER ROAD
4.	0485212	11/23/2004	NICHOLS FLOOD CONTROL PROJECT	Tioga	NICHOLS	SOUTH MAIN STREET
5.	0503667	06/27/2005	VISSCHER HOME	Tioga	NICHOLS	1400 SOUTH MAIN STREET

[Refine This Search](#)



Spill Incidents Database Search Results

Record Count: 1 Rows: 1 to 1

[Export XLS](#) [Export CSV](#)

	Spill Number	Date Spill Reported	Spill Name	County	City/Town	Address
1.	0650983	08/02/2006	ANDREW SILVANIC RESIDENCE	Tioga	NICHOLS	193 SUNNY SIDE DR

[Refine This Search](#)



Environmental Site Remediation Database Search Results

Record Count: 1 Rows: 1 to 1

[Export XLS](#) [Export CSV](#) [Export KML](#)

	Site Code	Site Name	Program	Site Class	County	City/town	Address
1	754014	South Main Street Dry Cleaners	HW	N	Tioga	Nichols	37 South Main Street

[Refine This Search](#)



Spill Incidents Database Search Results

Record Count: 1 Rows: 1 to 1

Export XLS

Export CSV

	Spill Number	Date Spill Reported	Spill Name	County	City/Town	Address
1.	0205929	09/08/2002	VESTAL RESIDENCE	Tioga	NICHOLS	15 WALNUT ST

Refine This Search



Department of
Environmental
Conservation

Environmental Site Remediation Database Search Details

Site Record

Administrative Information

Site Name: South Main Street Dry Cleaners

Site Code: 754014

Program: State Superfund Program

Classification: N *

EPA ID Number:

Location

DEC Region: 7

Address: 37 South Main Street

City: Nichols Zip: 13812

County: Tioga

Latitude: 42.01958801

Longitude: -76.36782013

Site Type:

Estimated Size: 0.25 Acres

Site Owner(s) and Operator(s)

Current Owner Name: MR. MICHAEL AMATO

Current Owner(s) Address: RD#2 BOX 134
ROME, PA, 18837

Current Owner Name: Michael Amato

Current Owner(s) Address: RD#2 BOX 134
ROME, PA, 18837

Owner(s) during disposal: Unknown

Site Description

The cleaning solvent tetrachloroethylene (PCE or "perc.") was used in a dry cleaning machine housed in a small laundromat located at 37 South Main Street in the middle of the Village of Nichols. After it was used, the spent PCE went into an on-site dry well located behind the laundromat. The PCE eventually leaked into the groundwater beneath the property and

contaminated it. The laundromat closed in 1968, however the total duration of disposal is unknown. The presence of PCE in the groundwater was first discovered in 1990 during a groundwater sampling event. At that time groundwater sampling was required to evaluate the extent of leakage from an underground gasoline tank at a Convenient Mart/gas station located next door to the old laundromat. The maximum concentration of PCE found during the sampling was 220 ppb. A Preliminary Site Assessment (PSA) was completed in 1997. The PSA helped delineate the contaminant source and plume. It also identified other properties on South Main Street that had PCE contamination at low levels. Three of these properties are private residences and the fourth is a small restaurant. Two private homeowner wells had PCE levels of 3.5 ppb and 1.0 ppb respectively. (The public drinking water supply standard is 5 ppb). Evaluation of the groundwater data showed that there was a low level contaminant plume moving toward a public water supply well located less than 1500 feet downgradient of the original source area at 37 South Main Street. In June of 2000, another round of groundwater sampling and collection of one soil sample from a dry well, suspected to be the source area, was done. Analysis shows that the PCE contaminant levels in the plume have diminished to levels below groundwater standards for PCE in all but one location which is at 18 ppb. No other VOCs were detected. The soil sample results were non-detect, suggesting a source of contamination no longer exists. A "No Further Action" ROD was signed in March, 2002, recommending decommissioning of the monitoring wells and that the site be de-listed from the Registry.

Site Environmental Assessment

There are no remaining environmental problems associated with the disposal of hazardous waste at this site.

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

For more Information: [E-mail Us](#)

[Return To Results](#)



Bulk Storage Database Search Details

Next Site

Last Site

Facility Information

Site No.: 7-006858
Status: Unregulated/Closed
Expiration Date: 07/01/1991
Site Type: PBS
Facility Type: Unknown
Site Name: GREAT AMERICAN #485
Address: RIVER & CADY STREET
Locality: NICHOLS
State: NY
Zipcode: 13812
County: Tioga

Facility(Property) Owner(s) Information

Facility Owner: HARRIS ENTERPRISES INC
PO BOX 66 ROSS CORNERS . VESTAL , NY. 13850
Mail Contact: HARRIS ENTERPRISES INC
PO BOX 66 ROSS CORNERS . VESTAL , NY. 13850

Facility Operator

Facility Operator: GREAT AMERICAN #485

Tank Information

1 Tanks Found

Tank No	Tank Location	Status	Capacity (Gal.)	
001	Underground including vaulted with no access for inspection	Closed Prior to 03/1991	4000	
				Return To Results
Refine This Search				



Bulk Storage Database Search Details

First Site

Previous Site

Next Site

Last Site

Facility Information

Site No.: 7-129151
Status: Unregulated/Closed
Expiration Date: 06/05/1992
Site Type: PBS
Facility Type: Unknown
Site Name: NICHOLS ONE STOP
Address: CORNER RIVER & MAIN ST
Locality: NICHOLS
State: NY
Zipcode: 13812
County: Tioga

Facility(Property) Owner(s) Information

Facility Owner: CHARLES & GLORIA BURGESS
RD 2 BOX 16A . NICHOLS , NY. 13812
Mail Contact: CHARLES & GLORIA BURGESS
RD 2 BOX 16A . NICHOLS , NY. 13812

Facility Operator

Facility Operator: NICHOLS ONE STOP

Tank Information

5 Tanks Found

Tank No	Tank Location	Status	Capacity (Gal.)
101	Underground including vaulted with no access for inspection	Closed Prior to 03/1991	3000
201	Underground including vaulted with no access for inspection	Closed Prior to 03/1991	3000
301	Underground including vaulted with no access for inspection	Closed Prior to 03/1991	3000
401	Underground including vaulted with no access for inspection	Closed Prior to 03/1991	3000
501	Underground including vaulted with no access for inspection	In Service	1000



Spill Incidents Database Search Details

Spill Record

Administrative Information

DEC Region: 7

Spill Number: 8701700

Spill Date/Time

Spill Date: 05/31/1987 **Spill Time:** 12:00:00 PM

Call Received Date: 05/31/1987 **Call Received Time:** 01:59:00 PM

Location

Spill Name: NICHOLS ONE STOP

Address: RIVER AND MAIN STREETS

City: NICHOLS **County:** Tioga

Spill Description

Material Spilled **Amount Spilled** **Resource Affected**

gasoline 400 Gal. Groundwater

Cause: Tank Test Failure

Source: Gasoline Station or other PBS Facility

Waterbody:

Record Close

Date Spill Closed: 12/01/1995

"Date Spill Closed" means the date the spill case was closed by the case manager in the Department of Environmental Conservation (the Department). The spill case was closed because either; a) the records and data submitted indicate that the necessary cleanup and removal actions have been completed and no further remedial activities are necessary, or b) the case was closed for administrative reasons (e.g., multiple reports of a single spill consolidated into a single spill number). The Department however reserves the right to require additional remedial work in relation to the spill, if in the future it determines that further action is necessary.

If you have questions about this reported incident, please contact the [Regional Office](#) where the incident occurred.

[Return To Results](#)

[Refine This Search](#)



Bulk Storage Database Search Details

First Site

Previous Site

Next Site

Last Site

Facility Information

Site No.: 7-422096
Status: Unregulated/Closed
Expiration Date: 07/14/1992
Site Type: PBS
Facility Type: Unknown
Site Name: NICHOLS FIRE STATION
Address: RIVER STREET
Locality: NICHOLS
State: NY
Zipcode: 13812
County: Tioga

Facility(Property) Owner(s) Information

Facility Owner: NICHOLS JOINT FIRE DISTRICT
RIVER STREET . NICHOLS , NY. 13812
Mail Contact: NICHOLS JOINT FIRE DISTRICT
RIVER STREET . NICHOLS , NY. 13812

Facility Operator

Facility Operator: NICHOLS FIRE STATION

Tank Information

3 Tanks Found

Tank No	Tank Location	Status	Capacity (Gal.)
001	Underground including vaulted with no access for inspection	Closed - Removed	1000
002	Underground including vaulted with no access for inspection	Closed - Removed	1000
3	Aboveground - in contact with soil	In Service	1000

Refine This Search

Return To Results

Attachment 6

Section 7 Documents:

NYSDEC Significant Natural Communities and Rare Plants or
Animals map
NHP Documentation
USFWS Determination Letter

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

April 19, 2018

Alicia Shultz
Governor's Office of Storm Recovery
38-40 State Street
Albany, NY 12207

Re: Village of Nichols Recreation Improvements and Creek Stabilization Project
County: Tioga Town/City: Nichols

Dear Ms. Shultz:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

We have no records of rare or state-listed animals or plants, or significant natural communities at the project site or in its immediate vicinity.

The absence of data does not necessarily mean that rare or state-listed species, significant natural communities, or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information that indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other resources may be required to fully assess impacts on biological resources.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities, and other significant habitats maintained in the Natural Heritage database. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 7 Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,



Nicholas Conrad
Information Resources Coordinator
New York Natural Heritage Program





**Governor's Office of
Storm Recovery**

ANDREW M. CUOMO
Governor

May 22, 2018

Robyn A. Niver
Endangered Species Biologist,
U.S. Fish & Wildlife Service
New York Field Office
3817 Luker Rd.
Cortland, NY 13045

VIA EMAIL: robyn_niver@fws.gov

**Re: ESA/MBTA/BGEPA consultation for the Village of Nichols: Recreation Improvements Project,
Village of Nichols, Tioga County, New York**

Dear Ms. Niver:

The Governor's Office of Storm Recovery (GOSR), operating under the auspices of the New York State Homes and Community Renewal's (NYSHCR) Housing Trust Fund Corporation, was established to aid the statewide recovery of disaster-affected communities in New York State. GOSR is administering a U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant for Disaster Recovery (CDBG-DR), including the New York Rising Community Reconstruction (NYRCR) Program. The environmental review for projects funded under the NYRCR Program are processed on a case by case basis in accordance with the United States Fish and Wildlife Service (USFWS) New York Field Office's online project review process. The project described herein was analyzed pursuant to Section 7 of the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d); and the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712; Ch. 128; July 13, 1918; 40 Stat 755).

As discussed below, we have reviewed the project and found that the proposed project does not jeopardize the continued existence of ESA species or destroy or adversely modify their critical habitat. We are submitting project materials to document the determination made by GOSR that the proposed project may affect the Northern Long-eared Bat (NLEB), but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule. If the USFWS does not respond within 30 days from submittal of this document, then GOSR may presume that its determinations are informed by the best available information and its project responsibilities under Section 7 with respect to the NLEB are fulfilled through the USFWS January 5, 2016, Programmatic Biological Opinion (BO).

1.0 PROJECT DESCRIPTION

The Village of Nichols: Recreation Improvements Project (the “Project”) involves construction at two locations: Kirby Park at River Street (NYS Route 502), Village of Nichols, Town of Nichols, Tioga County New York 13812, and at a Village of Nichols owned parcel at West River Road (NYS Route 282), Village of Nichols, Town of Nichols, Tioga County, New York 13812 (see Project location maps in **Appendix A**, note the Creek Stabilization Project is not included in this submission and will be reviewed separately). The Village of Nichols is requesting CDBG-DR funding for recreational improvements to Kirby Park and the creation of a new village park, Veterans Memorial Park. During Tropical Storm Lee, the Wappasening Creek rose over its banks and flooded 90% of Kirby Park. The water washed away goal posts, caused structural damage to park facilities and left the grounds covered in mud and debris. The Project will provide an economic benefit by increasing tourism and improving the residents’ overall quality of life by increasing active recreation.

The recreational improvements to Kirby Park will include installing new park sign(s) and lighting, multi-use trails, a pedestrian walkway, a children's play area, portable toilet facilities, resiliency landscaping, and a trail connection to the edge of Wappasening Creek; upgrading Kirby Park’s perimeter and entrance; improving the southern parcel of Kirby Park; repositioning the practice baseball field, pavilion, and basketball court; and increasing handicapped accessible parking.

The Project will also involve the creation of a new village park, Veterans Memorial Park, on another parcel of property located in the Village of Nichols. The Veterans Memorial Park will be a small outdoor space that conserves the existing landscape and supports the surrounding landscape and local wildlife. The new public park area will improve the overall fitness of the Village of Nichols. The creation of the park will involve the installation of a landscaped park entrance with a park sign along West River Road, benches, and a five to six foot-wide paved park walkway along a loop configuration that will be approximately 65 feet long. Additional amenities will include lighting, benches, a shade structure or gazebo and a Veteran’s Memorial with flagpole(s). The Park site will be limited to the Village-owned parcel due to the cost of acquiring the private property parcel which would have allowed the connection of the space south to Kirby Street. A safe and feasible pedestrian link along West River Road from the Village to the park entrance is also proposed, if funding allows.

Ground disturbance will be caused by the installation of footings for the new pavilion location, a park sign, and electrical conduit; and relocation of the children’s play area. Some surficial disturbances will occur for the installation of pedestrian trails and new parking areas. Current utilities near the bandstand might need to be relocated to a better location. The parcels are currently owned by the Village of Nichols and contain NYSDEC, NYSDOT and Water Well easements.

2.0 ENDANGERED SPECIES ACT, MIGRATORY BIRD TREATY ACT, AND BALD AND GOLDEN EAGLE PROTECTION ACT PROTECTED SPECIES

The USFWS New York Ecological Services Field Office was contacted through the Information, Planning, and Conservation System (IPaC) regarding the potential presence of species under the jurisdiction of the USFWS within the Project area. According to the USFWS Official Species List, there is one (1) federally threatened species (northern long-eared bat) that might potentially occur at the proposed Project location (**Appendix B**). According to the USFWS Official Species List, there is no critical habitat for federally protected threatened and endangered species in the Project area.

The IPaC Resource List (included in **Appendix C**) obtained from the USFWS for the Project area indicates that there are 10 migratory bird species of concern protected under the Migratory Bird Treaty Act and/or the Bald and Golden Eagle Protection Act that could potentially be affected by the proposed Project. There

are no known breeding bald eagles within the vicinity of the Project area; therefore, no adverse impacts to breeding bald eagles are expected as a result of the Project. The primary nesting season for migratory birds is early April to mid-July. Precautions will be used to protect any migratory birds that may be found in or near the Project area. Such precautions include minimizing construction noise to the extent practicable, using care to avoid birds when operating machinery or vehicles near birds, and general contractor awareness of potential bird presence. We anticipate that these measures should avoid any take of migratory birds.

A description of the one (1) federally threatened species identified by USFWS, and an evaluation of the likelihood that this species occurs within the Project area and would be affected by the Project is provided below. The species description is summarized from the NYSDEC fact sheet and USFWS species profile.

2.1 NORTHERN LONG-EARED BAT

The northern long-eared bat (NLEB) is a medium-sized bat that is distinguished by its long ears, particularly as compared to other bats in its genus. The northern long-eared bat is found across much of the eastern and north central United States. White-nose syndrome is the predominant threat to this bat, especially throughout the northeast where the species has declined by up to 99 percent from pre-white-nose syndrome levels at many hibernation sites. During summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees, using tree species based on suitability to retain bark or provide cavities or crevices. They emerge at dusk to fly through the understory of forested hillsides and ridges feeding on moths, flies, leafhoppers, caddisflies, and beetles or by gleaning insects from vegetation and water surfaces. Northern long-eared bats spend winter hibernating in caves and mines. This bat prefers habitat with abundant stands of trees with sufficient bark crevices and snags for roosting habitat.

Suitable summer habitat for NLEBs is present within the vicinity of the Project area. The Project may involve the removal trees in a developed area that is comprised of protected park land, residential properties, commercial properties. However, a NYSDEC jurisdictional inquiry response states that the “project area does not occur in the immediate vicinity of known occurrences of rare or state-listed bat species,” which includes the NLEB (**Appendix D**). It is recommended that tree removal is performed during the winter season (November 1 – March 31).

The Project will not disturb hibernating NLEBs in a known hibernaculum, alter the entrance or interior environment of a known hibernaculum, remove any trees within 0.25 miles of a known hibernaculum, or cut or destroy known occupied maternity roost trees or any other trees within a 150-foot radius from the maternity roost tree. Additionally, GOSR recommends that tree cutting occur between November 1 and March 31, but this may not be feasible due to construction schedules which have not been finalized. Therefore, as indicated in **Appendix E**, GOSR has determined that the proposed Project may affect the NLEB, but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule.

3.0 CONCLUSION

Project implementation would be conditioned upon issuance of applicable federal and state permits and would be constructed in accordance with federal and state permit conditions. The Project would not jeopardize the continued existence of ESA species or destroy or adversely modify their critical habitat.

If the USFWS does not respond within 30 days from submittal of this form, GOSR may presume that its determination is informed by the best available information and that its project responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS January 5, 2016, “Programmatic Biological Opinion (BO) on the Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.”

GOSR understands that the USFWS presumes that all activities are implemented as described herein. GOSR will promptly report any departures from the described activities to the USFWS. GOSR will provide the USFWS with the results of any surveys conducted for the NLEB. Involved parties will promptly notify the USFWS upon finding a dead, injured, or sick NLEB.

For additional information, please contact me by email at Alicia.Shultz@nyshcr.org or by telephone at (518) 474-0647.

Sincerely,



Alicia Shultz
Senior Environmental Scientist
New York State Homes & Community Renewal
38-40 State Street, 408N
Hampton Plaza
Albany, NY 12207

Attachments:

- Appendix A:** Project Location Maps
(Street Map, USGS Topographic Map, and Aerial Map)
- Appendix B:** USFWS Official Species List
- Appendix C:** USFWS IPaC Resource List
- Appendix D:** NYSDEC Jurisdictional Inquiry Response (March 13, 2018)
- Appendix E:** NLEB 4(d) Rule Streamlined Consultation Form

Appendix A

Location Map



Legend

Approximate Project Area

- Kirby Park
- Proposed Veterans Memorial Park

Nichols Recreation Improvements Project
Village of Nichols
Town of Nichols
Tioga County, New York

Location Map



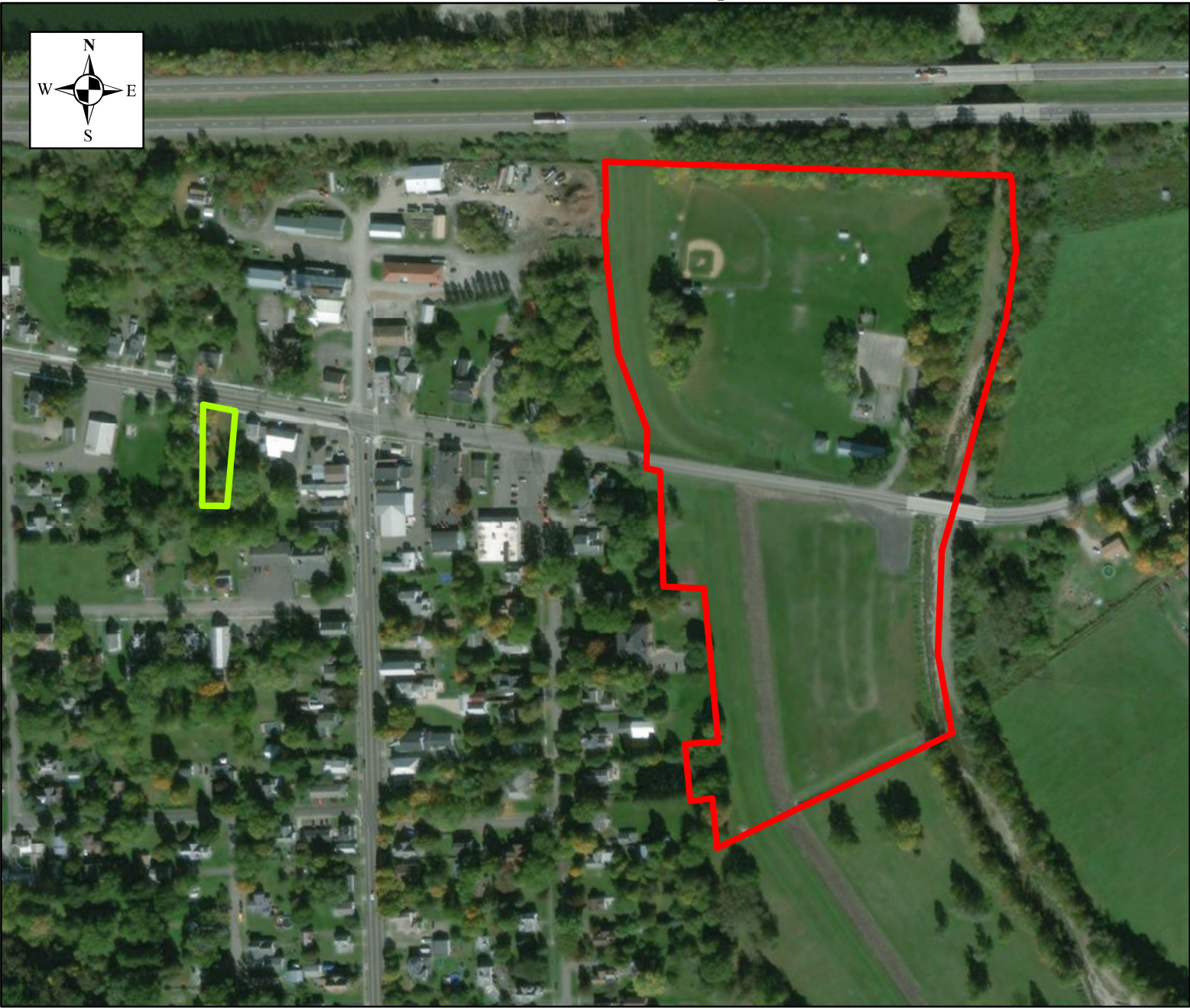
0 235 470 940 Feet
1:4,000

Approximate Project Area

- Kirby Park
- Proposed Veterans Memorial Park

Nichols Recreation Improvements Project
Village of Nichols
Town of Nichols
Tioga County, New York

Location Map



0 235 470 940 Feet
1:4,000

Approximate Project Area

- Kirby Park
- Proposed Veterans Memorial Park

Nichols Recreation Improvements Project
Village of Nichols
Town of Nichols
Tioga County, New York

Appendix B



United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office

3817 Luker Road
Cortland, NY 13045-9385

Phone: (607) 753-9334 Fax: (607) 753-9699

<http://www.fws.gov/northeast/nyfo/es/section7.htm>



In Reply Refer To:

March 22, 2018

Consultation Code: 05E1NY00-2018-SLI-1520

Event Code: 05E1NY00-2018-E-04658

Project Name: Nichols Recreation Improvements and Creek Stabilization Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: <http://www.fws.gov/northeast/nyfo/es/section7.htm>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (<http://www.fws.gov/windenergy/>)

[eagle_guidance.html](#)). Additionally, wind energy projects should follow the Services wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office

3817 Luker Road

Cortland, NY 13045-9385

(607) 753-9334

Project Summary

Consultation Code: 05E1NY00-2018-SLI-1520

Event Code: 05E1NY00-2018-E-04658

Project Name: Nichols Recreation Improvements and Creek Stabilization Project

Project Type: Federal Grant / Loan Related

Project Description: Recreation improvements and creek stabilization

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/42.02139834214459N76.36334928918208W>



Counties: Tioga, NY

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix C

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

Last login March 22, 2018 08:34 AM MDT

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

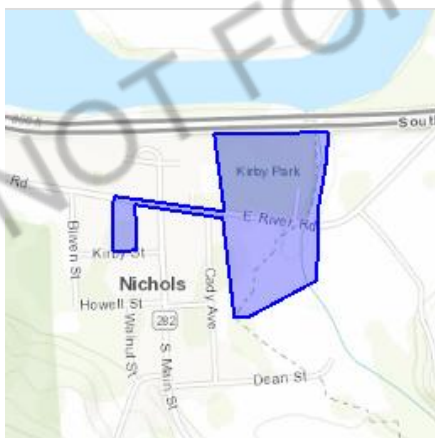
Project information

NAME

Nichols Recreation Improvements and Creek Stabilization Project

LOCATION

Tioga County, New York

**DESCRIPTION**

Recreation

improvements and creek stabilization

Local office

New York Ecological Services Field Office

☎ (607) 753-9334

📠 (607) 753-9699

3817 Luker Road

Cortland, NY 13045-9385

<http://www.fws.gov/northeast/nyfo/es/section7.htm>

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species

¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please [contact NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
 2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds
<http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see maps of where birders and the general public have sighted birds in and around your project area, visit E-bird tools such as the [E-bird data mapping tool](#) (search for the name of a bird on your list to see specific locations where that bird has been reported to occur within your project area over a certain timeframe) and the [E-bird Explore Data Tool](#) (perform a query to see a list of all birds sighted in your county or region and within a certain timeframe). For projects that occur

off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Sep 1 to Aug 31

Black-billed Cuckoo *Coccyzus erythrophthalmus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9399>

Breeds May 15 to Oct 10

Bobolink *Dolichonyx oryzivorus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 20 to Jul 31

Cerulean Warbler *Dendroica cerulea*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/2974>

Breeds Apr 27 to Jul 20

Eastern Whip-poor-will *Antrostomus vociferus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Aug 20

Golden Eagle *Aquila chrysaetos*

Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Prairie Warbler *Dendroica discolor*

Breeds May 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Rusty Blackbird *Euphagus carolinus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wood Thrush *Hylocichla mustelina*

Breeds May 10 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Yellow-bellied Sapsucker *sphyrapicus varius*

Breeds May 10 to Jul 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/8792>

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week

of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

- The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

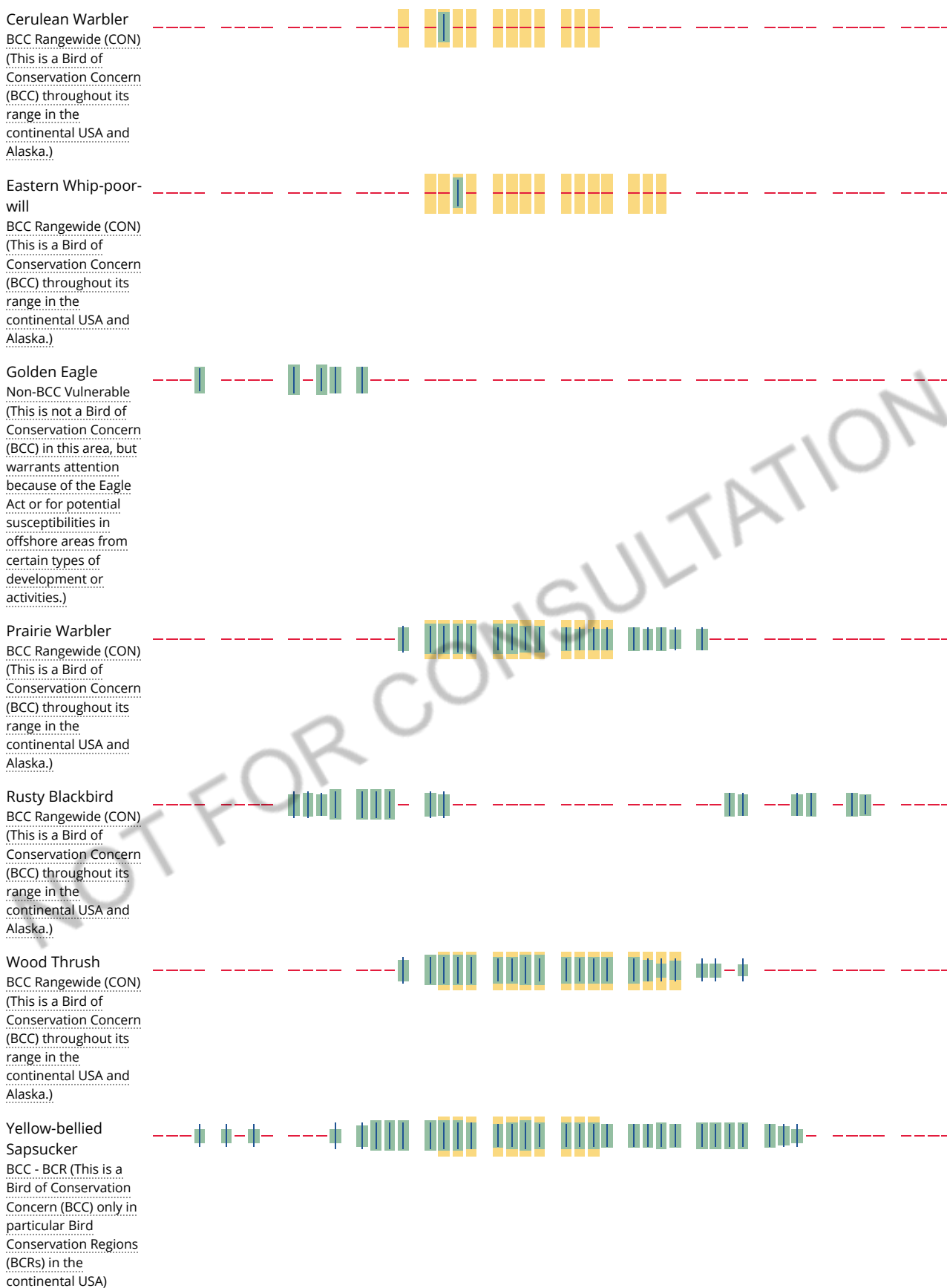
No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the counties which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird entry on your migratory bird species list indicates a breeding season, it is probable that the bird breeds in your project's counties at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the BGEPA should such impacts occur.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

[R2UBH](#)

A full description for each wetland code can be found at the National Wetlands Inventory website:

<https://ecos.fws.gov/ipac/wetlands/decoder>

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix D

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife

625 Broadway, 5th Floor, Albany, NY 12233-4750

P: (518) 402-8924 | F: (518) 402-8925

www.dec.ny.gov

March 13, 2018

Ms. Alicia Shultz
38-40 State Street
Hampton Plaza
Albany, NY 12207

RE: Recreation Improvements and Creek Stabilization Project
Town of Nichols, Tioga County, NY

Dear Ms. Shultz,

We received your jurisdictional inquiry request for the Recreation Improvements and Creek Stabilization Project located at Kirby Park and Wappasening Creek, Nichols, Tioga County. Owego Municipal Facility Project in the Village of Owego, Tioga County. Based on the NYS Resources map created by Amanda Bailey on 3/13/2018 (attached), we have the following comments on the project:

STATE-LISTED SPECIES

All threatened or endangered species are subject to regulation under Article 11, Title 5 of the Environmental Conservation Law and a permit is required for a taking of that species pursuant to 6 NYCRR Part 182. Besides death of individuals, taking includes harassment, interference with essential behaviors, and adverse modification of habitat. **If the site is in close proximity to known occurrences of state-protected species, additional information on the proposal will be required by the appropriate regional office for a determination on the need for an incidental take permit.**

We have reviewed the available information in the New York Natural Heritage Program database on known occurrences of rare or state-listed bat species. This project area does not occur in the immediate vicinity of known occurrences of rare or state-listed bat species (see NYS Resources map, attached). The major concern for bat species in relation to this project would be the destruction of potential roosts and roosting habitat that may occur if tree clearing is required. Because this project does not take place within known occupied habitat, there are no restrictions on cutting.

The absence of data does not necessarily mean that any rare or state-listed bat species do not exist on or adjacent to the proposed site. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence of all rare or state-listed bat species. To avoid potential take, DEC *recommends* that any tree clearing be conducted between November 1 and March 31, when bats are inactive in hibernation sites. DEC also recommends that all snag and cavity trees remain uncut, unless their removal is necessary for protection of human life and property. For more information, please refer to the DEC Northern long-eared bat protective measures guidance, available at: <http://www.dec.ny.gov/animals/106090.html>.



Department of
Environmental
Conservation

This document is only intended to address state-listed bat species. Other rare or state-listed species, natural communities or other significant habitats may exist within the project area and would require additional review. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

OTHER

USFWS Cortland Field Office

If a federal agency is involved in the project, or if federal funding is used, there are additional considerations for federally listed species. Section 7(a)(1) of the Endangered Species Act requires federal agencies to use their authorities to conserve listed species. Section 7(a)(2) requires federal agencies to consult on any action that may affect a listed species.

Other permits from this Department or other agencies may be required for projects conducted on this property now or in the future. Also, regulations applicable to the location subject to this determination occasionally are revised and you should, therefore, verify the need for permits if your project is delayed or postponed. This determination regarding the need for permits will remain effective for a maximum of one year unless you are otherwise notified. Applications may be downloaded from our website at www.dec.ny.gov under "Programs" then "Division of Environmental Permits."

Please contact this office if you have questions regarding the above information. Thank you.

Sincerely,

A handwritten signature in black ink that reads "Amanda Bailey". The script is cursive and fluid, with the first name "Amanda" and last name "Bailey" clearly distinguishable.

Amanda Bailey
Division of Fish and Wildlife
Amanda.bailey@dec.ny.gov
518-402-8859

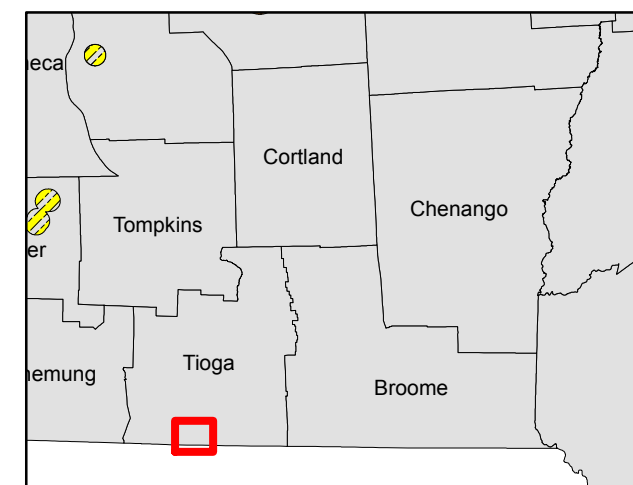
Cc: May O'Malley, NYSDEC Division of Environmental Permits
Andrea Gievers, Environmental Services, Tectonic Engineering



NYS Resources Map

Recreation Improvements and Creek Stabilization Project Town of Nichols, Tioga County


Prepared by AMB on 3/13/2018



 Project area

Bat Occurrences

 Indiana Bat

 Northern Long-eared Bat

Disclaimer: this map was prepared by the NYSDEC using the most current data available. It is deemed accurate but is not guaranteed. NYSDEC is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data. This map may contain information that is considered sensitive and therefore the distribution of this map is strictly prohibited.



**Department of
Environmental
Conservation**

0 0.075 0.15 0.3 0.45 0.6 Miles

1 inch = 1,250 feet

Appendix E

Northern Long-Eared Bat 4(d) Rule Streamlined Consultation Form

Federal agencies should use this form for the optional streamlined consultation framework for the northern long-eared bat (NLEB). This framework allows federal agencies to rely upon the U.S. Fish and Wildlife Service's (USFWS) January 5, 2016, intra-Service Programmatic Biological Opinion (BO) on the final 4(d) rule for the NLEB for section 7(a)(2) compliance by: (1) notifying the USFWS that an action agency will use the streamlined framework; (2) describing the project with sufficient detail to support the required determination; and (3) enabling the USFWS to track effects and determine if reinitiation of consultation is required per 50 CFR 402.16.

This form is not necessary if an agency determines that a proposed action will have no effect to the NLEB or if the USFWS has concurred in writing with an agency's determination that a proposed action may affect, but is not likely to adversely affect the NLEB (i.e., the standard informal consultation process). Actions that may cause prohibited incidental take require separate formal consultation. Providing this information does not address section 7(a)(2) compliance for any other listed species.

Information to Determine 4(d) Rule Compliance:	YES	NO
1. Does the project occur wholly outside of the WNS Zone ¹ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Have you contacted the appropriate agency ² to determine if your project is near known hibernacula or maternity roost trees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Could the project disturb hibernating NLEBs in a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Could the project alter the entrance or interior environment of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Does the project remove any trees within 0.25 miles of a known hibernaculum at any time of year?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Would the project cut or destroy known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree from June 1 through July 31.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

You are eligible to use this form if you have answered yes to question #1 **or** yes to question #2 **and** no to questions 3, 4, 5 and 6. The remainder of the form will be used by the USFWS to track our assumptions in the BO.

Agency and Applicant³: Alicia Shultz
Senior Environmental Scientist
New York State Homes and Community Renewal
38-40 State Street, 408N
Hampton Plaza
Albany NY 12207
(518) 474-0647
Alicia.Shultz@nyshcr.org

Project Name: Village of Nichols: Recreation Improvements Project

Project Location: Project location maps included in Appendix A.

¹ <http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf>

² See <http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html>

³ If applicable - only needed for federal actions with applicants (e.g., for a permit, etc.) who are party to the consultation.

Basic Project Description: Project description described in detail within ESA/MBTA/BGEPA Consultation.

General Project Information	YES	NO
Does the project occur within 0.25 miles of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project occur within 150 feet of a known maternity roost tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project include forest conversion ⁴ ? (if yes, report acreage below)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Estimated total acres of forest conversion	Unknown	
If known, estimated acres ⁵ of forest conversion from April 1 to October 31	Unknown	
If known, estimated acres of forest conversion from June 1 to July 31 ⁶	Unknown	
Does the project include timber harvest? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of timber harvest		
If known, estimated acres of timber harvest from April 1 to October 31		
If known, estimated acres of timber harvest from June 1 to July 31		
Does the project include prescribed fire? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of prescribed fire		
If known, estimated acres of prescribed fire from April 1 to October 31		
If known, estimated acres of prescribed fire from June 1 to July 31		
Does the project install new wind turbines? (if yes, report capacity in MW below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated wind capacity (MW)		

Agency Determination:

By signing this form, the action agency determines that this project may affect the NLEB, but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule.

If the USFWS does not respond within 30 days from submittal of this form, the action agency may presume that its determination is informed by the best available information and that its project responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS January 5, 2016, Programmatic BO. The action agency will update this determination annually for multi-year activities.

The action agency understands that the USFWS presumes that all activities are implemented as described herein. The action agency will promptly report any departures from the described activities to the appropriate USFWS Field Office. The action agency will provide the appropriate USFWS Field Office with the results of any surveys conducted for the NLEB. Involved parties will promptly notify the appropriate USFWS Field Office upon finding a dead, injured, or sick NLEB.

Signature: Alicia Shultz

Date Submitted: May 22, 2018

⁴ Any activity that temporarily or permanently removes suitable forested habitat, including, but not limited to, tree removal from development, energy production and transmission, mining, agriculture, etc. (see page 48 of the BO).

⁵ If the project removes less than 10 trees and the acreage is unknown, report the acreage as less than 0.1 acre.

⁶ If the activity includes tree clearing in June and July, also include those acreages in April to October.

Attachment 7

Agricultural, NCRS, and Zoning Maps

New York State Agricultural Districts Map (2016)

Town of Nichols Agricultural Districts Map (7/30/18)

USDA NRCS Soil Resource Report

USDA NRCS Farmland Classification Report

USDA NRCS Playgrounds Classification Report

USDA NRCS Picnic Areas Classification Report

Town of Nichols Zoning Map

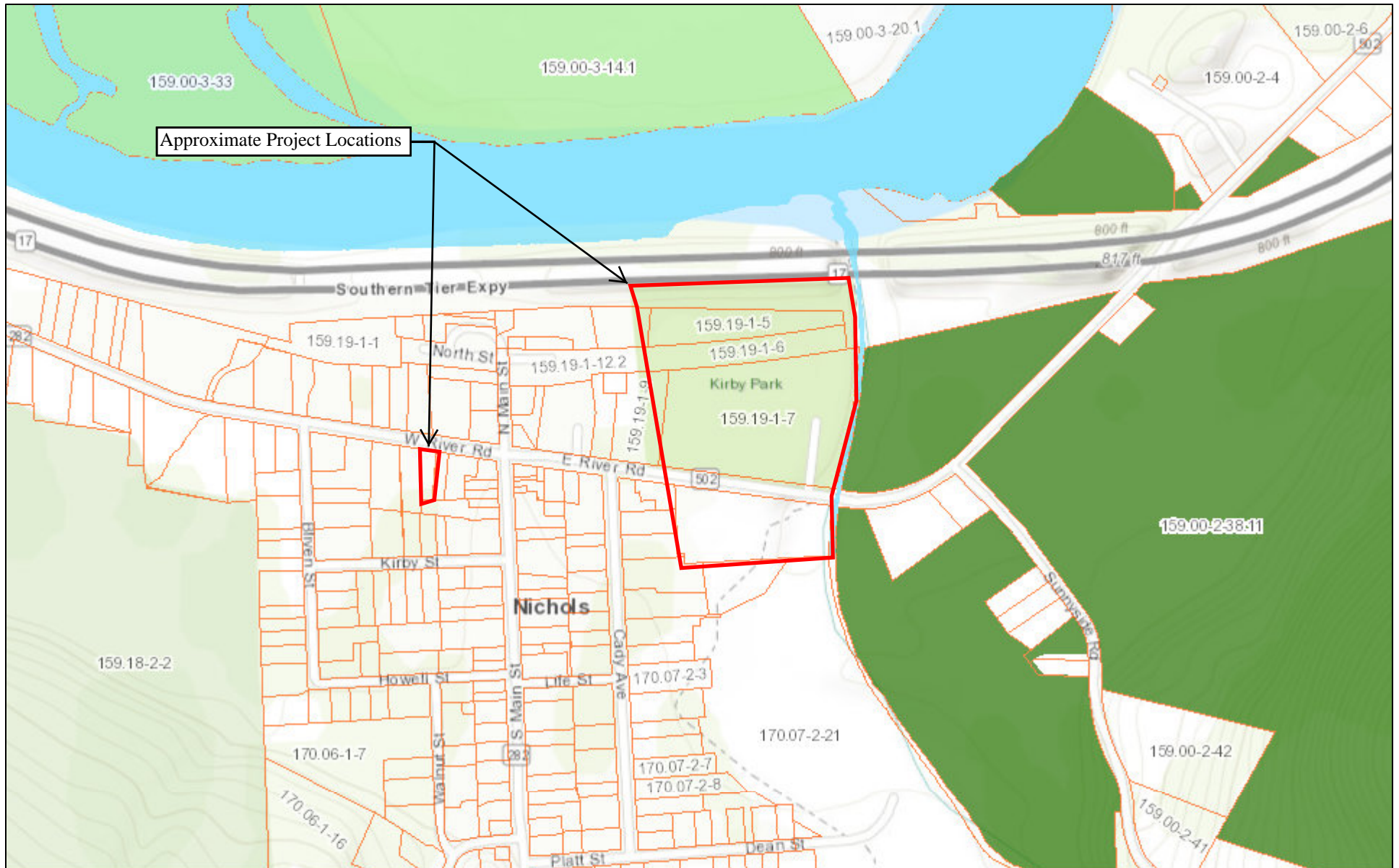
Town of Nichols Agriculture & Farmland Protection Plan (3/13/12)



0 500 1,000 2,000 Feet

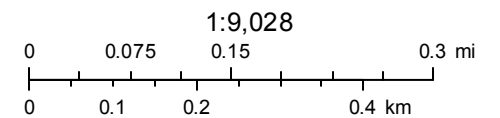
Nichols Recreation Improvements Project
Village of Nichols
Town of Nichols
Tioga County, New York

Town of Nichols Agricultural Districts Map



July 30, 2018

- Susquehanna River
- Owego/Nichols
- Parcel Boundaries
- Spencer
- North Tioga



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri



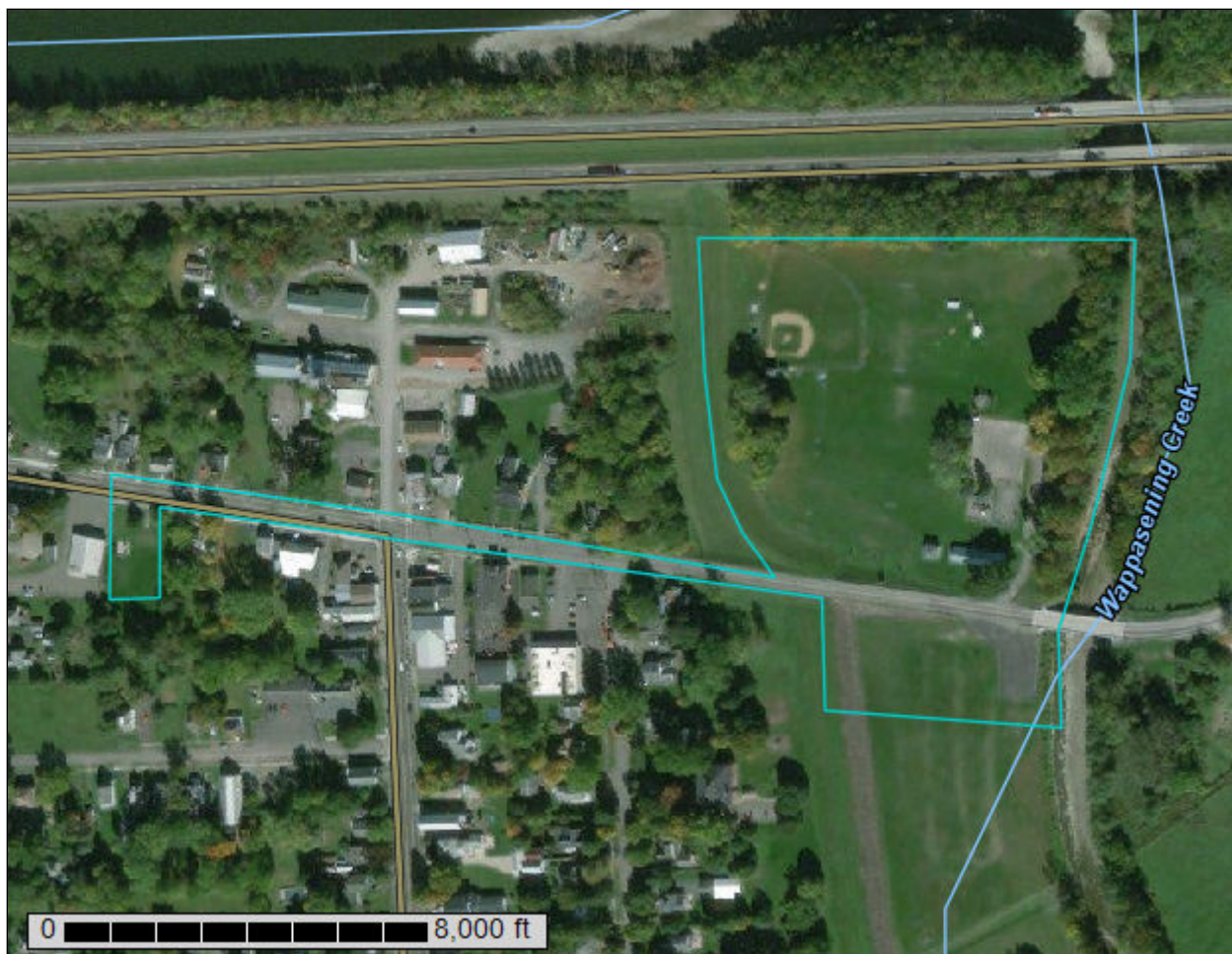
United States
Department of
Agriculture

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 Tioga County, New York



July 30, 2018

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

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

Custom Soil Resource Report

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 (Recreation Improvements Project)




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 1:31,700.

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: Tioga County, New York
Survey Area Data: Version 14, Oct 8, 2017

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

Date(s) aerial images were photographed: May 16, 2009—Nov 6, 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 (Recreation Improvements Project)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
A	Alluvial soils, undifferentiated	3.9	24.2%
Ts	Tioga silt loam	7.8	48.2%
Tsb	Tioga silt loam, high bottom	4.5	27.6%
Totals for Area of Interest		16.3	100.0%

Map Unit Descriptions (Recreation Improvements Project)

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.

Tioga County, New York

A—Alluvial soils, undifferentiated

Map Unit Setting

National map unit symbol: 9xsv
Elevation: 100 to 3,000 feet
Mean annual precipitation: 35 to 38 inches
Mean annual air temperature: 43 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Fluvaquents and similar soils: 40 percent
Udifuvents and similar soils: 40 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fluvaquents

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Alluvium with highly variable texture

Typical profile

H1 - 0 to 5 inches: silt loam
H2 - 5 to 70 inches: very gravelly sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 6.1 inches)

Interpretive groups

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

Description of Udifuvents

Setting

Landform: Flood plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf

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Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Alluvium with a wide range of texture

Typical profile

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

Properties and qualities

Slope: 0 to 3 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 very high (0.06 to 19.98 in/hr)
Depth to water table: About 24 to 72 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Saprists

Percent of map unit: 5 percent
Landform: Marshes, swamps
Hydric soil rating: Yes

Tioga

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

Wayland

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

Middlebury

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

Ts—Tioga silt loam

Map Unit Setting

National map unit symbol: 9xvd
Elevation: 600 to 1,800 feet

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Mean annual precipitation: 35 to 38 inches
Mean annual air temperature: 43 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Tioga

Setting

Landform: Flood plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy alluvium

Typical profile

H1 - 0 to 18 inches: silt loam
H2 - 18 to 36 inches: loam
H3 - 36 to 60 inches: Error

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): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Chenango

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

Middlebury

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

Udifluvents

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

Unadilla

Percent of map unit: 5 percent

Hydric soil rating: No

Tsb—Tioga silt loam, high bottom

Map Unit Setting

National map unit symbol: 9xvf

Elevation: 600 to 1,800 feet

Mean annual precipitation: 35 to 38 inches

Mean annual air temperature: 43 to 48 degrees F

Frost-free period: 100 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Tioga, high bottom, and similar soils: 80 percent

Minor components: 20 percent

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

Description of Tioga, High Bottom

Setting

Landform: Flood plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy alluvium

Typical profile

H1 - 0 to 18 inches: silt loam

H2 - 18 to 36 inches: loam

H3 - 36 to 60 inches: Error

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): Moderately high to high (0.57 to 5.95 in/hr)

Depth to water table: About 36 to 72 inches

Frequency of flooding: Rare

Frequency of ponding: None

Calcium carbonate, maximum in profile: 1 percent

Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 1

Hydrologic Soil Group: A

Custom Soil Resource Report

Hydric soil rating: No

Minor Components

Chenango

Percent of map unit: 5 percent

Hydric soil rating: No

Middlebury

Percent of map unit: 5 percent

Hydric soil rating: No

Udifluvents

Percent of map unit: 5 percent

Hydric soil rating: No

Unadilla

Percent of map unit: 5 percent

Hydric soil rating: No

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Classifications

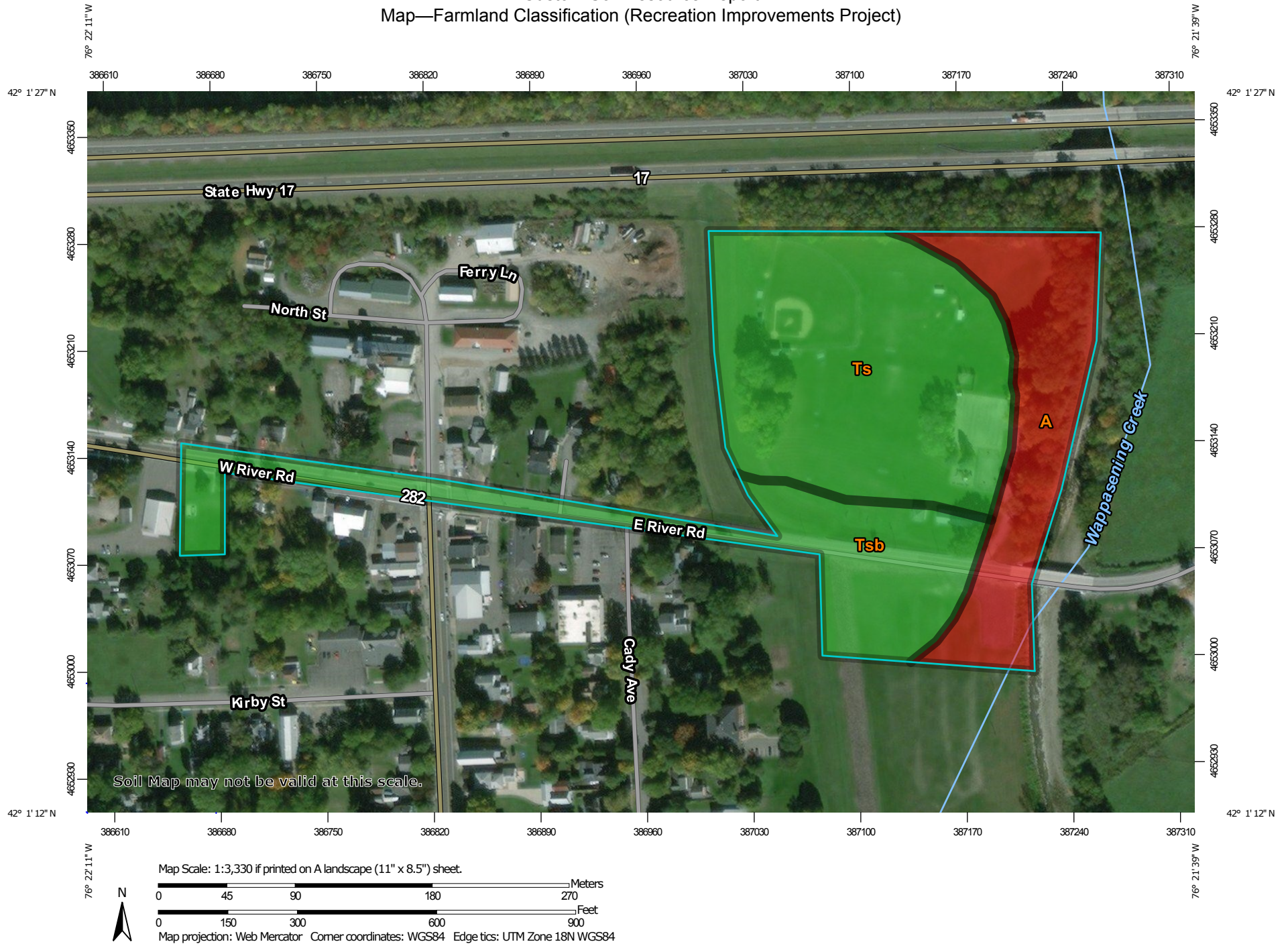
Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Farmland Classification (Recreation Improvements Project)

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Custom Soil Resource Report


Map—Farmland Classification (Recreation Improvements Project)



Custom Soil Resource Report









MAP LEGEND








Area of Interest (AOI)

 Area of Interest (AOI)




Soils








Soil Rating Polygons






-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available







Soil Rating Lines










-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained

-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available


Soil Rating Points

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season


-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available


Water Features

MAP INFORMATION

 Streams and Canals

Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:31,700.

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)

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

Soil Survey Area: Tioga County, New York
Survey Area Data: Version 14, Oct 8, 2017

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

Date(s) aerial images were photographed: May 16, 2009—Nov 6, 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.

Table—Farmland Classification (Recreation Improvements Project)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
A	Alluvial soils, undifferentiated	Not prime farmland	3.9	24.2%
Ts	Tioga silt loam	All areas are prime farmland	7.8	48.2%
Tsb	Tioga silt loam, high bottom	All areas are prime farmland	4.5	27.6%
Totals for Area of Interest			16.3	100.0%

Rating Options—Farmland Classification (Recreation Improvements Project)

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Recreational Development

Recreational Development interpretations are tools designed to guide the user in identifying and evaluating the suitability of the soil for specific recreational uses. Example interpretations include camp areas, picnic areas, playgrounds, paths and trails, and off-road motorcycle trails.

Playgrounds (Recreation Improvements Project)

Playgrounds are areas used intensively for games, such as baseball and football, and similar activities. Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic.

The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, saturated hydraulic conductivity (Ksat), and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, saturated hydraulic conductivity (Ksat), and toxic substances in the soil.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use.

Custom Soil Resource Report

"Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.


Custom Soil Resource Report Map—Playgrounds (Recreation Improvements Project)




Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)





 Area of Interest (AOI)

Background





 Aerial Photography

Soils





Soil Rating Polygons

-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available


Soil Rating Lines

-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available





Soil Rating Points

-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

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

MAP INFORMATION

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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: Tioga County, New York
Survey Area Data: Version 14, Oct 8, 2017

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

Date(s) aerial images were photographed: May 16, 2009—Nov 6, 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.

Tables—Playgrounds (Recreation Improvements Project)

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
A	Alluvial soils, undifferentiated	Very limited	Fluvaquents (40%)	Depth to saturated zone (1.00)	3.9	24.2%
				Flooding (1.00)		
				Gravel content (0.10)		
			Udifuvents (40%)	Flooding (1.00)		
				Gravel content (1.00)		
				Slope (0.13)		
Ts	Tioga silt loam	Very limited	Tioga (80%)	Flooding (1.00)	7.8	48.2%
				Dusty (0.02)		
Tsb	Tioga silt loam, high bottom	Somewhat limited	Tioga, high bottom (80%)	Dusty (0.02)	4.5	27.6%
Totals for Area of Interest					16.3	100.0%

Rating	Acres in AOI	Percent of AOI
Very limited	11.8	72.4%
Somewhat limited	4.5	27.6%
Totals for Area of Interest	16.3	100.0%

Rating Options—Playgrounds (Recreation Improvements Project)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Picnic Areas (Recreation Improvements Project)

Picnic areas are natural or landscaped tracts used primarily for preparing meals and eating outdoors. These areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas.

The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb

Custom Soil Resource Report

rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, saturated hydraulic conductivity (Ksat), and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, saturated hydraulic conductivity (Ksat), and toxic substances in the soil.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

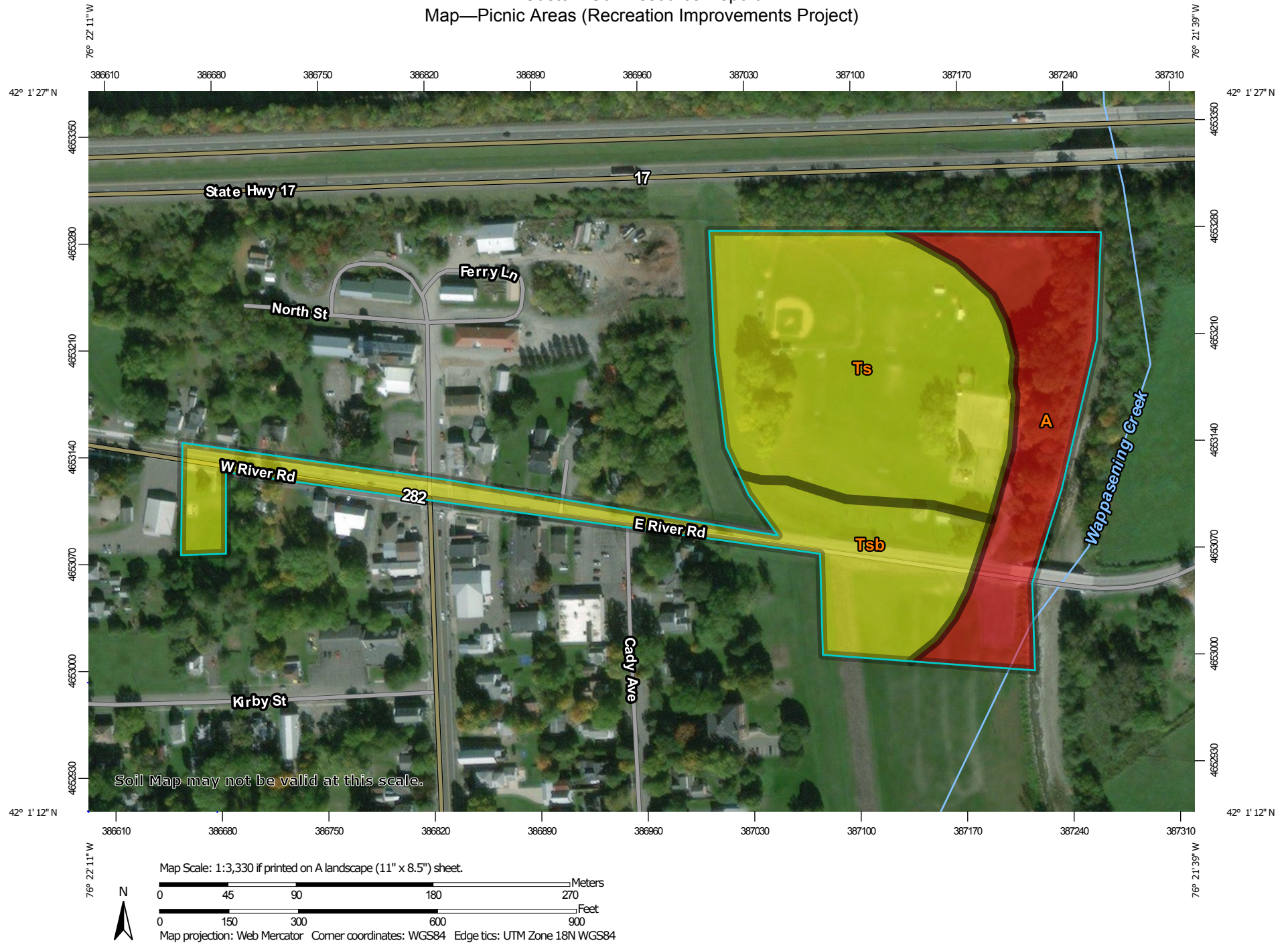
Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Custom Soil Resource Report


Map—Picnic Areas (Recreation Improvements Project)




Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)





 Area of Interest (AOI)

Background





 Aerial Photography

Soils





Soil Rating Polygons

-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available


Soil Rating Lines

-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available





Soil Rating Points

-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

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

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:31,700.

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.

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Date(s) aerial images were photographed: May 16, 2009—Nov 6, 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.

Tables—Picnic Areas (Recreation Improvements Project)

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
A	Alluvial soils, undifferentiated	Very limited	Fluvaquents (40%)	Depth to saturated zone (1.00)	3.9	24.2%
				Flooding (0.40)		
			Udifuvents (40%)	Gravel content (1.00)		
				Flooding (0.40)		
Ts	Tioga silt loam	Somewhat limited	Tioga (80%)	Flooding (0.40)	7.8	48.2%
				Dusty (0.02)		
Tsb	Tioga silt loam, high bottom	Somewhat limited	Tioga, high bottom (80%)	Dusty (0.02)	4.5	27.6%
Totals for Area of Interest					16.3	100.0%

Rating	Acres in AOI	Percent of AOI
Somewhat limited	12.3	75.8%
Very limited	3.9	24.2%
Totals for Area of Interest	16.3	100.0%

Rating Options—Picnic Areas (Recreation Improvements Project)*Aggregation Method: Dominant Condition**Component Percent Cutoff: None Specified**Tie-break Rule: Higher*

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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

A map of the Kirby Park area in Nichols, Maryland. The map shows the Susquehanna River to the north, with the town of Tioga to the northwest and the town of Nichols to the south. A red rectangle highlights the project location, which is situated between North St and E River Rd, and between W Main St and E River Rd. The project area is labeled with the following parcel numbers: 159.19-1-5, 159.19-1-6, and 159.19-1-7. The map also shows other streets such as North St, W Main St, E River Rd, Kirby St, Howell St, Life St, and Dean St. The map is titled "Approximate Project Location" and includes a scale bar indicating 0, 100, and 200 feet.

	Susquehanna River		Parcel Boundaries		School		B-A-R		I-B-A-R
	Streams		State		Town		I-A-R		R
	Municipal Boundaries		County		Village		I2-B-A-R		

A horizontal number line with two scales. The top scale is labeled in miles (mi) and has major tick marks at 0, 0.075, 0.15, and 0.3. The bottom scale is labeled in kilometers (km) and has major tick marks at 0, 0.1, 0.2, and 0.4. Vertical lines connect corresponding tick marks between the two scales: 0 mi to 0 km, 0.075 mi to 0.1 km, 0.15 mi to 0.2 km, and 0.3 mi to 0.4 km. There are also smaller, unlabeled tick marks between the major ones on both scales.

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri

Town of Nichols Agriculture & Farmland Protection Plan

March 13, 2012



Town of Nichols Agriculture & Farmland Protection Plan

ACKNOWLEDGEMENTS

The Town of Nichols Agricultural and Farmland Protection Plan was funded by a Municipal Planning Grant through the New York State Department of Agriculture and Markets, Tioga County and the Town of Nichols. The following individuals and groups have graciously contributed numerous hours to the development of this plan document:

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Project Consultant

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Ithaca, New York 14850

**Town of Nichols
Agriculture & Farmland Protection Plan**

**ADOPTION OF THE TOWN OF NICHOLS
AGRICULTURAL AND FARMLAND PROTECTION PLAN**

WHEREAS: The Town of Nichols Agricultural and Farmland Protection Plan Steering Committee, in conjunction with Tioga County Department of Economic Development and Planning, Tioga County Soil & Water Conservation District, Tioga County GIS and Cornell Cooperative Extension of Tioga County, has developed a draft Town of Nichols Agricultural and Farmland Protection Plan in accordance with Article 25AAA, Section 324-a of the NYS Agriculture and Markets Law, and

WHEREAS: The Tioga County Agricultural and Farmland Protection Board has reviewed and approved the Plan; and

WHEREAS: The Tioga County Planning Board has reviewed and recommended approval of the Plan under General Municipal Law Section 239 l & m; and

WHEREAS: The Nichols Town Board has completed the Long Environmental Assessment Required by SEQR and has made a Negative Declaration; and

WHEREAS: The Nichols Town Board has held a required public hearing to seek input , therefore be it

RESOLVED: That the Nichols Town Board hereby adopts the Town of Nichols Agricultural and Farmland Protection Plan.

James Branstetter 3/13/12

Town of Nichols
Agriculture & Farmland Protection Plan

SEQR NEGATIVE DECLARATION FOR THE TOWN OF NICHOLS
AGRICULTURAL AND FARMLAND PROTECTION PLAN

WHEREAS: The Town of Nichols Agricultural and Farmland Protection Plan Steering Committee, in conjunction with Tioga County Department of Economic Development and Planning, Tioga County Soil & Water Conservation District, Tioga County GIS and Cornell Cooperative Extension of Tioga County, has developed a draft Town of Nichols Agricultural and Farmland Protection Plan in accordance with Article 25AAA, Section 324-a of the NYS Agriculture and Markets Law, and

WHEREAS: The Nichols Town Board has completed the Long Environmental Assessment Required by SEQR and has found no significant environmental impacts as a result of this Plan; and

WHEREAS: The Nichols Town Board has held a required public hearing to seek input on the document and the SEQR Long Environmental Assessment Form, therefore be it

RESOLVED: That the Nichols Town Board hereby makes a SEQR Negative Declaration in regards to the Town of Nichols Agricultural and Farmland Protection Plan.

Jane Bronstein 3-13-12

Town of Nichols
Agriculture & Farmland Protection Plan

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Agriculture & Farmland Protection Plan

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Town of Nichols

Agriculture & Farmland Protection Plan

INTRODUCTION

This Agriculture and Farmland Protection Plan is a report on the state of agriculture in the Town of Nichols today, and a vision for the future of agriculture in the town. By definition, agriculture in this plan includes a variety of activities on the land, including on-farm buildings, equipment, manure processing and handling facilities, and practices which contribute to the production, preparation and marketing of crops, livestock and livestock products as a commercial enterprise. Agriculture also includes the production, management and harvesting of farm woodlands, as well as other activities as defined in Article 25AA of the New York State Agriculture and Markets Law.

It provides a snapshot of various economic data and data on land and soil resources, regulatory issues and trends in agriculture and land use. This report also includes an assessment of the perceived challenges and opportunities facing agriculture in Nichols today, as well as the weaknesses and strengths of the sector.

Agriculture is deeply rooted in the town. For agriculture to continue as an important economic sector and contributor to the quality of life for residents, however, the Town of Nichols needs to become more proactive in supporting and promoting the long-term viability of the sector. This document makes recommendations for action by the Town of Nichols, other local and state agencies, and the farm community itself, to promote the long-term viability of agriculture in the town.

This document is a plan of action. As a plan it does not have the force of law, nor does it change any current Town regulations or policies. Any such changes require action by the Town Board after further public input. Moreover, as a plan it should be considered a document subject to periodic review and modification as conditions in the Town of Nichols change.

Agriculture in the Town of Nichols has a rich history that predates the arrival of European-American settlers in the early 1790s. The bottomlands along

the Susquehanna River, known as Maughantowano Flats, were in cultivation by the Iroquois and produced abundant harvests of corn and vegetables:

"...on the broad and fertile plain land in the same [Nichols] town the Indian raised as good corn and vegetables as did the whites in the east, and great indeed was the surprise of Sullivan's men when they discovered the productive qualities of the soil in the region¹."

Much of these prime farm soils are subject to the flooding which impacts their agricultural productivity. Flooding may wash away vital topsoil, leave behind silt and debris, deposit trash, and create channels so the river or creeks make farmland inaccessible to farm equipment.

Agriculture in the town employed about 4% of the town's labor force in 1999, the latest year for which data is available. As compared to other employment sectors, the agricultural sector is more significant economically in the Town of Nichols than in Tioga County or the state. Employment in agriculture, forestry and fisheries in the county was only 2.2% in 1999, while statewide the percentage was only 0.6%. Although it employs a small number of residents, agriculture still makes a significant contribution to the local and regional economy.

Agriculture is also a diverse economic sector, with a wide variety of dairy, livestock, field crop, vegetable, fruit and specialty farms represented. Farm size also varies widely, from less than 50 acres to over 1,000 acres.

The Town of Nichols encompasses some 33.7 square miles along the southern border of Tioga County. It is located between the Susquehanna River to the north

¹ Kingman, Leroy W., ed. History of Nichols, NY from Our County & Its People: A Memorial History of Tioga County, New York. Elmira: W.A. Ferguson & Co. 189?

Town of Nichols

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and west, the Town of Owego to the east, and Bradford County, Pennsylvania to the south. Today the town can be described as a rural bedroom community: over 70% of its workforce commutes more than 15 minutes to work in surrounding areas. During the past three decades the population of the Town of Nichols has remained relatively steady at around 2,500 residents. The population in 2010 was 2,525, according to the U.S. Census Bureau.

Close to the town's geographical center, the Village of Nichols covers about 0.5 square mile and has a population of 512 according to the 2010 Census. The main intersection in the village is the county road known as River Road and NYS Route 282, which leads southward to Pennsylvania. NYS Route 17 (future I-86) runs along the northern edge of the town.

The population of the town has been relatively stable, but in the past ten years or so the opening of the Best Buy regional distribution center in Lounsberry and redevelopment of the Tioga Downs casino and horse racing track have brought potential for additional growth and development to Nichols. Likewise, the town must keep in mind that there could be long-term impacts on agriculture due to the upgrading of NYS Route 17 to I-86 over the next several years and potential natural gas development in the area.

As is the case across the state, the Town of Nichols is faced with the need to balance economic and resource development, and future prospects for growth, with a desire to also protect its valuable

farmland, farming enterprises and other agricultural resources, and to ensure the continued survival and prosperity of its agricultural sector.

The intent of this plan is to identify the key issues facing agriculture in the community; highlight the importance of agriculture to the community; identify important agricultural lands to be protected; and supplement proactive collaborative support for agricultural enterprises and related farm business infrastructure. It can be utilized as both an opportunity for community dialogue, community education and community action. Through the planning process the Town of Nichols can develop a community consensus on the strategies, programs and policies necessary to preserve and protect its farmland and agricultural resources and enhance the long-term economic viability of agriculture in the town, while accommodating other non-agricultural economic growth and development in the future.

Finally although the agricultural land resources of the Town of Nichols vary in terms of soils and suitability for specific types of agriculture, these resources are viewed as an integrated whole. Some soils and lands may well be more productive than others in Nichols. Some are also seen as more vulnerable to conversion to non-agricultural uses. Nonetheless all agricultural lands play an important function in the long term viability of agriculture in the Town of Nichols, and thus the goals and implementation actions set forth later in this document are intended to benefit farmers and farms throughout the town.



Town of Nichols

Agriculture & Farmland Protection Plan

PUBLIC PARTICIPATION

Extensive efforts were made to ensure public participation in the preparation of this Agriculture and Farmland Protection Plan. The Agriculture Plan Steering Committee and its consultants developed and distributed 107 surveys; conducted 8 interviews; and held two community forums. The results of these initiatives are summarized below.

1. Farm Community Survey

In March 2010 the Agriculture Plan Steering Committee distributed 107 survey questionnaires to farmers and farmland owners in the Town of Nichols. The objective of the survey was to give members of the farming community an opportunity to share their thoughts about agriculture in the town, its future, and what actions might help support the long term health and viability of farming locally. It would also give the Committee some indication of the composition of the farm community and what farmers and farmland owners thought about the state of agriculture in the town.

The survey was confidential and no personal identification information was requested of participants.

A total of 27 surveys were returned, a 25% return rate. Although the survey results are not considered scientific and definitive, they do provide insights into agriculture and the agricultural community in the Town of Nichols. The tabulated results of the survey are located in Appendix A.

Survey respondents included 13 active farmers, 3 retired farmers and 9 non-farming owners of farmland. Ten of the active farmers own farmland in Nichols, and 7 active farmers rent farmland in Nichols. Two of the retired farmers and only 2 of the non-farmers rent the farmland they own to active farmers. One retired farmer's land is in C.R.P. (a federal farmland conservation program), but no reasons were given as to why the other 6 non-farmers do not rent their land to farmers.

While about 75% of those actively farming are dairying, Nichols agriculture is still quite diverse.

Other enterprises indicated by respondents include: beef, hogs, poultry, field crops, hay, grain, fruit, vegetables, honey and maple production.

Half of the respondents are actively farming over 700 acres, with 3 farming 1,200 acres, 1,600 acres and almost 2,000 acres. The smallest farms were one at 69 acres, and 3 acres owned by a beekeeper whose bees forage "over thousands of acres in Tioga, Tompkins and Chemung Counties."

Eighty five percent of the farmers reported their farmland is included in a state Ag District. About half have NYS Ag Assessment. Some farmland in Nichols may not realize a reduction in property taxes under state agricultural assessment (ex. hill land with sub-prime soil classes).

Farms represented in the surveys have been in business for at least 35 years, with 7 operating 50-90 years, and 3 for over 150 years.

Eight multi-generation farms were represented, 7 of which involve 3 or more generations. Family includes parents, children, grandchildren, and other relatives. Half of respondents have 5 or more family members working on their farms. Five farms employ non-family.

Over 85% of farms provide full-time year round jobs, with over half employing 3 or more full-time workers, and one employing 8. Ten of the 13 farms provide part-time employment, with most employing 3 or more workers, and one employing 10.

Active farmers responding to the survey ranged from 32 to 71 years old, averaging 57. Principals similarly averaged 56 years old, ranging from 36 to 73. Notably, this is also the national average age (57.1) of the American farmer, according to NASS data. Other principals were younger, ranging from 16 to 38 years old (average of 24 years old). Retired farmers ranged from 70 to 79 years old, for an average age of 76 years. Non-farming landowners who reported their ages ranged from 38 to 73, for an average age of 57.

Of the 13 actively farming, only 1 does not plan to remain in farming (indicating age as the reason).

Town of Nichols

Agriculture & Farmland Protection Plan

Nearly 60% of the farms surveyed (8) plan to expand in the next 5 years, adding on acreage, employees and/or livestock. This includes most of the dairies. The 6 other farms plan to remain the same size, while none plan to decrease in size during this timeframe.

Significant farm investment has occurred in the last 10 years, with most respondents in the \$100,000 to \$500,000 range. Two invested over \$1 million dollars and one under \$50,000.

Half of the farmers reported gross income over \$100,000/year, and half under \$50,000/year. Four dairies are over \$500,000/year.

Taxes ranked as the highest concern overall for those planning to expand. The availability of quality farmland and availability of land within reasonable distance of farm ranked second and third. Commodity prices and access to capital were rated high/medium.

Most farmers feel pressure or competition with non-agricultural development, including commercial, residential, industrial and gravel mining. Concerns identified include loss of prime farmland, and the inability to compete with non-farm buyers due to low commodity prices and/or low margins in farming.

Seventy nine percent of farmers indicated they would reinvest a windfall (such as from gas or wind development) back into their farms.

Two of the respondents are farming land in the floodplain, with one experiencing flooding yearly and the other flooding every 2 to 3 years. Damages include streambank and gully erosion, flood trash, crop losses and personal property losses. Farmland not in the floodplain is also subject to sheet flooding and erosion.

Farmers indicated the state of agriculture in New York and the United States as being challenging overall. Reasons given include regulations, taxes, fees, the high cost of doing business in NY, high cost of inputs relative to low commodity prices, and neighbor issues. More positive responses were "some areas of U.S. are growing" and "bright for the creative non-traditional (farms)."

Similarly, the farmers indicated a challenging state for agriculture in the Town of Nichols and Tioga County. They cited regulations, taxes, fees, the high cost of doing business in NY, high cost of inputs relative to low commodity prices, and neighbor issues. More positive responses were "it is fair" and "bright for the creative non-traditional (farms)."

Primary strengths of the agriculture sector in Nichols reported by farmers include: location, quality land, good farmers, farmers working together, family-oriented farms, new farms, and the community.

Major problems faced by agriculture in Nichols reported by farmers include: high taxes, high expenses, low commodity prices, increasing regulations, neighbor issues, NIMBYs, aging farmers, loss of agricultural infrastructure/agri-businesses, lack of community support, and competition for land.

Opportunities for agriculture in Nichols identified by farmers include: direct marketing, gas development and diversification.

Seven farmers responded to the question regarding impacts to agriculture due to actions taken by the Town of Nichols. Five wrote they were unhappy with the town's response to the chicken farm. Zoning and the spreading of sewage treatment plant waste were also mentioned.

Farmers identified things the Town of Nichols can do to better support agriculture, such as: education of residents and non-farmers, preservation of prime farmland, tax breaks, working with farmers, and supporting value-added agricultural enterprises (such as a canola/oil crop pressing facility).

Tables 1a and 1b below summarized the findings in terms of challenges, opportunities, weaknesses and strengths.

Town of Nichols

Agriculture & Farmland Protection Plan

Table 1a. Challenges & Opportunities

Challenges	Opportunities
<ul style="list-style-type: none"> • Farmers at low end of totem pole(always getting the blame – manure smell, crippled cows outside of barn, etc. • Farmers do not always get fair prices for whatever they produce • Farmers need help with problems instead of more regulations • Land use regulations • Less farms every year • Loss of prime farmland • Low milk/commodity prices & high/increasing operating costs • Market prices do not cover expenses of operations • Missed opportunity when chicken farm was not developed (more jobs + funds, etc.) • Moratorium against agriculture passed by Town • Needs of agriculture are being neglected • Small farms cannot compete with the larger farms • State continues to increase regulations, permits, taxes, electric, fuel (all these will push farms out) • Taxed out of business • Too much farmland being used for commercial building • Too worried about land use, re: wind farms and gas drilling • Town actions taken to bring Best Buy (built on prime farmland) • Young people lack their parents' strong work ethic - farming is long and hard days • Zoning 	<ul style="list-style-type: none"> • Agriculture-friendly zoning • Crop land/good land • Diversification of crops grown • Educating residents on how farms support + feed them • Farm direct to consumer marketing (close to markets – miles matter for food) • Find better ways to operate farms at cost savings • Implement a positive water management plan/program • Keep river bottom lands in agricultural zoning • Less regulations (get off our backs) • Local marketing of farm products • Lower or eliminate taxes on agriculture-related assets, infrastructure inputs • Lower taxes on farmland • Natural gas development will help sustain agriculture • Promote and support locally grown – farm market stand at old creamery, organic store, ice cream stands • Quit making the best farmland into gravel pits & Best Buy warehouses • With many farms vacant it land should be cheap to rent or buy • Town should give farmers a break in any way it can • Town should support agricultural businesses – it could have chicken farm here already • Try to attract a canola/oil crop processing facility here • Work for and with farmers

Table 1b. Weaknesses & Strengths

Weaknesses	Strengths
<ul style="list-style-type: none"> • Aging farmers and fewer younger people becoming farmers • Competition for land with other farmers • Farmers under stress from increasing costs & often low prices induced by many factors beyond local control • Farming start-up costs are high • Farmland is wasted around two exits off Route 17, while some hill land is growing brush lots • Flooding • Government regulations (DOT, DEC) • Groups such as PETA • High expenses & operating costs for agricultural businesses • High taxes • Lack of a water plan • Lack of support from the community, and from the Town • Land use regulations • Losing farms, & losing our farm infrastructure • Low prices for farm products • Low/falling milk prices to the farmer while costs keep going up • New people will want to change the zoning & keep manure smell down • Non-farm people have a lot to say about agriculture (& a lot of influence) • People don't want farms in the town; not in my backyard attitude • Prime farmland being used for commercial sites & gravel mining • Zoning 	<ul style="list-style-type: none"> ▪ Agricultural operators staying together as a whole agricultural unit ▪ Close to markets ▪ Continued local support for agricultural industry within our community ▪ Cost of land is cheap compared to other places ▪ Farm tax deductions ▪ Farmers are doing their best ▪ Farmers will employ the unemployable ▪ Farms provide local jobs ▪ Good agricultural operators ▪ Good fertile land ▪ Group of food farmers ▪ Location ▪ River bottom land ▪ Small newbie farmers ▪ Still family farm oriented – no CAFOs yet ▪ Support from local government ▪ Supportive friends and neighbors ▪ Years of experience, heritage & traditions

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2. Summary of Farm Community Interview Responses

Part of the information gathering process for this plan included interviews of 9 members of the farm community in Nichols to document their insights with regard to agriculture and its future. Interviews were conducted, in their homes, barns, fields, or a local restaurant. The main points gathered from the interviews are summarized below.

- 6 were farming full-time; 2 were farming part-time; and 1 was retired; 4 interviewees represented multi-generational farms.
- 6 were raised on a farm; 6 raised or will raise a family on the farm; 4 feel that a farm is a good place to raise children.
- The farm operations represented in the interviews are dairy (4), livestock (3), poultry (1), field crops (4), hay (2), vegetables and fruits (1).
- 3 of the farms represented are organic, 2 of which are certified organic.
- All own land in the Town of Nichols, 2 also rent land.
- Interviewees identified public benefits of farming in Nichols as including: food (4 responses); open space; floodplain protection; recreation (3 responses); sense of community; aquifer recharge; feed for other farmers; sustainable land use; improving the land.
- Interviewees described the state of agriculture in NY and the US in general as: "hard shape," "not great," "slim future," "not hopeless, [but] not sunny," "good" (but need to diversify out of dairy, move toward organic, smaller scale), "good" (industrial agriculture in trouble [but] new generation practicing sustainable agriculture on the rise).
- The state of agriculture in the Town of Nichols was described as: "promising for large operations," "hard shape," "not hopeless, [but] not sunny" (for the small operator), "better" (but

must evolve), "better" (farmers aren't leaving like 20 years ago), "future is slim."

- Major problems facing agriculture in the Town of Nichols include: flooding (2 responses); economics (production costs, land costs) (5 responses); loss of agricultural services, government regulation (2 responses); stream erosion (3 responses); town government focused on non-farm development, not agriculture (3 responses); gravel mining (4 responses); natural gas drilling; young farmers can't break into business; farms becoming too spread out (lack of good accessible land close by); more and more chemical use in agriculture; trespass; traffic volume and speed on local highways.

Valuable resources for agriculture in Nichols include: land (5 responses); strong, committed, cooperative farm community (3 responses); farm support services (e.g. SWCD, FSA, NRCS, Cooperative Extension, Farm Bureau); local farm support businesses; innovation; diversification; organic farms.

- Local efforts to help support agriculture and improve the viability of agriculture are needed in the areas of: more supportive Town Board; less regulation ("get gov't off our backs") (2 responses); educating the general public (2 responses); more efforts/support for direct farm marketing; more agriculture-friendly zoning; streambank/stream channel control (2 responses); better control on gravel mining; speed enforcement on local highways; Town Right to Farm Law.
- Opportunities for agriculture in the Town of Nichols include: future growth in organic farming; agri-tourism; alternative fuels development (ethanol, cooperative methane plant); direct farm marketing; opportunities to expand operation; younger generation of farmers.
- 5 want their farm to remain in business or their land to remain in farming after they are no longer farming; 4 want to see family members choose to remain in agriculture; and 1 has already transferred their farm (to 4th generation)

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- Agriculture in the future in Nichols should be: diversified; have developed a strong local (50-100 mile) market; sustainable; organic; small-scale; diversified; grass-based in hills; dairy and beef.

Tables 2a and 2b below summarized the findings in terms of challenges, opportunities, weaknesses and strengths.

Table 2a. Challenges & Opportunities	
<p>Challenges</p> <ul style="list-style-type: none"> • economics, such as production costs, land costs • farms becoming too spread out (lack of good accessible land close by) • flooding • government regulation • gravel mining • loss of agricultural services • more and more chemical use in agriculture • natural gas drilling • stream erosion • Town focused on development, not agriculture • traffic volume and speed on local highways • trespass • young farmers can't break into business 	<p>Opportunities</p> <ul style="list-style-type: none"> • agri-tourism • alternative fuels development (ethanol, cooperative methane plant) • farm direct marketing • farming improves land • future growth in organic farming • opportunities to expand operation • sustainable land use • younger generation of farmers
Table 2b. Weaknesses & Strengths	
<p>Weaknesses</p> <ul style="list-style-type: none"> • better controls on gravel mining needed • education for the general public • greater efforts/support for farm direct marketing • more agriculture-friendly zoning • need more supportive Town Board • regulations and taxes ("get government off our backs") • speed enforcement on local highways • stream bank/stream channel control • Town has no Right to Farm Law 	<p>Strengths</p> <ul style="list-style-type: none"> • diversification • farm is a good place to raise children • farm support services (e.g. SWCD, FSA, NRCS, Cooperative Extension, Farm Bureau) • farming provides public benefits, including: food; open space; floodplain protection; aquifer recharge; recreation • innovation • land • local farm support businesses • new generation practicing sustainable agriculture on the rise • organic farms • sense of community • strong, committed, cooperative farm community

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3. Farm Community Forum and C.O.W.S. Exercise

On December 21, 2010 the Agriculture Plan Steering Committee and its consultants hosted a soup and sandwich luncheon and community forum for farmers and farmland owners at the Masonic Temple in Nichols. To publicize the forum over 100 postcard invitations were mailed to the homes of farmers and farmland owners in the Town of Nichols. Approximately 25 people attended the forum.

Forum participants heard a report on the State of Agriculture in the Town of Nichols by the consultants, which was followed by a question and answer session. There was a group discussion about

agriculture in the town and some of the issues farmers face. The consultants then led a C.O.W.S. exercise, where forum participants wrote down what they see as the **C**hallenges, **O**pportunities, **W**eaknesses and **S**trengths of agriculture in the Nichols. The results are shown in Table 3a and Table 3b below.

Despite the challenges and weaknesses forum participants identified in the exercise, the atmosphere in the meeting was generally upbeat. While acknowledging the realities facing their community today, these farmers and farmland owners were nonetheless optimistic about the future of agriculture in Nichols.

Table 3a. Challenges & Opportunities

Challenges	Opportunities
<ul style="list-style-type: none"> • Community indifference/apathy related to agriculture and agriculture-related issues • Competition with non-farm development for land • Conflicts between farm & non-farm rural residents • Cost of energy • Cost of insurance • Economics in general • Encouraging new farmers to relocate to Nichols • Flooding and stream migration and erosion • Government environmental regulations • Government food safety regulations • Government programs skewing food & commodity prices • Lack of available high quality farmland • Legal system • Loss of prime agricultural lands to gravel mining • Outdated zoning regulations/zoning regulations that promote growth over agriculture • Providing more support to beginning farmers • Taxes • Traffic on local roads, highways 	<ul style="list-style-type: none"> • Able to learn from other communities' mistakes • Active farms that remain in Nichols • Direct marketing • Educating general public on value of agriculture to larger community • Farmers markets • Increasing awareness of importance of agriculture in Nichols • Large amount of active and inactive farmland in Nichols • Potential inflow of income from pending natural gas drilling operations • The younger generation of farmers in Nichols • Unused lands

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Table 3b. Weaknesses & Strengths

Weaknesses	Strengths
<ul style="list-style-type: none"> • Aging population of farmers • Commodity prices • Community indifference/apathy for agriculture and agriculture-related issues • Development in floodplain areas • Economics of agriculture • Lack of farm organization • Lack of laws to protect farmers • Lack of political power of farmers • Lack of stream maintenance and control over stream migration, streambank erosion • Lack of time (to organize) • Poor gov't management of farmland resources. 	<ul style="list-style-type: none"> • Climate • Farmers markets • Good transportation links to markets • High quality farmland base • Large amount of active and inactive farmland in Nichols • Movement toward /growth of sustainable agriculture • People/farmers themselves • Proximity to population centers • Rural community character • Soil resources • Water resources

4. Community Open House

On February 3, 2011 the Agriculture Plan Steering Committee and its consultants hosted a Community Open House from 4:30 PM to 7:30 PM at the Nichols Town Hall. At the open house the draft Action Plan Matrix, draft plan maps and other information for the Agriculture and Farmland Protection Plan were available for review by the public. Steering Committee members, including staff of the Tioga County Department of Economic Development and Planning, Tioga County GIS, Soil and Water Conservation District, and the consultants were present and available to answer questions.

The open house format enabled members of the Nichols farm community and the general public to stop in to the Town Hall at a convenient time during the three hour event. They were able to review the plan proposals and discuss them in an informal atmosphere with committee members, staff and the consultants.

The Community Open House was publicized through local newspaper and radio station outlets. Stories announcing the open house and draft plan were published in the Owego Pennysaver, Tioga Courier and Sayre Morning Times.

5. Other Public Participation

Additional opportunities for the community to learn about and weigh in on the proposed plan have taken place at meetings of the Town of Nichols Town Board and the Tioga County Agriculture and Farmland Protection Board. The plan was discussed at three Town Board meetings and three Agriculture and Farmland Protection Board meetings. The plan was also reviewed by the Tioga County Planning Board as part of the General Municipal Law Section 239 review process.

A copy of the draft plan was posted on the Town of Nichols link on the Tioga County website at: <http://www.tiogacountyny.com/towns-villages/nichols/farmland-protection-plan.html>

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AGRICULTURAL LAND RESOURCES

Farmers in Nichols maintain some 14,000 acres of land in cultivated fields, pasture, hay fields and woodland - or about two-thirds of the area of the town as seen on Map 1. Farms contribute significantly to the scenic character of the town and the quality of life of its residents. The agricultural land base remains concentrated and generally has not been

fragmented to any large extent by low-density residential development or larger scale land subdivision. Gravel mining, commercial and industrial development are viewed as threats to prime farmland along the highway and river corridor.

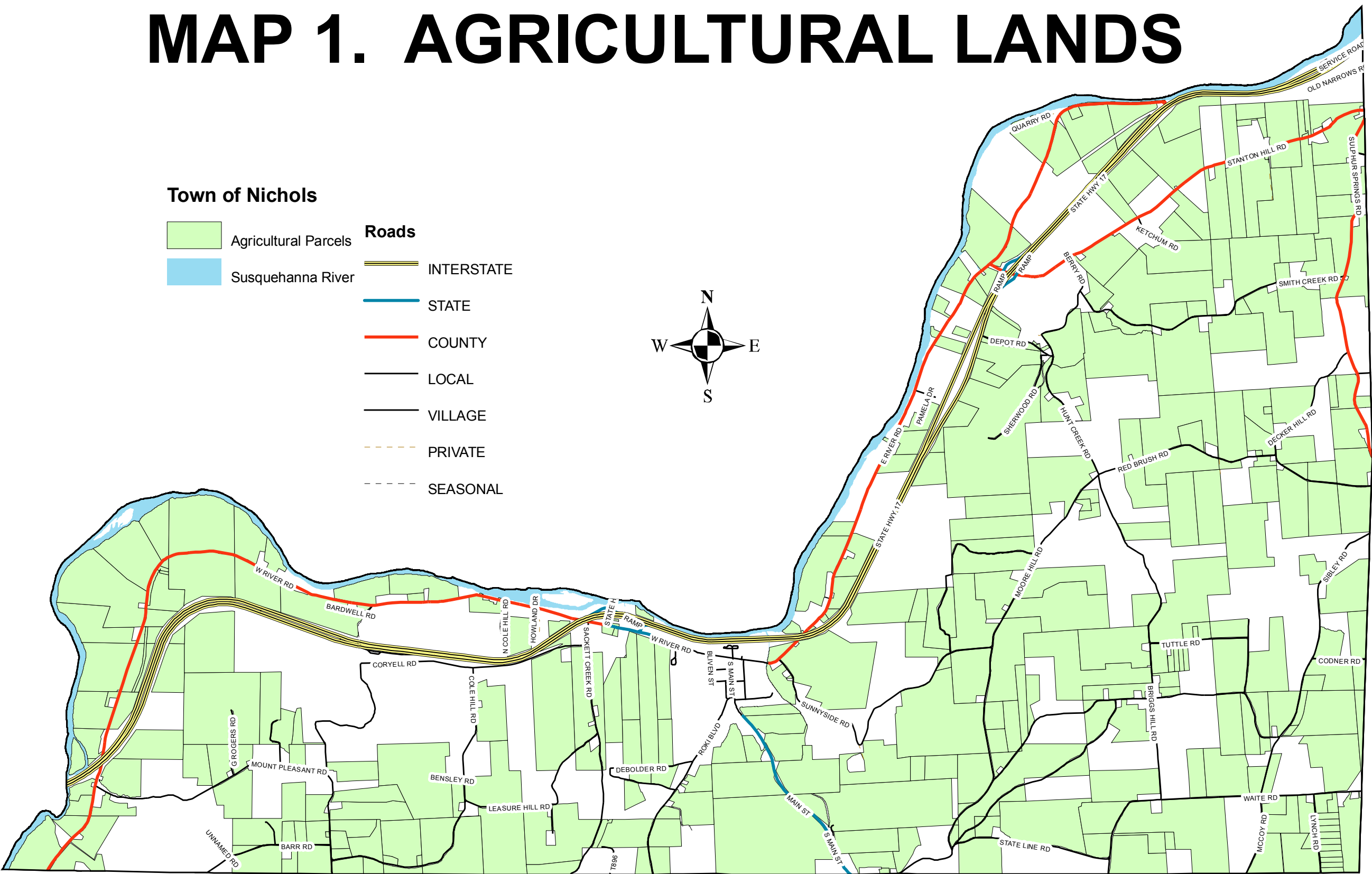
As Table 4 shows, agriculture in the Town of Nichols is diverse.

Table 4. Agricultural Land Uses by Acreage, 2009			
Type of Operation	Property Class Code	Acres	Percent
Field Crops	120	2,662	37%
Dairy	112	2,222	31%
Livestock	113	970	14%
Truck Crops (vegetables)	140	37	0.5%
Vacant Farmland*	105	1,269	18%
TOTAL		7,160	100%
* Vacant farmland is defined by NYS Real Property Services as land used as part of an operating farm that does not have living accommodations and cannot be specifically related to any of the other agricultural property class categories. It is commonly found in municipalities where operating farms are made up of a number of individual parcels.			
Source: NYS Real Property Services 2009			

The NYS Route 17 (future I-86) limited access highway crosses the Town of Nichols from east to west. Exits at Nichols and at Lounsberry provide easy access to this major highway corridor and place Nichols within 3.5 hours of all major cities in New York, as well as Philadelphia, Pennsylvania. Although this highway may provide quick access to markets for farm products, it has also attracted

interest in industrial development as illustrated by the development of the Best Buy regional distribution center in Lounsberry and the Vulcraft steel plant and new CVS regional distribution facility to the west in Chemung, New York. Industrial development is important to local economic growth, but it also competes for valuable farm acreage.

MAP 1. AGRICULTURAL LANDS



Tioga County
GIS

0 2,500 5,000 10,000 Feet

Tioga County makes no representations or warranties as to the accuracy or reliability of any information, resources or data provided, produced, compiled or otherwise utilized by any person, corporation or entity for any purpose whatsoever. The user or any third party may not rely upon the accuracy or reliability of such information, resources or data. Any user or third party assumes all risks and liability in the utilization of any information, resources or data.

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LOCAL & REGIONAL PLANNING & AGRICULTURE

1. County Level Planning

Tioga County has adopted a number of plans and planning studies in recent years that are related to agriculture and agricultural land protection. These include the ***Tioga County 2010 Strategic Plan***, the ***Tioga County Agriculture & Farmland Protection Plan*** and the ***Tioga County Infrastructure Master Plan***.

The ***Tioga County 2010 Strategic Plan***, adopted in March 2005, was developed to serve as a guide to County, municipal and community leaders and provide a countywide context for decision-making. Plan goals include "Expand the vitality and viability of County agriculture and maintain and retain for future generations agricultural lands, as well as the feasibility of farming." Specific objectives to be met over the long and short term include:

- Strengthening the connection between the farming community, the non-farming community and the leaders who establish policy for the community;
- Protecting prime agricultural land for agricultural use;
- Promoting purchase of development rights (PDR) to protect valuable agricultural lands;
- Creating new markets for agricultural products and providing support and assistance to agricultural entrepreneurial efforts;
- Increasing community education efforts and promoting increased awareness of agriculture;
- Integrating agriculture into overall County goals;
- Encouraging understanding of and participation in Agricultural District programs by farmland owners.

The ***Tioga County Agriculture and Farmland Protection Plan*** was adopted in November 1998. It notes that agriculture in Tioga County and New York as a whole continues to be subject to external financial pressures, and that these forces have

resulted in a continued decline of lands in agriculture, number of farms in operation and the number of people engaged in agriculture. The plan indicates that if not changed, a continued decline in agriculture would further erode the importance of the sector in Tioga County.

The Plan outlined a number of actions Tioga County and various municipalities could take to enhance the long-term viability of agriculture in Tioga County, including:

- Provide agricultural entrepreneurs with assistance in product development, value-added processing, marketing and distributing through a full-time agriculture development specialist;
- Develop educational programs to increase understanding by municipal officials of the NYS Agricultural District Law, NYS Agricultural Assessment and Purchase of Development Rights;
- Encourage representation by the agriculture community on various municipal boards and committees;
- Pursue opportunities to promote and increase agricultural tourism in Tioga County as recommended in the ***2004 Agri-Tourism Study***.

Leadership in implementing the ***Agriculture and Farmland Protection Plan*** was delegated primarily to the Tioga County Agriculture and Farmland Protection Board and the Tioga County Agricultural Resource Group. Support for the two bodies is provided by the Tioga County Soil and Water Conservation District, Cornell Cooperative Extension, the Department of Economic Development and Planning, Real Property & Taxation Office, the Natural Resources Conservation Service, Farm Service Agency, Farm Bureau, Tioga County Rural Economic Area Partnership (REAP), Tioga County Tourism, local farmers and others.

The purpose of the ***Tioga County Infrastructure Master Plan***, adopted in 2004, is to provide Tioga County and its municipalities with strategies for

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improving water and sewer infrastructure in communities throughout the county. The plan has a number of recommendations that have potential implications for agriculture in the Town of Nichols, including:

- Extension of water lines from the water treatment plant at Lounsberry westward along East River Road, as well as eastward along Stanton Hill Road;
- Creation of a new sewer collection and wastewater treatment plant to replace existing private on-lot septic systems in the Village of Nichols and to serve the area in the town westward to Tioga Downs casino and horse racing track and beyond along West River Road;
- Extension of the sewer collection system at Lounsberry westward along East River Road to the Village of Nichols.

The plan prioritizes the nearly four dozen projects outlined in the document. In the case of the Town of Nichols the waterline connection between Lounsberry and the village ranked 5th in the County's list of

priorities; the sewer system for the village and Tioga Downs casino and horse racing track ranked 28th; and the proposed extension of sewer service along East River Road from Lounsberry ranked 43rd.

From a positive standpoint the creation of a public sewer system within the Village of Nichols and in the area immediately west of the village could create incentives to channel future residential, industrial and commercial development away from other areas of prime agricultural lands in the town. (See Map 5, Map 6)

From a negative standpoint the extension of public water and sewer services along East River Road between Lounsberry and Nichols would open up 500 to 600 acres of active farmland to development for non-agricultural uses. Extension of water and sewer infrastructure between the village and Tioga Downs casino and horse racing track would open up some 200 acres of active farmland to potential non-agricultural development, and another 300 to 400 acres of active farmland west of the casino/racetrack.

VALUE OF AGRICULTURE TO LOCAL ECONOMY

Farming in the Town of Nichols generates millions of dollars in sales each year through the production and marketing of farm products. Although figures are not available for the Town of Nichols, according to the 2007 Census of Agriculture in Tioga County as a whole the market value of agricultural commodities sold in 2007 was \$36,665,000, up from \$28,327,000 in 2002. Table 5 compares farm sales figures in zip code 13812 for the years 2002 and 2007, which gives an idea of the relative value of farm sales for the Town of Nichols.

According to the 2007 Census of Agriculture, there were 29 commodity farms in the Town of Nichols. Of these 3 operations had commodity sales of more than \$250,000; 2 farms had sales of \$50,000-\$249,000, and 24 farms had sales below \$50,000.

Table 5: Commodity Farm Sales by Number of Farms in Zip Code 13812

Sales Volume	2002	2007
Farms with sales greater than \$250,000	3	3
Farms with sales \$50,000-\$249,999	9	2
Farms with sales less than \$50,000	23	24
Total Farms	35	29

Data Source: U.S.D.A. Census of Agriculture
 * Data is from U.S. postal zip code area 13812, which includes the Town of Nichols and a small portion of the Town of Owego along the border with the Town of Nichols

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According to the Census of Agriculture, in 2007 there were 29 farm operations in the Town of Nichols. This compares to 35 farms in 2002 and 37 farms in 1997. As shown in Table 6, most farms in 2007 were less than 50 acres in size, but in 2002 most farms were in the range between 50-999 acres. In Tioga County, according to the Census of Agriculture there were 579 farms in 1987, 604 farms in 2002, and 565 farms in 2007.

Agriculture also generates economic impacts from businesses that provide services or goods to farmers and from businesses that process, transport, or resell farm products. These include: retail businesses that sell equipment, fertilizer, seeds and other inputs; providers of financial, technical, and engineering services; construction contractors; trucking companies; processing plants; and retail sales of farm products. Commodity sales generate considerable income from outside of the region, and keep much of

that income circulating in the community through local spending and support of area agri-businesses.

Table 6: Number of Commodity Farms in Zip Code 13812

Farm Size	2002	2007	Absolute Change
1-49 acres	4	21	+17
50-999 acres	31	7	-24
> 1000 acres	0	1	+1
Total Farms	35	29	-6

Data Source: U.S.D.A. Census of Agriculture

* Data is from U.S. postal zip code area 13812, which includes the Town of Nichols and a small portion of the Town of Owego along the border with the Town of Nichols

VALUE OF FARMLAND TO THE COMMUNITY

Agriculture is by far the largest land use in the Town of Nichols. It is a major element in the scenic character of the town enjoyed by both residents and many thousands of motorists who pass through Nichols on NYS Route 17. Although residential, commercial and industrial development may offer the tangible benefit of increased tax base, many communities today value the intangible benefits to community character and quality of life that agriculture contributes.

Moreover, studies conducted in New York municipalities by American Farmland Trust have consistently shown agricultural land, woodland and other types of open space generate more in property tax revenue than they receive in services².

Table 7: Comparative Costs of Municipal Services vs. Tax Revenues Generated

Land Use	Municipal Service Costs	Tax Revenues Generated
Agricultural land, other types of open space	\$.29	\$1.00
Residential development	\$1.27	\$1.00
Commercial development	\$.26	\$1.00

Data Source: American Farmland Trust

² American Farmland Trust Factsheet: *Cost of Community Services Studies*

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Residential development in contrast generally requires more in services than the revenues such development generates.(Table 7)

The objective of these types of analysis is not to discourage residential development in the community, but rather to point out that such development does

come with costs. Since World War II many communities that have sacrificed agricultural lands to promote "growth and development" in pursuit of increased property tax base are today saddled with the high costs of maintaining the infrastructure needed to support such development.

CURRENT CONDITIONS AND TRENDS IN AGRICULTURE

The *Tioga County 2010 Strategic Plan* notes that "the number of farms, productivity of farms, and farmed acreage, has declined dramatically" over the past 100 years. The report concludes that "current trends indicate a continuing decline in agriculture and if unchanged, will further reduce important agricultural contributions to the County."

Although the amount of land in agriculture in Tioga County has declined dramatically over the past

several decades, much of the decline can be attributed to the abandonment of marginal agricultural lands where poorer soil quality has been a major constraint since the arrival of early settlers. The reduction in number of farms however does correspond to an increase in the average size of farms. Across the state of New York the average size of farms has increased from 154 acres in 1957 to 219 acres in 2007, a 42% increase.

ISSUES IMPACTING LONG-TERM VIABILITY OF AGRICULTURE

1. External Influences

While this plan focuses primarily on issues and actions that are within the influence of local government, there are several potential threats to the economic viability of local farms that are apparent at the regional, state, and national levels. These include:

- Fluctuations in the cost of inputs and services (e.g. fuel, fertilizer, seed, insurance) with limited, or no latitude for the farmer to pass along these costs to the buyer or end user;
- Increasing conflicts with automobile and truck traffic, and greater potential for accidents as farm machinery must travel on public roads and highways to access fields and other farm operations;
- International trade agreements and global competition for markets;
- Increasing burden of property taxes and impact

on farm profitability;

- Changes in federal farm policy;
- State and federal regulations, including transportation policies, and environmental regulations (e.g. CAFO regulations);
- Susquehanna River Basin Commission permitting requirements and expenses associated with water withdrawals from the Susquehanna River and its tributaries;
- Federal immigration policy that makes investment in labor intensive crops, such as fruits and vegetables, a potentially risky investment (due to labor availability);
- Limited local supply of laborers interested in working on farms, or willing to work for the wages that farmers can afford to pay.
- New Clean Water Act compliance requirements by the US Environmental Protection Agency (as

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of December 31, 2010) that will impact many farms with increased federal and state oversight due to mandated reductions in Total Maximum Daily Load (TMDL) limits on nitrogen, phosphorus and sediment in the Chesapeake Bay watershed.

According to Governor Andrew Cuomo's 2010 *Farm NY: Growth Through Innovation – The New NY Agenda*, the state needs creative new ideas to protect farmland and agricultural viability.

“Like most New Yorkers, farmers face the mounting burden of property taxes... As with other small businesses, the State’s high business costs are slowing economic revitalization – our agriculture industry is no exception. Businesses in New York face the second highest tax burden in the nation, the second highest “cost of doing business index,” the second most negative business climate, among the highest health insurance costs and the second highest energy rates in the nation. We must be cognizant of these financial challenges and find innovative ways to support farmers who are struggling to make a decent living and keep their land in agricultural production.”

These issues are recognized as major challenges that affect agriculture in ways that are difficult to overcome at the local level.

2. Public Awareness and Understanding of Agriculture.

With only about 1.5% of the U.S. population engaged in farming, the vast majority of Americans no longer have any direct ties to agriculture. The entertainment industry and news media largely shape public understanding of agriculture and farming practices. As a result of this disconnect, public policies are often guided by misperceptions and resulting local government decisions can adversely impact the farm community. Examples of such impacts can be decisions to extend municipal infrastructure into agricultural areas to spur development, local zoning regulations designed to promote and protect residential development from the impacts of

agriculture, and local taxing policies.

3. Farmland Ownership

Farmland owned by non-farmers tends to be more vulnerable to development or abandonment than farmland owned by farmers and members of their families. Due to the uncertainties inherent in renting and short-term leases, farmers operating on rented land tend to be more reluctant to make long-term capital investments in this land (such as planting perennial crops, like alfalfa, or erecting permanent fencing). In Nichols the proportion of farmland owned by farmers has declined over the past two decades, while rental of farmland from non-farming owners has increased significantly. If these trends continue, reinvestment in farms may decline as local farmers who rely on rented land become increasingly vulnerable to loss of access to this farmland and to the financial decisions made by non-farming landlords.

4. Farms in the Middle

The agricultural community in the Town of Nichols is comprised of primarily family farms. These farms are described by some experts as the “agriculture in the middle” in the United States. They lay somewhere in between the so-called “hobby” farms at one end of the spectrum and the large so called “corporate” agricultural enterprises. Family farms in the United States form the backbone of agriculture nationwide, statewide and locally in Nichols and Tioga County. They also represent the sector of agriculture that is under the most duress, economically, socially and in terms of regulation. Any plan for the future of agriculture needs to recognize the importance of the family farm to the long-term viability of the agricultural sector in any local economy.

5. Revival of the Small Farm

For the past several decades there has been a trend in the United States of farms becoming larger and larger in terms of acreage and capital investment.

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Yet, another trend in agriculture in the United States that has become evident over the past decade or more has been the resurgence of smaller farms.

These smaller farms are characterized by size but also by their diversity. They range from large gardens to hobby farms to part-time or full-time commercial farms. They may be organic or non-organic, or specialize in one or more niche or specialty crops. Another trait of these smaller farms is their ability to more rapidly adapt to market trends by changing product lines as new markets emerge.

Many new small farms have emerged closer to major metropolitan areas of the country, where they form the basis of a “grow local/eat local” food system, supplying fresh produce and other agricultural products to city dwellers.

This resurgence in smaller farms can be seen in Nichols as well, where a number of such operations have been identified. They should be supported by the Town of Nichols as they are an opportunity to diversify the local agricultural sector and enable it to better adapt to future market trends.

6. Agricultural Support Resources

Many agricultural support services are available in Nichols and vicinity, including Pennsylvania. These include:

- Trucking companies/services (2)
- Equipment dealers (7)
- Food processors and sales
- Feed and seed supply
- Feed mills (1)
- Professional services such brokerage, custom operators
- Fertilizer and chemical supply (3)
- Veterinarians (8)
- Auctioneers

The Community Bank in the Village of Nichols works with the farming community. Although many of the commercial enterprises supporting agriculture are located in surrounding towns, Middendorf Tractor and Auto sales and a number of trucking businesses are located within Nichols. Other businesses of note

include: Scott Smith & Son Inc. (Fuel Oil / Energy Supply / Propane & Service); Ward and VanScoy (Seed supply and manufacturer); Norwesco (storage tanks); Wagner Lumber (Owego); Visschers (Auctioneers).

In addition to local businesses that support agriculture in Nichols, there are a number of agencies and organizations that contribute to the success of local farming. These include the Tioga County Soil & Water Conservation District, Cornell Cooperative Extension of Tioga County, USDA Farm Service Agency, NRCS, Tioga County Agricultural Resource Group (TC ARG), Farm Bureau, Tioga County Agricultural Society, Tioga County Economic Development & Planning, Tioga County Tourism, the Upper Susquehanna Coalition, Tioga County Dairy Princess, Tioga County Rural Economic Area Partnership, and Tioga County Agricultural and Farmland Protection Board.

7. Soil Resources

The Town of Nichols is richly endowed with high quality farmland soils. According to the USDA soils survey data and New York State Land Classification System, approximately 20% of the soils in the town are classed as prime agricultural soils, and 48% are classed as soils of statewide importance.³ (Map 2, Table 8) Some two-thirds of the soils in the town, covering approximately 14,800 acres of land, are classed as prime or soils of statewide importance.

Of particular significance are the soils covering the river bottomlands along the Susquehanna River and Wappasening Creek. There are approximately 4,600 acres of relatively flat, rich soils along the river and the creek. Of these some 3,400 acres, or nearly 75% of the land, are covered with soils classed as prime agricultural soils. The bottomlands account for 92% of all prime soils in the town.

³ U.S. Department of Agriculture, Natural Resources Conservation Service Web Soils Survey.

Town of Nichols Agriculture & Farmland Protection Plan

Table 8. Prime Soils in the Town of Nichols		
Soil Type	Acres*	Percent of Town Land Area
Chenango gravelly loams	880	4%
Howard loams & gravelly loams	1,110	5%
Lordstown channery silt loams	70	0.3%
Mardin channery silt loams	210	1.0%
Middlebury silt loams	130	0.6%
Tioga silt loams	1,300	6%
Unadilla sandy and silt loams	430	2%
Woostern gravelly silt loams	130	0.6%
Total*	4,260	19.5%
* Rounded to nearest 10 acres		
Source: U.S. Department of Agriculture, Natural Resources Conservation Service Web Soils Survey, and New York State Land Classification System		

8. Natural Hazards Such as Floods, Stream Erosion.

The rich bottomlands along the Susquehanna River, Wappasening Creek and smaller streams in the Town of Nichols are important farmland resources. However the river and creeks that have created them can also threaten agricultural operations and farmland resources.

Almost all of the most productive soils in the town are located in floodplain areas along the Susquehanna River and its tributaries. As a result flooding can be a major issue for farmers, either delaying spring planting or by destroying crops in the field. Floods also pose a hazard to farm buildings, stored feed, livestock and equipment located within floodplains.

Floods can cause considerably more damage where intensive non-farm development has occurred in floodplain areas. In addition to the hazards to property, health and public safety such development can create, it also consumes valuable farmland. For





this reason directing development away from floodplain areas not only would protect valuable farmland, it could reduce the potential for catastrophic losses to a community.

For example, large expanses of undeveloped floodplains south and east of the Village of Nichols provide areas where accumulating floodwaters may spread laterally, helping to relieve pressure on the aging levee system protecting the village. Filling, paving and building upon these floodplains puts more people, property, and public infrastructure at risk.








Along lower reaches of many streams topography and hydrologic conditions combine to create the potential for severe streambank erosion and stream channel migration. Major problem areas have been identified along Wappasening Creek and Sacketts Creek, where flooding and stream migration have already destroyed or threaten to destroy farm fields. Flooding to a lesser degree is also a problem along smaller streams in the town.

Map 2.
Town of Nichols
Prime and Significant Soils

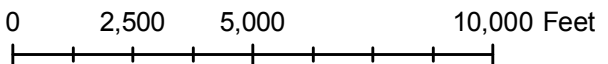
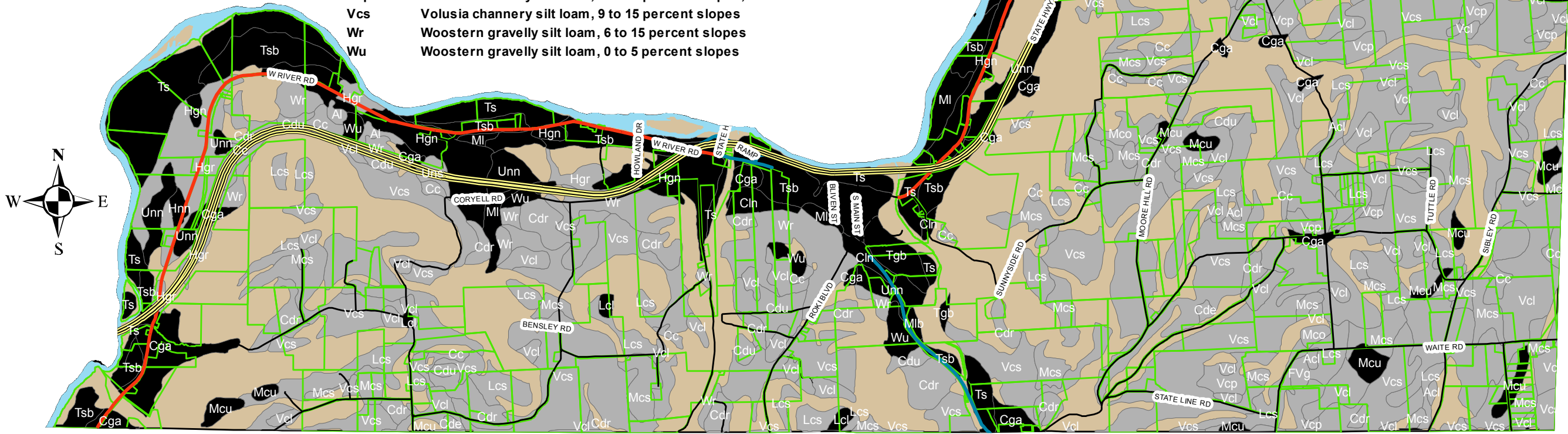
Prime and Significant Soils

-  All areas are prime farmland
-  Farmland of statewide importance
-  Agricultural Parcels
-  Susquehanna River

Roads

-  INTERSTATE
-  STATE
-  COUNTY
-  LOCAL
-  VILLAGE
-  PRIVATE
-  SEASONAL

MUSYM *	MUNAME
Acl	Allis channery silt loam, 3 to 8 percent slopes
Al	Atherton silt loam
Cc	Chippewa channery silt loam
Cde	Canfield gravelly silt loam, 9 to 15 percent slopes, eroded
Cdr	Canfield gravelly silt loam, 9 to 16 percent slopes
Cdu	Canfield gravelly silt loam, 0 to 8 percent slopes
Cga	Chenango gravelly loam, fan, 3 to 12 percent slopes
Cgr	Chenango gravelly loam, 6 to 15 percent slopes
Cln	Chenango gravelly silt loam, 0 to 3 percent slopes
FVg	Fremont and Volusia channery silt loams, 0 to 8 percent slopes
Hgn	Howard gravelly loam, 0 to 3 percent slopes
Hgr	Howard gravelly loam, 6 to 15 percent slopes
Hnn	Howard loam, 0 to 3 percent slopes
Lcl	Lordstown channery silt loam, 0 to 5 percent slopes
Lcs	Lordstown channery silt loam, 6 to 15 percent slopes
Mco	Mardin channery silt loam, 9 to 15 percent slopes, moderately deep
Mcp	Mardin channery silt loam, 9 to 15 percent slopes, eroded
Mcs	Mardin channery silt loam, 9 to 15 percent slopes
Mcu	Mardin channery silt loam, 0 to 8 percent slopes
MI	Middlebury silt loam
MIb	Middlebury silt loam, high bottom
Tgb	Tioga gravelly loam, high bottom
Ts	Tioga silt loam
Tsb	Tioga silt loam, high bottom
Ufn	Unadilla fine sandy loam, 0 to 3 percent slopes
Unn	Unadilla silt loam, 0 to 3 percent slopes
Uns	Unadilla silt loam, 6 to 15 percent slopes
Vcl	Volusia channery silt loam, 0 to 8 percent slopes
Vcp	Volusia channery silt loam, 9 to 15 percent slopes, eroded
Vcs	Volusia channery silt loam, 9 to 15 percent slopes
Wr	Woostern gravelly silt loam, 6 to 15 percent slopes
Wu	Woostern gravelly silt loam, 0 to 5 percent slopes



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MAP 3. CURRENT FEMA FLOOD ZONES





Town of Nichols

Current FEMA Flood Zones








-  100-year
-  500-year

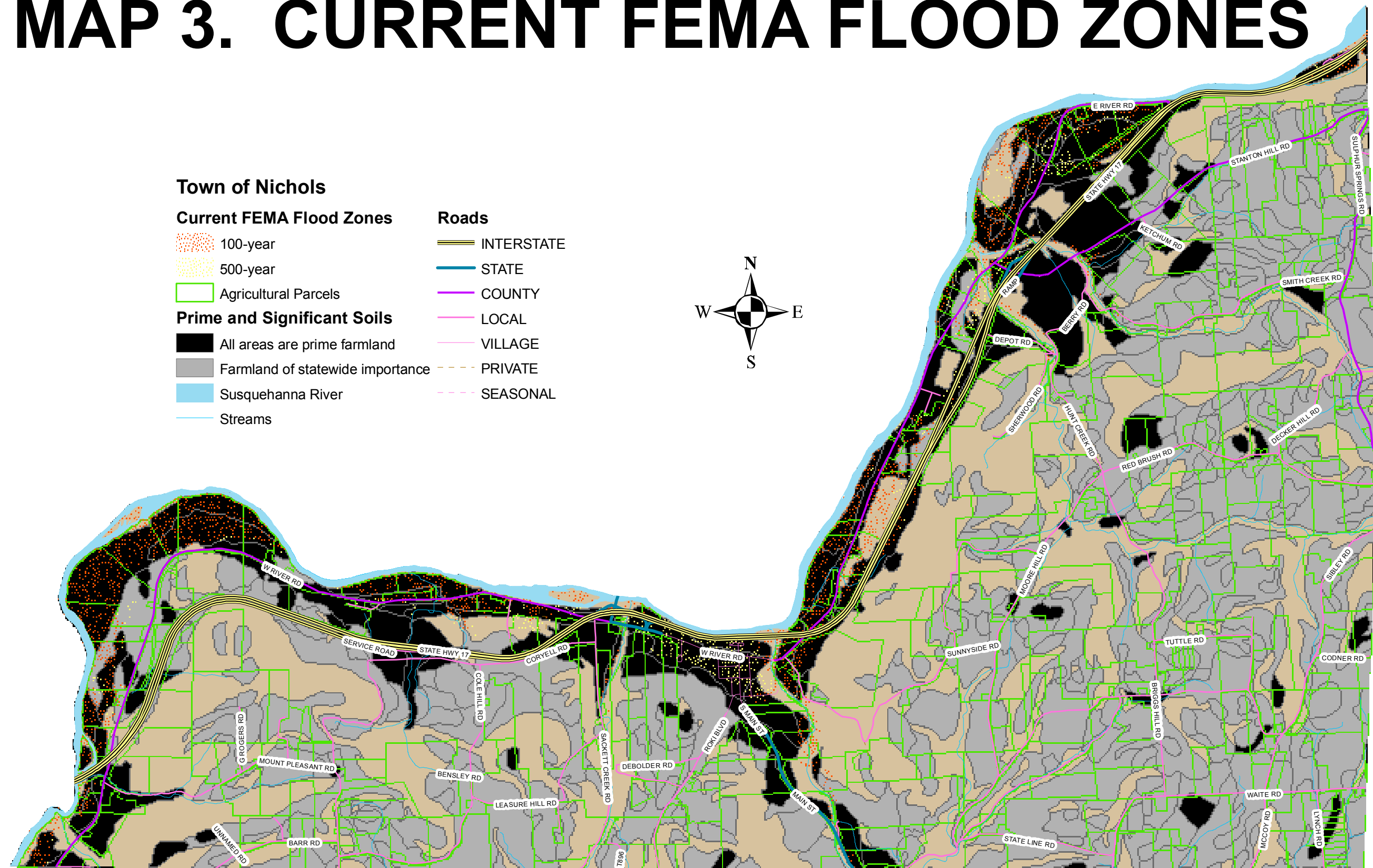
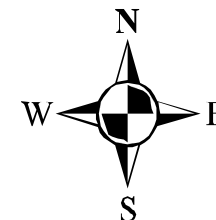
Agricultural Parcels

Prime and Significant Soils

-  All areas are prime farmland
-  Farmland of statewide importance
-  Susquehanna River
-  Streams

Roads

-  INTERSTATE
-  STATE
-  COUNTY
-  LOCAL
-  VILLAGE
-  PRIVATE
-  SEASONAL



0 2,500 5,000 10,000 Feet

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Town of Nichols

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9. Participation in the NYS Agricultural Districts Program

Participation in the NYS Agricultural District Program provides farmers and farmland owners with certain protections from unreasonable restriction of agricultural practices by local government, right to farm protection, and assurance that construction practices of public infrastructure projects will not adversely impact farmland, among other benefits. Tioga County Agricultural District No.2 encompasses the Town of Nichols and the adjacent Town of Owego. Approximately 5,750 acres or 80.3% percent of lands in the town identified in the NYS Office of Real Property Services database as agricultural lands are located within Agricultural District 2.

10. Agricultural Direct Marketing Enterprises

According to recent National Agricultural Statistics Service (NASS) data, 20% of New York farmers engage in direct marketing of at least some of their products. In addition to traditional farmstands erected along the roadside, a wider variety of activities have recently come to define direct marketing businesses, such as farm tours, agri-tainment, sale of exotic animals, meats, baked goods and other value-added farm products produced on the premises. A number of direct marketing farm businesses are located within Tioga County, including Nichols (Table 9).

Table 9. Agriculture Direct Marketing Enterprises

Business	Location	Products
Thomas Babcock Honey Products	Nichols	Honey, honey products
Art Engelbert	Nichols	vegetables
Engelbert Farms	Nichols	organic butter, cheese, beef, pork, veal, vegetables, feed grain
Moore Farms	Nichols	organic beef, eggs, vegetables
Visscher Auction & Real Estate Co.	Nichols	hay, auction services
Charles Babcock	Nichols	hay
Johnson Farms	Nichols	potatoes
Romberger's Farm	Nichols area	pork, beef, straw, vegetables, livestock
Chuck Campbell	Nichols	feed corn
Kay's Rare Cacti & Succulent Greenhouse	Nichols	cactus, succulent plans
Sanctuary Farm	Nichols	honey
Beeman Apiaries	Nichols area	honey and bee forage
Heritage Pastures	Nichols	pastured pork, chicken, turkey, eggs
Ketchums Greenhouse	Nichols	bedding plants
Glen Martin	Nichols	hay, biodiesel, food grade vegetable oil
Traues Blueberries	Nichols	u-pick blueberries
Lindhorst Cattle Co.	Nichols	hay, feed corn
Lloyd's USA Development, Inc.	Nichols area	feed
Strong Haven Farms	Nichols area	feed

Source: Internet; Local Farmers; Tioga County Tourism agency; Visit Tioga website

Town of Nichols

Agriculture & Farmland Protection Plan

11. Participation in New York State Agricultural Assessment

According to the state's Uniform Assessment Standards, actively farmed land is valued according to its current use for agricultural purposes, irrespective of whether farming is considered the highest and best use of such property. New York State Agricultural Districts Law allows reduced property tax bills for land in agricultural production by limiting the property tax assessment of such land to its prescribed agricultural assessment value. To establish a uniform statewide land classification system, the Department of Agriculture and Markets uses differences in soil productivity as the common denominator in classifying all New York State farmland. The state's soil rating methodology is based primarily on differences in the inherent ability of soils to support crop production.

Landowners interested in NY State Agricultural Assessment need to apply annually, and the farmland must satisfy certain gross sales and acreage eligibility requirements. The first step in the enrollment process involves the county Soil & Water Conservation District, which plots each farm tax parcel on Soil Map, outlines woodlands and any ineligible areas, and records this information on the Soil Group Worksheet

(Form ADP-1). They should be made aware of any areas of flood induced crop and yield losses on these parcels, as the reduced productivity of the mapped flood-prone soils affects how those soils are categorized in the state's classification system. Next, the landowner transfers this soil information to the "Application for Agricultural Assessment" (Form RP-305) on the parcel, which is available from the assessor's office. The landowner then submits the completed RP-305 application form along with copies of the completed ADP-1 Soil Group Worksheet and the Soil Map to the assessor by the taxable status date, typically March 1st. After the initial application, a shorter version, Form RP-305-r ("Agricultural Assessment Application Renewal") may be submitted if there have been changes since the previous year's application.

Farmers under New York State Agricultural Assessment who have experienced flood-related crop losses in the last 10 years may want to verify with the county Soil & Water Conservation District that appropriate soil groups are associated with their flood-prone soils, and if necessary request a correction based upon actual flooding frequency and crop losses using Form RA-103, "Land Classification System Affidavit Concerning Soils That Flood" (see Appendix D).

FARMLAND CONVERSION PRESSURES

The pressure to convert farmland to non-agricultural uses in the Town of Nichols appears to be low overall. According to the US Census of Population and Housing, the population of the Town of Nichols increased by 254 persons, or by approximately 11% between 1980 and 2010. (Table 10) The population of Tioga County increased in the three decades between 1980 and 2010 by 1,972 persons, or by 4.0%.

The 2010 Census data records a population drop in the Town of Nichols of 59 persons between 2000 and 2010, or 2.3 percent. (Note the Census 2010 data is considered preliminary and final count numbers may

vary.) Despite this demand for new housing has continued in the town. Between 2000 and 2010 a total of 51 new housing units were built in the Town of Nichols outside the village limits. This represents an increase of 6.3 percent over the course of the decade.

Town of Nichols

Agriculture & Farmland Protection Plan

Table 10. Growth in Town of Nichols and Tioga County, 1980 - 2010

Municipality	Population						Housing Units			
Census Year	1980	1990	2000	2010	Change 1980- 2000	Percent Change	2000	2010	Change 2000- 2010	Percent Change
Town of Nichols*	2,271	2,525	2,584	2,525	254	11.2%	805	856	51	6.3%
Nichols Village	613	573	574	512	-101	-16.5%	228	233	5	2.2%
Town of Barton*	4,046	4,138	4,459	4,414	368	9.1%	1,875	1,888	13	0.7%
Town of Owego*	16,107	16,837	16,454	15,987	-120	-0.7%	6,313	6,584	271	4.3%
Tioga County	49,812	52,337	51,784	51,125	1,972	4.0%	n/a	n/a	n/a	n/a

* Data for Nichols, Barton and Owego towns excludes the populations of the villages of Nichols, Waverly and Owego.

The above census data is reflected in the comparison of land use in the Town of Nichols as shown on aerial imagery from 1994/95, and aerial imagery from 2009/2010 published by the New York State Geographic Information Systems Clearinghouse. The aerial imagery shows approximately 50 new homes in the Town of Nichols outside the village. These homes are scattered throughout the town and many appear to have been built on land not used in crop production, such as land covered by woods or non-farm meadow and brush. Some of the homes however were built on productive farmland.

Although there is not a high demand for housing in the Town of Nichols, often the homes that are built are spread over the countryside, and many times they impact farms both directly and indirectly. Farms are directly impacted by the construction of houses on farmland or in farmed areas. Farms are also indirectly impacted by urban families who don't understand agricultural practices moving into rural farming areas. In many municipalities across New York and other states conflict often develops between farm and non-farm landowners with regard to normal

agricultural practices such as hauling and spreading manure or other farm activities that create noise or odor.

The conversion of agricultural lands to industrial uses, commercial uses and to gravel mining in the town has resulted in the loss of significantly more agricultural land than residential development. According to the New York State Geographic Information Systems Clearinghouse aerial imagery, nearly 200 acres of agricultural land have been converted to these uses since 1994/1995. Of this acreage approximately 125 acres have been converted to commercial and industrial uses, including the new Best Buy regional distribution center in Lounsberry. The remaining conversions to non-agricultural uses have been due to commercial development in the vicinity of Exit 62 west of the Village of Nichols, and at the redeveloped Tioga Downs casino and horse racing track.

Since 1994/1995 approximately 75 acres of formerly agricultural lands have been consumed by gravel mining. This mining activity has been concentrated along East River Road in the vicinity of Lounsberry. In addition to lands now actively or formerly mined,

Town of Nichols

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there are approximately 300 or more acres of actively farmed land around Lounsberry that are owned by

mining interests.

ZONING AND AGRICULTURE

1. Overview

Zoning is one of the key tools utilized to implement the vision set forth in a community master plan. Since 1990 the Town of Nichols has regulated and restricted the use of lands within the town, the height, number of stories and size of buildings and other structures, the percentage of occupancy of lots and parcels of land that may be occupied, and the density of population as authorized by NYS Town Law. The Town of Nichols Zoning Ordinance establishes specific zoning districts and sets forth specific uses permitted in each district, as well as design and operating standards. The Zoning Ordinance has been amended and updated on a number of occasions since its original adoption.

The Town of Nichols Zoning Ordinance is a relatively simple but comprehensive set of land use regulations that reflect the rural character of the community and the small scale of its government. As they relate to agriculture they are not overly burdensome, with the exception of the issues noted below. Recommended changes are relatively minor and technical in nature and intended to avoid potential conflicts with NYS Agriculture and Markets Law (AML) Article 25-AAA, Section 305-a,⁴ or to provide additional flexibility to provide farmers with additional opportunities to create income and enhance the economic viability of their farm operations.

The following commentary is not a complete analysis of the Town of Nichols Zoning Ordinance. Rather it looks at the implications with regard to its potential impacts to agriculture and agricultural enterprises in the Town of Nichols

For the purpose of this report agriculture is defined as the use of land, buildings, structures, equipment, manure processing and handling facilities, and practices which contribute to the production, preparation and marketing of crops, livestock and livestock products as a commercial enterprise or a hobby, and including commercial horse boarding operations as defined in NYS Agriculture and Markets Law Article (AML) 25-AA, Section 301. Historically agriculture has included a variety of disciplines aside from fruit, vegetable and crop production and livestock raised for food. In this report animal husbandry, or the breeding of specific animals for use or sale (e.g. race horses), beekeeping, aquaculture (fish production), horticulture and floriculture, including greenhouse operations and silviculture, maple production and forestry are all considered agricultural pursuits as well.

Section 305-a of NYS Agriculture and Markets Law (AML) provides farmers and agricultural operations located within State Agricultural Districts specific protections against local zoning regulation that may be unreasonably restrictive and cause undue interference with legitimate agricultural practices as defined by state law. Because many of the farms in the Town of Nichols are located within a State Agricultural District, they are afforded the protections available through Section 305-a.

In 2002 NYS Town Law Section 283-a was amended to require local governments to ensure that their laws, ordinances or other regulations that might apply to agricultural operations located in state certified agricultural districts do not "...unreasonably restrict or regulate farm operations in contravention of Article 25-AAA of the Agriculture and Markets Law, unless it can be shown that the public health or safety is threatened."

⁴ Available online at:
<http://www.agmkt.state.ny.us/AP/agsservices/agdistr icts.html>

Town of Nichols

Agriculture & Farmland Protection Plan

When assessing their application of zoning regulations to agriculture, municipal officials should consider such issues as:

- Do the regulations materially restrict the definition of farm, farming operations or agriculture in a manner that conflicts with the definition of "farm operation" as set forth in NYS AML Sect. 301(11)
- Do the regulations materially limit or prohibit the production, preparation or marketing of any crop, livestock or farm product?
- Are certain types of agriculture subject to more intensive review or permitting process than other types of agriculture?
- Is any agricultural activity that meets the definition of "farm operation" as set forth in NYS AML Sect. 301(11) subject to special permit, site plan review or other local review standard above ministerial review, or subject to a more intensive level of review than other uses permitted within the same zoning district?
- Are farm operations treated under the local zoning regulations as integrated, interdependent uses and activities, or as independent, competing uses of the same property?
- Do the local zoning regulations prohibit any farm operations located within a State Agricultural District or do they permit them as a "legal nonconforming use?" (e.g. a land use that predates the adoption of the zoning ordinance but is not listed as a permitted use)

Upon the request of a farmer or municipal official the NYS Department of Agriculture and Markets may review local land use regulations to assess whether a local law or ordinance is unreasonably restrictive on its face, and whether it is unreasonably restrictive when applied to a particular agricultural practice. The Department must additionally assess whether the regulated activity also poses a threat to public health or safety.

If the NYS Department of Agriculture and Markets determines that a local law or ordinance does impose an unreasonable burden on farm operations within a

State Agricultural District, it will notify the municipality of its findings. The Department will then work with municipal officials to bring the local regulations in line with the NYS Agriculture and Markets Law. If the issue cannot be resolved through negotiation the NYS Commissioner of Agriculture is authorized under the law to bring an action against the municipality to enforce the provisions of Section 305-a.

2. Recommendations for Changes to Town of Nichols Zoning

The Town of Nichols Zoning Ordinance divides the town into four zoning districts and combinations thereof:

- Agricultural zoning districts;
- Business zoning districts;
- Industrial zoning districts;
- Residential zoning districts;

The Town of Nichols zoning districts are designed to permit multiple uses within each district. Agriculture is permitted throughout the Town of Nichols with the exception of a small R-Residential zoning district centered on Taylor Avenue off East River Road. The zoning district covering the largest land area within the town – upwards 90% of the land – is the A-R zoning district. This district permits agricultural operations as well as "...buildings and manufactured houses with one or two-family dwelling units" and "...mobile home parks, town house complexes, cluster housing, and apartment buildings in Planned Development Areas with Special Permit approved by the Town Board."

Because population growth in the Town of Nichols and demand for land for residential uses is relatively small, the combination of agricultural use and residential use in the A-R District is an appropriate approach for the Town of Nichols. However the A-R District is not clear with regard to the status of agriculture in relation to residential development. The statements "In residential districts that are also zoned agricultural, animals, poultry, and fowl related to agricultural pursuits must be restricted by fencing,

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screening, or equivalent, to the property owned, rented, or leased by the owner of the animals, poultry, and fowl," indicates that residential development and the lifestyle of rural non-farm residents take precedence over agricultural uses.

The Town of Nichols may wish to consider revising the description of the A District to clarify the status of agriculture as a primary land use within the A-R zoning districts. This could be accomplished by replacing the existing language with language that elevates the status of agriculture as the primary land use. An example of such language is:

"The general purpose and intent of the A-R Agricultural-Residential district is to protect the farmland and other agricultural resources and rural agrarian character of the Town of Nichols, to promote, as much as possible, the continued economic and operational viability of agricultural enterprises in the Town of Nichols, and to provide opportunities for rural residential and other compatible development within an agricultural environment."

The Town of Nichols may wish to review the size of the existing B-A-R; I-A-R and I2-B-A-R zoning districts. Given the population of the town and traffic volumes on NYS Route 17 (future I-86), the amount of area allocated to business and industry west of the village appears to be well in excess of what might be needed to accommodate future growth in those sectors. In addition, such zoning may create expectations as to the development value of this land, which may make it difficult for farmers to compete with prices non-farm land buyers are willing to pay for this critical acreage.

The Town of Nichols should consider reducing the sizes of these zoning districts by re-zoning some of the land to A-R. Map 4 shows the recommended revisions to zoning district boundaries. Lands recommended for possible rezoning are outlined in yellow. Parcels recommended for consideration of rezoning are:

- the parcels on the north side of West River Road west of NYS Route 17 (future I-86);

- the rear portions of the parcels located along West River Drive and Coryell Road south and east of NYS Route 17 (future I-86);
- lands on the north side of Stanton Hill Road eastward from the Ketchum Road intersection;
- lands east of Hunt Creek Road south of intersection with Depot Road and lands on both sides of Smith Creek Road south of intersection with Berry Road.

Definitions are a critical component of any set of zoning regulations. Although agriculture is a permitted use in the Agricultural zoning districts, the term is not defined. Instead the Zoning Ordinance has a list of types of farms as examples. Rather than listing examples, the Town of Nichols should consider simply listing "agriculture" as the permitted use. It could then revise the definitions section to include a definition of "agriculture" and include it as a permitted use.

An example of a definition of agriculture is:

"The use of land, buildings, structures, including greenhouse structures, equipment, and the practices which support the production, preparation, marketing and transportation of grain, vegetable, fruit, fiber feed and other crops, honey, maple syrup, horticultural and floricultural products, animal husbandry, bees, livestock and livestock products."

This language provides a clear and concise definition of what would constitute agriculture or an agricultural operation and provides considerable flexibility to accommodate the wide variety of activities generally recognized as being "agriculture" in New York. It can also ensure some flexibility in the future to accommodate the changing nature and increasing diversity of agriculture. Use of "agriculture" as an umbrella term also takes into account not merely the specific activities set forth in the several definitions currently used by the Town of Nichols, but also the multiple structures and subordinate activities that contemporary American agriculture encompasses.

The list of permitted uses in the Agricultural zoning districts does not include farmstands, farm markets,

Town of Nichols

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home occupations, riding stables or horse boarding enterprises. These types of activities are commonly found on farms and in rural areas.

Although “vegetable stands not part of agricultural establishments” are permitted within Business zoning districts, the vast majority of farms in the Town of Nichols are located outside Business zones. The language also limits sales to vegetables. This effectively prohibits the sale of fruits, eggs, meats, baked goods and other products that a farm may produce for retail sale to the general public. Finally, the “...not part of agricultural establishment...” language could be interpreted to preclude an active farm from also operating a roadside stand or farm market.

The Town of Nichols should add “farm stand,” “farm market,” or other suitable terms as a permitted accessory use in the Agricultural zoning districts. In addition the use should be defined in the definitions section of the zoning ordinance.

The Town of Nichols can consider an approach similar to one taken by the Town of Lima, which distinguishes between farmstands and farm markets. The Town of Lima defines a farm market as being a permanent enterprise selling a wider variety of agriculture-related merchandise, while a farm stand is a smaller, temporary or portable structure limited to selling produce.

Possible definitions for the Town of Nichols to consider are:

FARM MARKET. *A permanent structure, with or without appurtenant open display area, operated as an accessory use to an active agricultural operation, from which agricultural produce and limited agricultural-accessory products such as tools, appliances and other such items may be sold, and which may also contain facilities for the onsite preparation of processed foods comprised of ingredients that add value to products of the farm, such as a kitchen or bakery.*

FARM STAND. *A portable or temporary structure or defined area, operated as an accessory to the principal use of the property,*

from which agricultural products, baked goods and other agriculture-related value added items produced on the premises may be sold.

The above “farm market” may also be distinguished from a “farm stand” in that the sales from a farm stand could be limited to products produced on the premises. In some communities farm stands are permitted to also sell agricultural products from surrounding farmers and gardeners. Farm markets housed in permanent structures have larger sales volumes, are likely to be operated year-round and need to be able to acquire fresh produce and other products from outside vendors. In many cases the outside vendors may be other area farms that may lack the resources or the exposure on a major highway to sustain a retail operation.

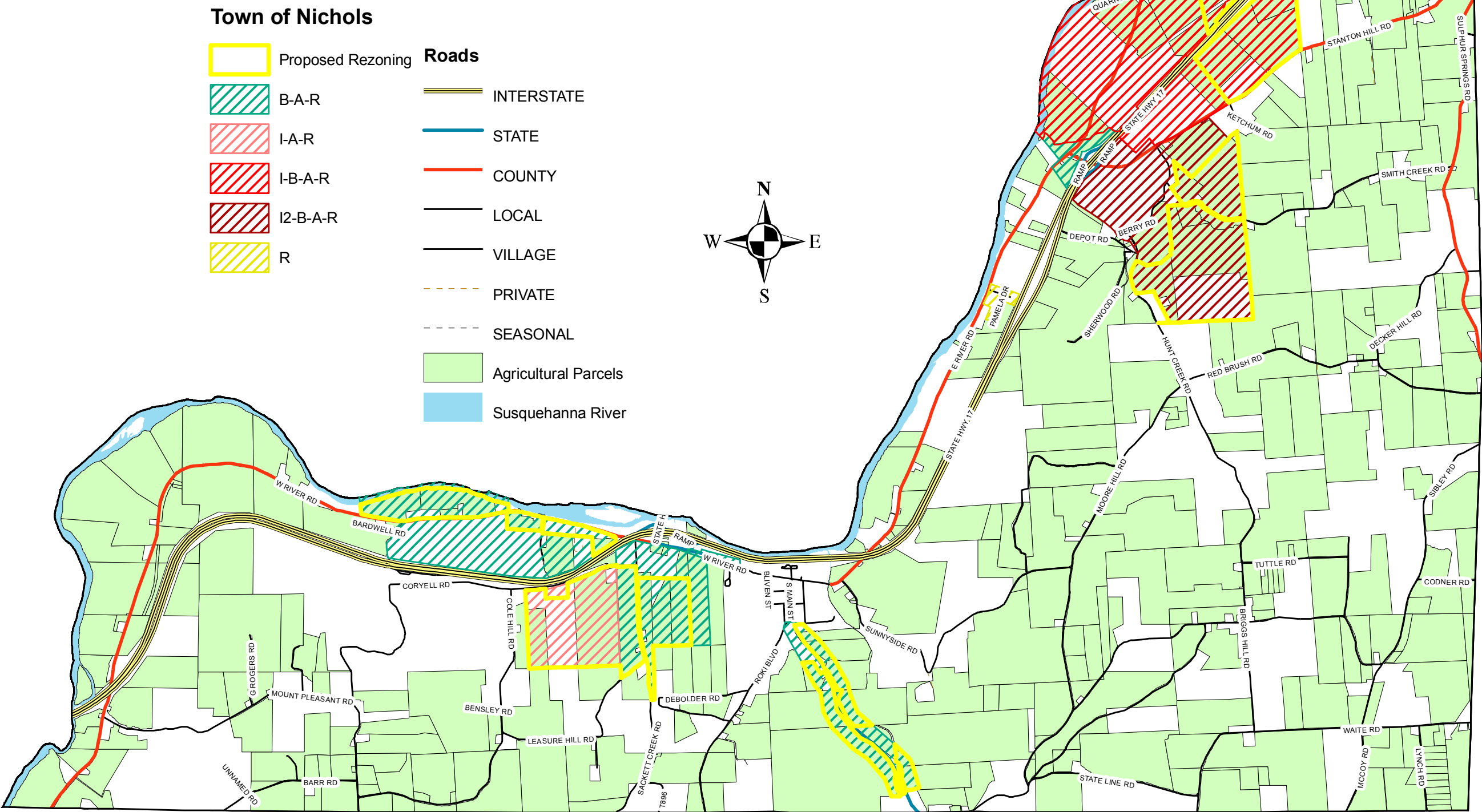
Farm markets also have the option of selling “agricultural accessory products,” which can be defined as *“items, whether natural, processed, or manufactured, which are directly linked to and promote the use and sale of agricultural products.”* Examples of such products might be canning supplies, hand gardening tools, seed, fertilizers, mulch soil amendments and like products principally utilized in gardening or farming.

The definition of farm stand is written in a manner that would permit homeowners with gardens or fruit trees or bushes to also operate a farm stand.

The Town of Nichols should also consider revising the definition for “Junkyard” to exclude the traditional farm practice of storing inoperable machinery, recycled wood and other materials on the premises. A revised definition might read:

“JUNK YARD: *Any area of land, including buildings therein, which is used primarily for the collecting, storage, and/or sale of waste paper, rags, scrap metal, or discarded material; or for the collecting, storage, and/or salvaging of machinery or vehicles not in running condition and for sale of parts thereof, excluding however refuse, wastes and debris generated by or used on the premises by any ongoing agricultural operation, as determined by the NYS Commissioner of Agriculture and Markets.”*

MAP 4. AREAS PROPOSED FOR RE-ZONING



Tioga County
GIS

0 2,500 5,000 10,000 Feet

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Agriculture today has evolved in a manner where many farms have diversified their income sources, in some cases through side businesses designed to generate supplemental revenues to support the overall income stream. These businesses are not stand alone businesses, but rather are subordinate to an ongoing farm operation. They must also be related to and supportive of agriculture in the community. The businesses can be seed, fertilizer, equipment or other dealership, a farm service business or a direct marketing operation such as a farm stand. Agri-tourism has stimulated the development of businesses as diverse as bed and breakfast inns, wineries, corn mazes or other seasonal attractions on the farm.

The Town of Nichols currently does not have specific language permitting such enterprises in the A-R zoning district. Permitting such business ventures could provide farmers in the town with more flexibility in terms of revenue sources. An example of a definition of such businesses is:

"AGRICULTURAL ENTERPRISE: A retail or wholesale enterprise providing services or products principally utilized in agricultural production, operated by the owner(s) of the active agricultural operation existing on the property, including structures, agricultural equipment and agricultural equipment parts, batteries and tires, livestock, feed, seed, fertilizer and equipment repairs, or providing for wholesale or retail sale of cheese, bag feeds, grain, fruit, produce, trees, shrubs, flowers or other products of agricultural operations, including the packaging and storage of raw and processed materials utilized in the operation of said enterprise."

These types of businesses can be an important asset to the overall agricultural economy in the Town of Nichols and surrounding area. Such businesses can provide critical services or products at a convenient distance for local farmers. They can also provide a market for locally produced agricultural products.

TARGETED AGRICULTURAL PROTECTION AREAS

The over 14,000 acres of farmland in the Town of Nichols vary in physical characteristics such as topography and soils quality. These lands taken in their entirety, however, constitute a unique and productive system of agriculture in the Town of Nichols. Although many of the bottomland areas may by some measures be superior agricultural lands, for the purpose of this agriculture and farmland protection plan all lands in agricultural production are considered critical to the overall agricultural economy in the Town of Nichols.

Due to development patterns in the Town of Nichols in recent decades the bottomland soils along the Susquehanna River appear to be more vulnerable to conversion to non-agricultural uses. Competition for these lands for industrial development and gravel mining pose a threat to this resource. To address this issue, this plan proposes several Targeted Agricultural Protection Areas. These areas are

designed to draw attention to areas of bottomland soils that are vulnerable to conversion.

Map 5 shows these Targeted Agricultural Protection Areas of the Town of Nichols where priority should be given to the protection of agricultural land over other land uses. These areas were selected based on the following criteria:

1. Higher quality soils (prime or soils of statewide importance) cover most if not all of the lands;
2. Lands with higher levels of pressure for conversion (i.e. development or mining);
3. Lands in close proximity to highway interchanges, or with large amounts of frontage on public roads or highways;
4. Lands at the edge of existing development or adjacent to lands served by water and/or sewer lines;
5. Several contiguous parcels of land that create a large area of higher quality agricultural lands;

Town of Nichols Agriculture & Farmland Protection Plan

About 74% of the acreage designated as Targeted Agricultural Protection Areas on Map 5 is covered with prime soils (39.2%) or soils of statewide significance (34.7%). The priority lands account for just under half (48%) of all acreage covered by prime agricultural soils in the Town of Nichols.

The primary tool for protecting the identified lands is through revisions to the current zoning regulations and zoning map. The proposed revisions would remove land uses such as mining, commercial and industrial land uses from contention with agriculture by rezoning selected parcels of land to the A-R zoning designation.

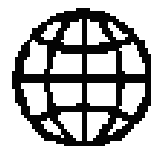
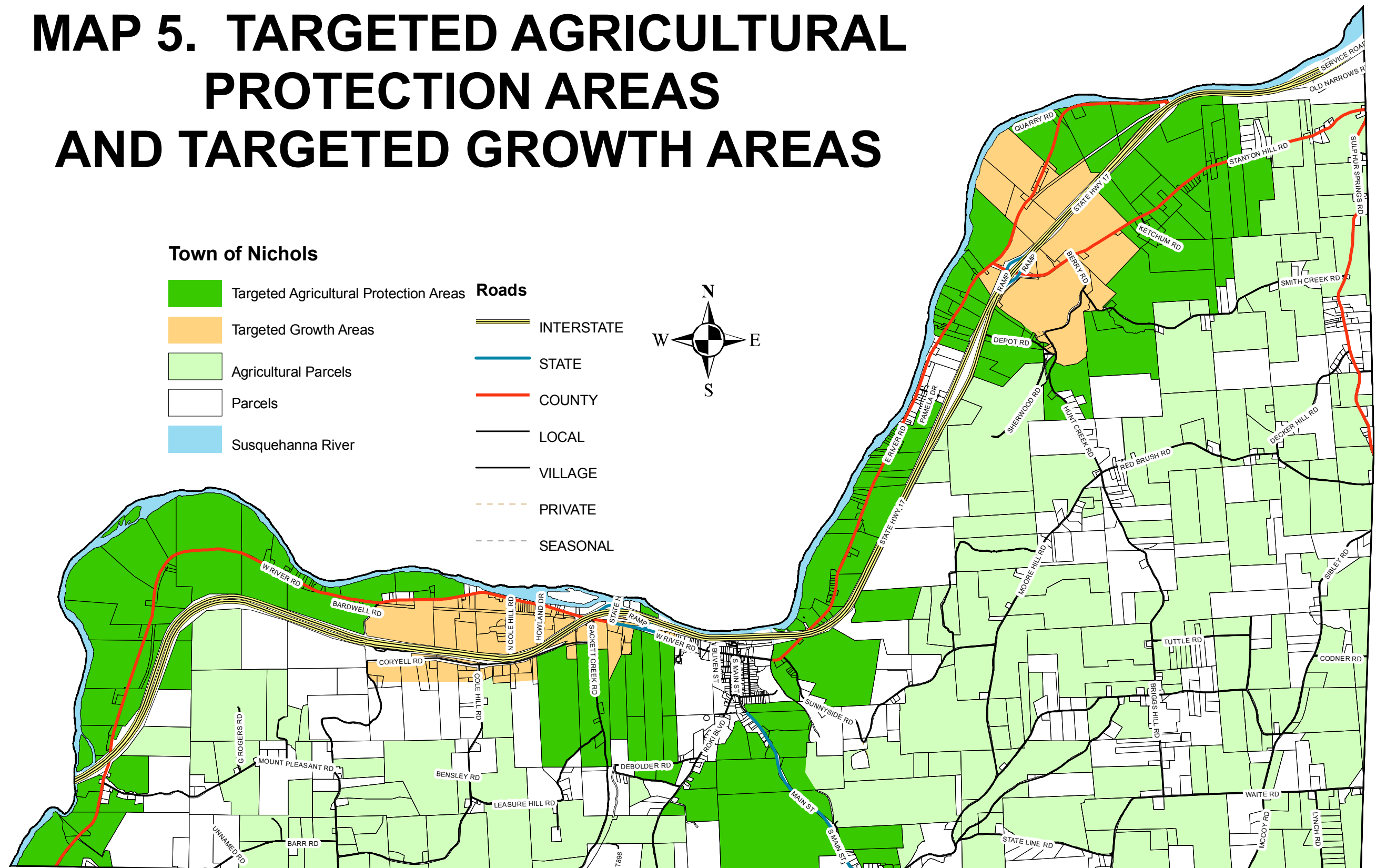
In addition to identifying Targeted Agricultural Protection Areas the plan also designates Targeted Growth Areas. These areas are where the Town of Nichols should direct future industrial and commercial growth. These designated areas illustrate a balance between protection of agricultural resources and economic development. Just over one-quarter of the prime agricultural soils in the town (26%) are located within the proposed Targeted Development Areas.

Although they do not exhibit the same high quality in terms of soils and slopes of bottomland, the remaining 65% of the farmland resources in the Town of Nichols are critical to the long-term viability of agriculture in the Town of Nichols. Approximately one half of these lands are covered with soils of statewide importance, (Map 2) In most cases these lands are not designated as Targeted Agricultural Protection Areas because they do not have the same levels of development pressure as observed elsewhere.

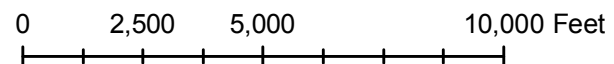
These other agricultural lands are important resources worthy of protection for reasons other than their agricultural productivity. As in the case of much of the priority agricultural lands, they contribute to the scenic character of the town and the quality of life for the non-agricultural community in Nichols. From a public health and safety standpoint, the maintenance of these lands in agriculture and other open space uses, as opposed to residential and other development, reduces the potential flooding downstream in the bottomland areas of the Town of Nichols.



MAP 5. TARGETED AGRICULTURAL PROTECTION AREAS AND TARGETED GROWTH AREAS



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Town of Nichols

Agriculture & Farmland Protection Plan

EVALUATION OF POTENTIAL AGRICULTURAL LAND PROTECTION STRATEGIES

Introduction

There are a number of tools and strategies for protecting farmland and other agricultural resources, and promoting the long term viability of agriculture in the Town of Nichols. These tools and strategies can be implemented by the town as well as individual farmers and farmland owners, and they should to be designed to fit the Town of Nichols's and the community's capacity to implement them. In Nichols, it is important to adopt a strategy or strategies that will reduce conversion pressure on its more vulnerable high quality farmland, while also providing for anticipated growth in non-agricultural, industrial, commercial and residential development.

In addition to protecting its farmland resources, the Town of Nichols should also ensure that its land use regulations for the agricultural businesses that own and work the land provide the flexibility essential for their long-term survival.

1. Local "Right to Farm" Law

The Town of Nichols currently does not have a "right to farm" law as authorized in the NYS Agriculture and Markets Law. Local "right to farm" laws articulate local policy in support of farming, define "generally accepted agricultural practices," and affirm a farmer's right to employ such practices. Typically these laws also include a statement that farm practices may include odors, noise and other activities that may not be desirable for non-farm residents. Where a right to farm law is in force, it can afford farmers protection from nuisance lawsuits brought by neighbors and serve as a valuable education tool for the non-farm community.

Today towns have begun to expand the scope and benefits of right to farm laws by including in their laws a local "grievance" procedure to resolve complaints between farmers and non-farm neighbors. A local committee consisting of local farmers as well as non-

farm residents may be established to hear and resolve complaints.

A model right to farm local law is provided in Appendix B.

2. Zoning to Protect and Promote Agriculture

Zoning regulations have traditionally been utilized primarily to promote orderly growth and development in a community, and to protect the investments of residents and businesses. In many areas of the country two underlying assumption of zoning since World War II have been 1) that residential, commercial, industrial or other type of development constituted the "highest and best" use of agricultural lands; and 2) that agriculture is for the most part a holding action until the land can be developed. As a result many zoning ordinances have relegated agriculture to secondary status as a land use.

In the 1970s a number of communities in Maryland and Pennsylvania began to recognize that suburban sprawl was threatening critical farmland resources. They recognized that modern agricultural operations had become inherently incompatible with non-farm residential development, and that zoning regulations were not keeping up with the evolving nature of agricultural enterprises. The concept of agriculture being a "highest and best" land use and worthy of being treated as a land use on par with residential and other development began to appear in zoning regulations. In addition, planners recognized that more flexibility in zoning regulations was needed to permit the variety of small scale agricultural support businesses and other enterprises that did not fit the traditional definition of agriculture, but which are critical to the economic viability of the farm operation.

As a result, zoning today is a tool which can be utilized to promote the long-term viability of agriculture in the community. Zoning regulations can be crafted to create land use districts where agriculture is considered the pre-eminent land use. Other

Town of Nichols

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traditional rural land uses, such as scattered rural residential, churches and other institutional uses, parks and campgrounds, etc. can also be permitted, but subordinate to agriculture. More intensive land uses, such as large scale residential, commercial or industrial development, and extractive industries that compete with farmers for prime farmland, should not be permitted.

Small scale businesses may also be appropriate in an agricultural zoning district as a means of support for agricultural operations. Many farms have diversified to generate supplemental income through side businesses such as farm markets, farm-based entertainment or custom services. The businesses can be seed, fertilizer, equipment or other dealership, farm service business or a direct marketing operation such as a farm stand. Agri-tourism has stimulated the development of businesses as diverse as bed and breakfast inns, wineries and corn mazes or other seasonal attractions on the farm.

Key to the successful implementation of these new zoning concepts are:

1. Clear and concise definitions;
2. Clear and concise design standards for parking lots, signs, lighting and other facilities;
3. Site plan review by the Planning Board for some businesses to ensure the safety of members of the public who patronize the establishments.

3. Infrastructure Management

Public infrastructure, such as roads, highways and municipal water and sewer services, can have both positive and negative impacts on agriculture in the community. Good, sound local roads and highways are critical to moving farm product to market. Without proper planning, however, they can also create major issues for farmers by spurring non-agricultural development in competition with agriculture.

Because they can promote non-agricultural development, the potential adverse impacts on agriculture of public investments in public water and sewer infrastructure need to be carefully considered. These investments are most often designed to

promote land development, often on prime agricultural soils. They can effectively force farmers off the land by increasing land values, property taxes and also conflicts with non-farm neighbors and land uses. Development can quickly fragment farmland, creating additional obstacles to farm operations.

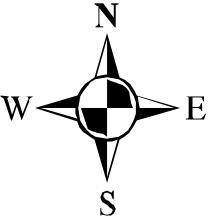
At the same time, access to public water supply may become more desirable for some farm operations due to increasingly stringent food safety regulations. The key is designing and locating such infrastructure in a manner that it can serve agriculture without spurring undesirable development. In Erie County towns have developed a policy of sizing watermains in a manner that provides the capacity needed to service farms, but not more intensive land development.

The NYS Department of Agriculture and Markets has a policy on water hookups in state Agricultural Districts that is designed to insure that active agricultural operations may access waterlines at any point if such infrastructure is extended into a state Agricultural District.⁵ Lateral restrictions can also be adopted to restrict connections from new watermains to existing structures at the time of construction, and future agricultural structures. Such a policy would mirror the NYS Department of Agriculture and Markets policy.

Any future Agricultural Advisory Committee established by the Nichols Town Board should review all potential infrastructure extensions into the agricultural areas of the town.

⁵ Available online at:
<http://www.agmkt.state.ny.us/AP/agsservices/agdistricts.html>

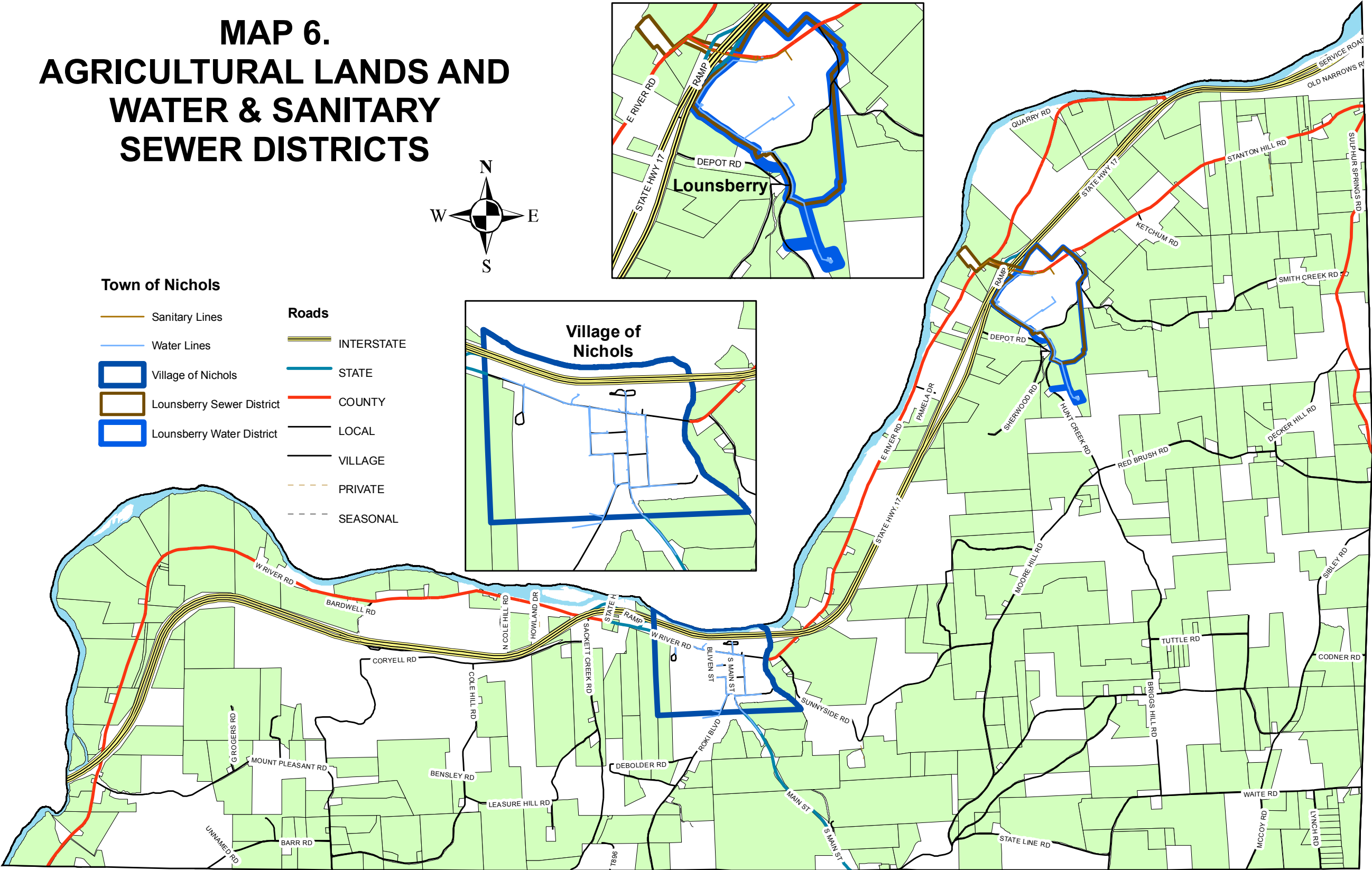
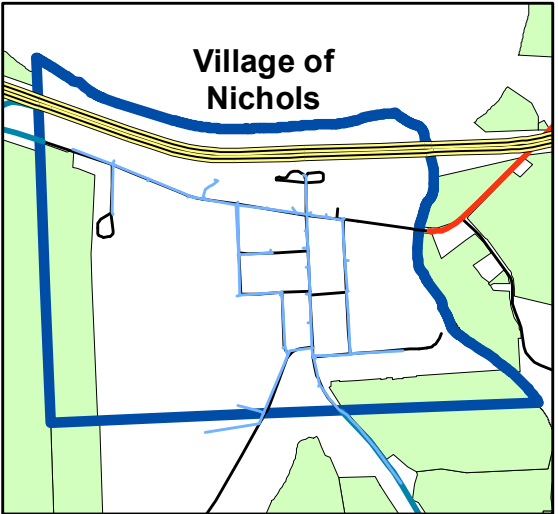
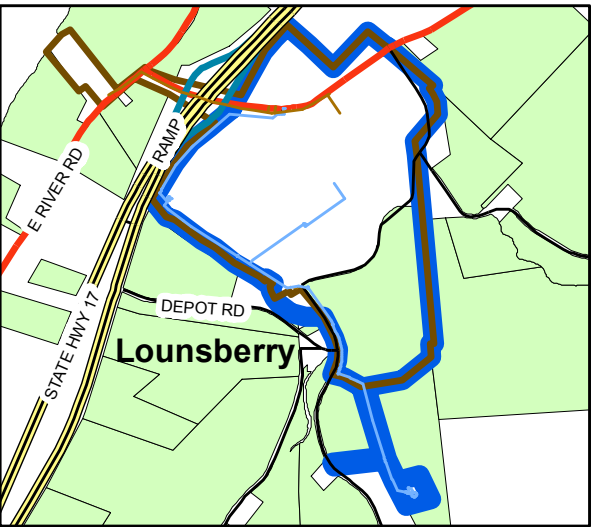
MAP 6. AGRICULTURAL LANDS AND WATER & SANITARY SEWER DISTRICTS



Town of Nichols

- Sanitary Lines
- Water Lines
- Village of Nichols
- Lounsberry Sewer District
- Lounsberry Water District

- Roads**
- INTERSTATE
 - STATE
 - COUNTY
 - LOCAL
 - VILLAGE
 - PRIVATE
 - SEASONAL



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0 2,500 5,000 10,000 Feet

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4. Conservation Easements/ Purchase of Development Rights

The purchase of agricultural conservation easements, also known as purchase of development rights or PDR, has proven to be a successful public program for the permanent protection of critical farmland. It is a voluntary program through which local, county or state agencies, or non-governmental groups such as land trusts, purchase or accept donations of the surface development rights to the land from willing landowners. In exchange, a conservation easement is placed on the land that prohibits non-agriculture-related future development. The easement is a perpetual easement that would run with the land and be recorded. An application process has been established in Tioga County by the Tioga County Agricultural and Farmland Protection Board that is administered by Cornell Cooperative Extension of Tioga County.

The value of development rights is calculated as the difference between the value of the land for agricultural purposes and its value for development. Ownership of the parcel does not change, nor do the owners surrender control over public access to their property. The owner may continue to farm or otherwise utilize the property in accordance with the restrictions of the conservation easements. Since the agricultural conservation easement dramatically limits the future uses of the property, property tax assessments must take into consideration the impact of limitations on the property's use in the future.

PDR programs are regarded as a fair mechanism to achieve permanent protection of important farmland and open space. Although typically operated at the state or county level, a few towns in New York have established independent Town purchase of development rights programs. Most programs at the state and local level are funded through a combination of state- or federal grants and local funds.

Key to a successful program utilizing purchase of agricultural conservation easements is careful selection of lands to be targeted for protection.

Funding resources for purchase of agricultural conservation easements are very limited, so criteria for ranking parcels is necessary to assure both the optimal use of public funds and fairness in selecting candidate parcels for protection.

Typical criteria for selecting lands to be protected include:

1. High quality soils (prime or soils of statewide importance) cover most if not all of the lands to be protected;
2. High quality lands with higher levels of pressure for conversion (i.e. development or mining), such as those in close proximity to highway interchanges, served by water and/or sewer lines, or are at the edge of existing development;
3. Contiguous parcels of land that if protected by individual easements would create a large area of protected lands;
4. The farmer/farmland owner(s) has a history of good stewardship of the land as evident through participation in NYS Agricultural District program, use of best management practices, and investment in farm and farm operations;
5. Potential for intergenerational transfer of the farm operation.

5. Lease of Development Rights Program

Lease of development rights (LDR) programs, also known as term conservation easement programs, provide incentives to landowners who voluntarily commit to keeping their land undeveloped for a certain number of years. LDR programs are similar in concept to purchase of development rights programs, but the incentives they offer are more modest because the commitment is not permanent. In New York the most common form of LDR has been town programs that reduce property tax assessments for landowners willing to sign five to 25 year deed restrictions on property meeting minimum acreage requirements. LDR programs help farmers afford the maintenance of farmland and open space. They do not permanently protect land for farming, but they can

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help stabilize broad areas of a community, giving towns and landowners more time to develop other farmland protection strategies. LDR programs often draw interest from landowners with small farm acreages or from part-time farmers.

Jurisdictions employing LDR offer various incentives to make the program more alluring to both commercial and smaller scale farms. For instance, California's Williamson Act program has a "rolling" rather than a fixed term, meaning that the length of the term continues to roll forward until a participating landowner decides to withdraw from the program. Other programs, including Southampton, NY, have required that town governments receive a "right of first refusal" authority on properties enrolled in LDR programs. This gives a town the right to match purchase offers on participating properties. Additional incentives could include the expedited review of limited development proposals on properties enrolled in term commitment programs; the retention of current zoning standards for enrolled properties; and grant-writing assistance to help farmers acquire agricultural economic development funds.

LDR programs often involve simpler deed restrictions than PDR programs, in part because towns want to reduce program complexity and transaction costs. This can be justified because the agreements are not permanent, and simple programs are more attractive to landowners and easier to administer. However, towns must have a clear understanding of the permitted uses of properties enrolled in LDR agreements (and understand what constitutes a violation). For instance, can participating landowners build barns and other agricultural structures? Can they subdivide their property? Can they store vehicles or other items on land subject to the agreements? By having clear policies on such issues, towns can help prevent future misunderstandings and make the program easier to administer. Towns also need to develop termination provisions and penalties significant enough to discourage violations and dispel the potential perception within the community that local government is subsidizing land speculation.

While LDR is not a solution for permanent protection

of farmland it does provide short to medium term protection while other options are considered. The major benefits and drawbacks of LDR include:

Benefits of LDR

- Helps stabilize broad areas of a community's farmland;
- Term agreements may be attractive to landowners unwilling to make permanent commitments;
- Provides "breathing room" for communities experiencing rapid land use change;
- Reduces property tax burden for farm landowners who may not qualify for agricultural assessment or other state property tax reduction programs.

Drawbacks of LDR

- Does not permanently protect land;
- Can create the perception that a town is subsidizing land speculation and landowners will receive and review a "windfall" at the end of the term;
- Requires property tax shift or other incentives that can be expensive;
- Requires on-going monitoring and enforcement.

The Town of Perinton, located outside of Rochester in a high growth area, has had a successful LDR program since the 1970's offering reductions in assessed valuations from 25% to 90% in exchange for easements providing protection from 5 to 25 years. Perinton's program offers: 25% for a 5 year lease; 40% for a 10 year lease; 55% for a 15 year lease; 70% for a 20 year lease; and 90% for a 25 year lease. Participation has decreased since the program began in the 1970s, but participation tends to be the most active for leases greater than 10 years. Nichols is a much smaller rural community that is not experiencing the rapid growth found in the Rochester suburbs. Hence a less complicated LDR scheme is warranted.

As shown in Table 11, a possible scheme for an LDR program in Nichols might include a 40% reduction in assessed value for agricultural lands within the Targeted Agricultural Protection Areas for a ten year

Town of Nichols

Agriculture & Farmland Protection Plan

lease and an 80% reduction in assessed value on a 20 year lease. For land in agricultural use outside the Targeted Agricultural Protection areas, the program could offer a 25% reduction in assessed value on a 10 year lease and a 50% reduction in assessed value on a 20 year lease. The total assessed value, reduced assessed values, tax revenue, and reduced tax revenue are shown in Tables 11 and 12. The analysis is based on three rates of participation: 20%, 50%, and 70% of the agricultural parcels.

In Nichols, total property tax revenues in 2010 exceeded \$400,000. At maximum participation rates,

the LDR program would cost the Town of Nichols no more than 2.25% of the town's property tax revenue. It has been shown that conservation of 20% of agricultural lands in a given community will have the effect of stabilizing the entire agricultural sector. Thus, for a minimal investment, the Town of Nichols could protect and stabilize an economic sector that not only provides jobs and a large economic contribution to the local economy, but which also defines the town.

Table 11 LDR Program Tax Reductions with Varying Participation of Owners of Agricultural Parcels Targeted for Protection					
\$1,123,123.00 Current Total Assessed Value of all Agricultural Parcels Targeted for Protection			\$14,555.67 Current Tax Revenue from Agricultural Parcels Targeted for Protection		
10 Year Easement With 40% Reduction In Assessed Value					
Percentage Of Parcels Participating In Program	Assessed Value Of Agricultural Parcels Targeted for Protection	Tax Revenue on Assessed Value of Agricultural Parcels Targeted for Protection	Assessed Value With 40% Reduction In Assessed Value	Tax Revenue With 40% Reduction In Assessed Value	Reduction in Tax Revenue
20% of parcels	\$224,624.60	\$ 2,911.13	\$134,774.76	\$1,746.68	\$1,164.45
50% of parcels	\$561,561.50	\$ 7,277.84	\$336,936.90	\$4,366.70	\$2,911.13
70% of parcels	\$786,186.10	\$10,188.97	\$471,711.66	\$6,113.38	\$4,075.59
20 Year Easement With 80% Reduction In Assessed Value					
Percentage Of Parcels Participating In Program	Assessed Value Of Agricultural Parcels Targeted for Protection	Tax Revenue On Assessed Value of Agricultural Parcels Targeted for Protection	Assessed Value With 80% Reduction In Assessed Value	Tax Revenue With 80% Reduction In Assessed Value	Reduction in Tax Revenue
20% of parcels	\$224,624.60	\$ 2,911.13	\$ 44,924.92	\$ 582.23	\$2,328.91
50% of parcels	\$561,561.50	\$ 7,277.84	\$112,312.30	\$1,455.57	\$5,822.27
70% of parcels	\$786,186.10	\$10,188.97	\$157,237.22	\$2,037.79	\$8,151.18

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Table 12 LDR Program Tax Reductions with Varying Participation on Agricultural Lands Not identified as Agricultural Parcels Targeted for Protection

\$2,271,348.00 Current Total Assessed Value Agricultural Parcels Not Identified as Agricultural Lands Targeted for Protection			\$29,436.67 Current Tax Revenue Agricultural Parcels Not Identified as Agricultural Lands Targeted for Protection		
10 Year Easement With 25% Reduction In Assessed Value					
Percentage Of Parcels Participating In Program	Assessed Value Of Agricultural Parcels	Tax Revenue On Assessed Value of Agricultural Parcels	Assessed Value With 25% Reduction In Assessed Value	Tax Revenue With 25% Reduction In Assessed Value	Reduction in Tax Revenue
20% of parcels	\$ 454,269.60	\$ 5,887.33	\$ 340,702.20	\$ 4,415.50	\$1,471.83
50% of parcels	\$1,135,674.00	\$14,718.34	\$ 851,755.50	\$11,038.75	\$3,679.58
70% of parcels	\$1,589,943.60	\$20,605.67	\$1,192,457.70	\$15,454.25	\$5,151.42
20 Year Easement With 50% Reduction In Assessed Value					
Percentage Of Parcels Participating In Program	Assessed Value Of Agricultural Parcels	Tax Revenue On Assessed Value of Agricultural Parcels	Assessed Value With 50% Reduction In Assessed Value	Tax Revenue With 50% Reduction In Assessed Value	Reduction in Tax Revenue
20% of parcels	\$ 454,269.60	\$ 5,887.33	\$227,134.80	\$ 2,943.67	\$ 2,943.67
50% of parcels	\$1,135,674.00	\$14,718.34	\$567,837.00	\$ 7,359.17	\$ 7,359.17
70% of parcels	\$1,589,943.60	\$20,605.67	\$794,971.80	\$10,302.83	\$10,302.83

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PLAN VISION, GOALS & IMPLEMENTATION MEASURES

Introduction

Local governments have a limited influence upon national and international trends in agriculture, nor can they ensure on their own the economic viability of agriculture. This plan nonetheless anticipates that agriculture can continue to be a major and valuable economic sector and land use in the Town of Nichols. Farmers who desire to continue to farm should be provided with whatever support the town can provide them in their efforts.

This support is important to the long-term viability agriculture throughout the Town of Nichols. Although this plan identifies agricultural lands that may warrant priority for protection, it recognizes that all agricultural lands in the town are critical farmland and agricultural resources.

These implementation measures apply to all agricultural lands, businesses and producers within the town, except where otherwise noted.

1. A Vision

The Town of Nichols has a unique resource in terms of its rich soils, waters and its climate, which for over two centuries has supported stewardship, excellence, innovation and adaptation in agriculture. This plan envisions that a hundred years from now people farming in Nichols will be continuing this tradition, maintaining the town's rural character, enhancing the quality of life, protecting its environmental and other public resources, supplying food and other agricultural products, and strengthening the local economy.

Goal 1: Maintain and enhance the local agricultural economy and its capacity to respond to economic trends in agriculture.

Justification:

Agriculture is an important economic sector and contributor to the quality of life for residents. The Town of Nichols as a local government and a community needs to become more proactive in supporting the agricultural sector if it is to remain so. Although for many of the implementation measures detailed below

2. Goals and Implementation Measures

Key to an effective plan for the future of agriculture is a set of clear and concise goals and implementation measures that provide an overall framework for actions and policies that follow.

Goals are generally statements of a desired outcome, based on the values held by a community at large. These goals may not necessarily be attainable, and progress toward any particular goal generally may not be easily quantifiable.

Implementation measures are concrete actions or policies that are taken to further the goals of a plan. Usually progress toward completing actions or enacting policies, and as a result furthering the goals of the plan, can be measured in some manner.

The following goals and implementation measures address specific issues related to agriculture in the Town of Nichols, and are intended to further the vision set forth above. In some cases Implementation Notes have been provided to further elucidate the ideas and stated strategy.

The goals and implementation measures listed below are followed by the Action Plan Implementation Matrix, which is organized in a table that identifies key players, time frames, and possible funding sources.

Town of Nichols

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the Town of Nichols is expected to play a supporting role, in the key areas of land use regulations and lease of development rights, the Town must take the lead.

Municipal land use regulations can determine whether agricultural lands are developed or preserved. They are also one of the most effective tools available to the Town of Nichols for promoting the long-term viability of its agricultural sector. Zoning regulations, which must include appropriate and carefully drafted definitions, must also recognize farming operations as a business while taking into consideration the special needs and seasonal nature of farming. Land use regulations that do not recognize "agriculture" as a distinct zoning district may encourage the loss of farmland and inadvertently negatively impact the long-term viability of farming.

Planning efforts to protect farmland need to be consistent across jurisdictional boundaries. The NYS Agricultural Districts program provides distinct benefits and protections to farmers and farmland, which should be reflected in the local land use regulations.

Implementation Measures:

- 1.1 Create a supportive operating environment for agriculture by addressing inconsistencies in zoning as identified in the zoning analysis included in this plan.
- 1.2 Use recommendations contained in this plan to develop revisions to zoning code, paying particular attention to the definition section of the code.
- 1.3 Revise the purpose statement for the A-R Agricultural-Residential zoning district to establish agriculture as the primary land use in the district and incorporate "right to farm" language into the purpose statement.
- 1.4 Adopt site plan review process to provide the town with the ability to better assess potential impacts of proposed commercial and industrial development on nearby agricultural lands and businesses.
- 1.5 Adopt special permit review process for more intensive commercial and industrial development proposals to provide the town with the ability to better assess potential impacts on nearby agricultural lands and businesses.
- 1.6 Provide active agricultural operations with the option of hooking up to public water infrastructure by adopting NYS Department of Agriculture and Markets policy on water hookups in NYS Agricultural Districts.
- 1.7 Collaborate with Tioga County, other towns, Cornell Cooperative Extension and other partners to create a program to promote direct marketing agricultural enterprises in the Town of Nichols to travelers along NYS Route 17 (future I-86).

Implementation Note: A major challenge for direct marketing of agricultural products is that many farms are not located along major highways, so lack the visibility critical to building a customer base. In the Town of Nichols there exists a potential untapped market in the travelers that pass through the community in NYS Route 17 (future I-86). Working with the NYS Department of Transportation, the town and its farmers, in partnership with other agencies, can take advantage of the Tourism Oriented Directional (TOD) sign program to raise the profile of direct marketing enterprises in the Town of Nichols for the motoring public.

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- 1.8 Collaborate with Tioga County, Cornell Cooperative Extension, NYS Department of Agriculture and Markets, and other partners to promote new crops and new markets to help strengthen the viability of agriculture.

Implementation Note: Markets for agricultural products are increasingly in flux, as consumer likes and dislike continually evolve, and competitors from across the globe penetrate traditional markets. In Nichols over the past centuries the output from the land has changed dramatically in response to competition and markets. The Town of Nichols should support the efforts of farmers to diversify their production and take advantage of new markets. The town and its farmers can tap resources at the state and federal level to assist local farmers in developing new crops and entering new markets.

- 1.9 Collaborate with Tioga County, Cornell Cooperative Extension, NYS Department of Agriculture and Markets, and other partners to promote Community Supported Agriculture (CSA) initiatives under the proposed Share New York Food or similar state programs.

Implementation Note: Community Supported Agriculture (CSA) is an innovative means by which a farmer can access up front funding for the growing season, and supply healthy, local food to consumers. The CSA model of consumers paying in advance for a share of the harvest can reduce the farmer's need to borrow money in order to purchase equipment, seeds, fertilizer and other necessary inputs for production.

There is increased interest at the state and national level for using the CSA business model to provide residents in New York cities with greater access to fresh farm produce. Under Governor Andrew Cuomo's Farm NY Agenda, the proposed Share New York Food program the state would provide outreach services to both farmers and urban residents, create connections between consumers and food producers, and provide additional resources to assist CSAs in expanding their markets.

- 1.10 Collaborate with Tioga County, Cornell Cooperative Extension, NYS Department of Agriculture and Markets, and other partners to promote the development of small to medium scale food processing capacity for locally produced foods.

Implementation Note: Despite its bountiful harvests many New York farm products are processed in other states just to be resold in New York. The lack of local processing can create barriers to the sale of locally-grown products. The Town of Nichols, in collaboration with Cornell Cooperative Extension, Tioga County Industrial Development Agency and the Department of Agriculture and Markets and other agencies, can promote the development of home-based and farm-based processors and other microenterprise food manufacturers in the town. This will help sustain the agricultural economy, increase employment opportunities locally and increase the tax base.

Governor Andrew Cuomo's Farm NY Agenda proposes to modify the NY Manufacturing Assistance Program (MAP) that assists New York State manufacturers with investing in capital projects that significantly improve production, productivity and competitiveness. Currently the typical home-based and farm-based processors and other microenterprise food manufacturers cannot qualify due to program employment requirements, or requirements that a specific percentage of their product is for export markets. Under the current proposal a portion of MAP funding would be allocated to assisting such enterprises.

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- 1.11 Collaborate with Tioga County, Cornell Cooperative Extension, NYS Department of Agriculture and Markets, and other partners to enhance access by the agricultural sector to new, clean sources of renewable energy.

Implementation Note: Emerging technologies, including alternative energy sources such as solar, wind and biomass, can create new economic opportunities for farmers in the Town of Nichols. Farms and farmland are now recognized for their potential for renewable energy generation and for improving the environment. Production of agricultural goods and services relies on both direct energy inputs and indirect energy inputs, so farmers are adversely impacted by energy price increases. Renewable energy sources such as solar, wind methane digesters and geothermal energy however have the potential for making farms more energy independent for heating and electricity, and reducing the impact of price increases in fossil fuels.

The Town of Nichols can collaborate with farmers and agencies, such as the New York State Energy Research and Development Authority (NYSERDA) to promote the development of renewable energy sources on farms in the town. In addition to wind and solar, these include the sustainable harvesting of wood and other biomass that can be processed and burned in place of both fossil fuels and natural gas for heat and electricity. Oil crops and waste streams from dairy farms, food and food processing plant are other potential sources of bioenergy.

The Town of Nichols can collaborate with the New York Public Services Commission to publicize the Agriculture Energy Efficiency Program and increase financial support for town farmers who invest in measures to increase the energy efficiency of their operations.

- 1.12 Collaborate with Tioga County REAP and SET programs, Cornell Cooperative Extension, NYS Department of Agriculture and Markets, and other partners to enhance agricultural sector access to leading-edge technology such as broadband communications.

Implementation Note: Affordable access to broadband (high-speed internet) throughout the town will help connect Nichols farmers and other rural residents to business services, information and the world economy. The Town of Nichols can collaborate with farmers, private sector service providers and state agencies or programs such as the "Connect NY" initiative to extend broadband service throughout the town, as outlined in Governor Cuomo's Farm NY Agenda.

- 1.13 Collaborate with Tioga County, Cornell Cooperative Extension, NYS Department of Agriculture and Markets, and other partners to reduce the barriers for young and beginning farmers entering agriculture or expanding their existing enterprises.

Implementation Note: The investment required to break into agriculture or start a farm business can be a significant barrier in the recruitment and retention of a younger generation of new farmers. The Town of Nichols can work with local farmers, Farm Bureau, Cornell Cooperative Extension and other organizations to encourage and assist people who have an interest in becoming farmers with educational programs. Agricultural apprenticeship programs may be a potential avenue for people to gain the necessary knowledge and experience they need to succeed in running their own operation.

Another critical element is financing and access to credit. The Town can collaborate with the Farm Bureau, Community Bank, Cornell Cooperative Extension and agencies such as the New York Environmental Facilities Corporation and NYS Manufacturing Assistance Program to assist new farmers in becoming established.

Town of Nichols

Agriculture & Farmland Protection Plan

Goal 2: Preserve the land, water and other environmental resources critical to the long-term success of the local agricultural economy.

Justification.

Agriculture depends on land, clean water and a balanced and healthy ecosystem for its success. Water bodies adjacent to some farmland have flooded and pose an ongoing flood threat. Flooding not only damages crops and farm infrastructure, it also washes away valuable soil and can make land inaccessible for farm use.

Nichols has hundreds of acres of prime farmland, primarily along the Susquehanna River. A large portion of this land is zoned for non-farm uses. Due to its proximity to major highways, and opportunities for industrial development, commercial development and gravel mining, this prime agricultural land may experience rapid conversion. In addition to supporting farmers and farming, it is critical that prime farmland be preserved for the future.

Implementation Measures:

- 2.1 Utilize the Agricultural Lands Targeted for Protection map (Map 5) within the Town of Nichols, as well as target growth areas, for current and future policy development.
- 2.2 Promote agriculture as the most suitable use of river bottomlands and floodplains and protect such land resources from development.
- 2.3 Review existing zoning districts and district boundaries and revise the zoning map as illustrated in Map 4 to better protect areas covered with prime agricultural soils and soils of statewide importance in areas adjacent to Route 17 (future I-86) interchanges.
- 2.4 Plan for and accommodate future non-agricultural economic growth and development in areas that are less suitable for agriculture where it will have the least impact on agricultural resources.
- 2.5 Grant the proposed Agricultural Advisory Committee (See 3.2 below) the authority to review any mining permit application received from the Department of Environmental Conservation and to comment on the planned mine and its potential impacts on agricultural lands and operations, and ensure that the mine reclamation plan incorporates best management practices in site restoration.
- 2.6 Utilize investments in municipal water and sewer services as a planning tool to achieve land use development patterns that conserve the highest quality farmland and other agricultural resources for farming.
- 2.7 Collaborate with county, state and private organizations to permanently protect important farmland through non-regulatory means such as the purchase of development rights.
- 2.8 Investigate the feasibility of a Town of Nichols lease of development rights program to reduce property taxes and preserve critical farmland.
- 2.9 Develop educational brochure in consultation with Tioga County Soil and Water Conservation District, Cornell Cooperative Extension or other partners, aimed at educating the public on the value of protecting river bottomlands and floodplains for agricultural use.

Town of Nichols

Agriculture & Farmland Protection Plan

Goal 3: Ensure that the non-farm community continues to support the long-term viability of agriculture in Nichols.

Justification:

Although farmers or farmland owners may sit on the Town Board, outside expertise is required to assess development proposals or other agriculture-related matters when they come before the Board. In some cases the impact a proposal may have on agriculture or farming operations may not be immediately apparent. Having a panel of agriculture “experts” to advise the Town Board will help ensure that due consideration of agriculture is given when these matters come before the Board. The existence of the committee, which could also be called an Agricultural Advisory Committee, should be codified so that it remains an active, important part of government. This Agricultural and Farmland Protection Plan is as critical to the health and future of the town as its comprehensive plan and other land use regulations are; it should be reviewed and updated regularly.

A “Right to Farm” law clearly states the Town of Nichols’ policy in support of farming by clearly defining “generally accepted agricultural practices” or “farming operations,” thereby establishing the “right” of farmers to employ such practices. Because it recognizes the farmers’ “right” to engage in farming operations, Town Board adoption of such a law can protect the farmer from nuisance complaints based on generally accepted agricultural practices. Currently there is no right to farm local law in the Town of Nichols for farms and farmers, nor any mechanism for farmers and non-agricultural land owners to come together to mediate disputes.

Educating local decision makers about state level agricultural protection is critical to adoption of fair and consistent policies and laws relating to agriculture and agricultural operations. Agricultural Data Statements are a largely overlooked resource in local land use review processes. The long-term viability of agriculture depends on informed decision-making by local government boards, commissions, and elected officials.

Implementation Measures:

- 3.1 The Town Board and other boards will review existing and proposed policies or regulations to ensure that they are supportive of the many forms of agriculture in the Town of Nichols as well as the preservation of agricultural lands and other agricultural resources that are critical to the long-term viability of agriculture in the town.
- 3.2 Draft and adopt a local law that establishes a permanent Agricultural Advisory Committee to meet on a regular basis with the charge of advising town boards and committees on matters pertaining to agriculture. (Appendix C contains a sample local law.)
- 3.3 Adopt a town right to farm law that also would include a structure for mediating and resolving disputes between farmers and non-farmers over agricultural practices.⁶

⁶ Note: The NYS Department of Agriculture & Markets also offers a mediation process.

Town of Nichols

Agriculture & Farmland Protection Plan

- 3.4 Incorporate the use of Agricultural Data Statements as a resource in a Planning Board site plan and special permit review process, as well as municipal infrastructure investments and other Town of Nichols actions that may affect farmland and other agricultural resources.
- 3.5 Provide copies of Article 25-AAA of the NYS Agriculture and Markets Law to all Town, Planning and Zoning Board members on an annual basis.
- 3.6 Work with Tioga County Planning Department, New York Planning Federation and NYS Association of Towns and other organizations to offer training and education to the various Town of Nichols boards and committees to ensure a working understanding of laws governing agriculture.

Goal 4: Promote the link between farms and food: educate the general public about agriculture in Nichols, its value and its benefits to the overall community.

Justification:

Except for occasional stops at local farm stands or farmer's markets, many people are disconnected from their food sources. This may be true even for residents of rural communities who have daily contact with agricultural operations. Raising public awareness of the importance of farms and the dangers of farm conversion, and engaging the community in a positive way to re-establish the link between farms and food will have a long-term positive impact on agriculture and farming.

Implementation Measures

- 4.1 Collaborate with Tioga County, other towns, Cornell Cooperative Extension and other partners to develop an educational program for members of town boards and town staff about tools for planning and promoting the long-term viability of agriculture.
- 4.2 Collaborate with Tioga County, other towns, Cornell Cooperative Extension and other partners to develop educational programs that raise the profile of agriculture in Nichols and re-connect the larger community with the agricultural community.
- 4.3 Create an identity for Nichols as an agricultural town through the use of informational signs (e.g. "Right to Farm Town") along major travel routes through the town.
- 4.4 Create educational materials to communicate a Town right to farm policy to the non-farm community.
- 4.5 Publish a guide for real estate professionals to assist them in complying with NYS Agricultural District notification requirements and provide information on resources available at the county and state levels.
- 4.6 Acquire or create for public distribution educational materials on the impacts of development on the Chesapeake Bay ecosystem and the mutual role agriculture, local agencies, civic organizations and residents can have in helping to protect and enhance that ecosystem.

Town of Nichols

Agriculture & Farmland Protection Plan

ACTION PLAN IMPLEMENTATION MATRIX

The following pages contain the Agriculture and Farmland Protection Plan recommendations for implementing the plan and furthering the goals set forth on previous pages. The recommendations are organized in a matrix that includes:

1. each proposed action;
2. a proposed timeframe for that action;
3. the agency(ies) which would have primary responsibility for carrying out the proposed action;
4. the estimated cost of the proposed action, if any; and
5. potential funding sources.

Goal 1	Maintain and enhance the local agricultural economy and its capacity to respond to economic trends in agriculture.
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Implementation Measure 1.1	Create a supportive operating environment for agriculture by addressing inconsistencies in zoning as identified in the zoning analysis included in this plan.
Timeframe:	Begin immediately (within one year)
Responsible Agencies:	Agricultural Advisory Committee; Town Board
Estimated Cost:	\$5,000-\$10,000 for review and drafting of Code revisions
Potential Funding Source:	Town Budget
Implementation Measure 1.2	Revise the purpose statement for the A-R Agricultural-Residential zoning district to establish agriculture as the primary land use in the district and incorporate "right to farm" language into the purpose statement.
Timeframe:	Begin immediately (within one year)
Responsible Agencies:	Agricultural Advisory Committee; Town Board
Estimated Cost:	see Implementation Measure 1.1
Potential Funding Source:	Town Budget
Implementation Measure 1.3	Adopt site plan review process to provide the Town with the ability to better assess potential impacts of proposed commercial and industrial development on nearby agricultural lands and businesses.
Timeframe:	Begin immediately (within one year)
Responsible Agencies:	Agricultural Advisory Committee; Town Board

Town of Nichols

Agriculture & Farmland Protection Plan

Estimated Cost:	see Implementation Measure 1.1
Potential Funding Source:	Town Budget
Implementation Measure 1.4	Adopt special review process for more intensive commercial and industrial development proposals to provide the Town with the ability to better assess potential impacts on agricultural lands and businesses.
Timeframe:	Begin immediately (within one year)
Responsible Agencies:	Agricultural Advisory Committee; Town Board
Estimated Cost:	see Implementation Measure 1.1
Potential Funding Source:	Town Budget
Implementation Measure 1.5	Provide active agricultural operations with the option of hooking up to public water infrastructure by adopting NYS Department of Agriculture and Markets policy on water hookups in Agricultural Districts.
Timeframe:	Begin immediately (within one year); ongoing
Responsible Agencies:	Agricultural Advisory Committee; Town Board; NYSDAG
Estimated Cost:	unknown
Potential Funding Source:	Town Budget
Implementation Measure 1.6	Collaborate with Tioga County, other towns, Cornell Cooperative Extension and other partners to promote direct marketing agricultural enterprises in the Town of Nichols to travelers along NYS Rte 17/future I-86.
Timeframe:	Begin immediately (within one year); ongoing
Responsible Agencies:	Agricultural Advisory Committee; Town Board; Tioga County; Other Adjacent Towns; Cornell Cooperative Extension; Visit Tioga; Chamber of Commerce
Estimated Cost:	minimal
Potential Funding Source:	Town, County, Cooperative Extension, Visit Tioga, Chamber of Commerce

Town of Nichols

Agriculture & Farmland Protection Plan

Implementation Measure 1.7	Collaborate with Tioga County, Cornell Cooperative Extension, NYS Dept. of Agriculture and Markets, and other partners to promote new crops and new markets to help strengthen the viability of agriculture.
Timeframe:	Begin immediately (within one year); ongoing
Responsible Agencies:	Agricultural Advisory Committee; Town Board; Tioga County; Cornell Cooperative Extension; NYSDAG
Estimated Cost:	minimal
Potential Funding Source:	Town, County, NYSDAG (grant money??), Cooperative Extension

Goal 2	Preserve the land, water and other environmental resources critical to the long-term success of the local agricultural economy.
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Implementation Measure 2.1	Protect environmental resources such as river bottomlands and floodplains from development and promote agriculture as the presumptive best use of such land resources.
Timeframe:	Begin immediately (within one year); ongoing
Responsible Agencies:	Town Board; Tioga County; Cornell Cooperative Extension; Tioga Co. Soil & Water Conservation; Agricultural Advisory Committee
Estimated Cost:	\$2,000-\$5,000 for review and drafting of Code revisions
Potential Funding Source:	Town Budget
Implementation Measure 2.2	Promote agriculture as the presumptive best use of as river bottomlands and floodplains and protect such land resources from development.
Timeframe:	Begin immediately (within one year); ongoing
Responsible Agencies:	Town Board; Tioga County; Cornell Cooperative Extension; Tioga Co. Soil & Water Conservation; Agricultural Advisory Committee
Estimated Cost:	see Implementation Measure 2.1
Potential Funding Source:	Town Budget

Town of Nichols

Agriculture & Farmland Protection Plan

Implementation Measure 2.3	Review existing zoning districts and boundaries and revise zoning map as appropriate to better protect areas of prime agricultural soils and soils of statewide importance adjacent to Rte17/Future I-86 exits.
Timeframe:	Begin immediately (within one year); ongoing
Responsible Agencies:	Town Board; Tioga County; Cornell Cooperative Extension; Tioga Co. Soil & Water Conservation; Agricultural Advisory Committee
Estimated Cost:	\$2,000-\$5,000 for review and drafting of Code revisions
Potential Funding Source:	Town Budget; County Budget (technical and in-kind assistance from Tioga County GIS??)
Implementation Measure 2.4	Plan for and accommodate future non-agricultural economic growth and development in areas that are less suitable for agriculture.
Timeframe:	Begin immediately (within one year); ongoing
Responsible Agencies:	Town Board; Agricultural Advisory Committee (consulting agencies: Tioga County; Cornell Cooperative Extension; Tioga Co. Soil & Water Conservation)
Estimated Cost:	minimal--none
Potential Funding Source:	Town Budget
Implementation Measure 2.5	Utilize investments in municipal water and sewer services as a planning tool to achieve land use development patterns that conserve the highest quality agricultural land resources.
Timeframe:	Begin immediately (within one year); ongoing
Responsible Agencies:	Town Board; Tioga County
Estimated Cost:	minimal -- none
Potential Funding Source:	Town Budget
Implementation Measure 2.6	Collaborate with County, State and private organizations to protect important agricultural land resources through non-regulatory means such as the purchase of development rights.
Timeframe:	
Responsible Agencies:	Agricultural Advisory Committee; Town Board; Tioga County; NYSDAG
Estimated Cost:	unknown; possibly large investment
Potential Funding Source:	NYSDAG and USDA grant monies; Tioga County

Town of Nichols

Agriculture & Farmland Protection Plan

Goal 3	Ensure that the non-farm community continues to support the long-term viability of agriculture in their Town.
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Implementation Measure 3.1	Draft and adopt a local law that establishes a permanent Agricultural Advisory Committee with the charge of advising Town boards and committees on matters pertaining to agriculture.
Time Frame:	Begin Immediately (within one year)
Responsible Agencies:	Agricultural Advisory Committee; Town Board
Estimated Cost:	\$1000-\$1500.
Potential Funding Source:	Town Board
Implementation Measure 3.2	Adopt a Town Right to Farm Law that also would include a structure for mediating and resolving disputes between farmers and non-farmers over agricultural practices.
Time Frame:	Begin Immediately (within one year); Ongoing
Responsible Agencies:	Agricultural Advisory Committee; Town Board
Estimated Cost:	\$1000-\$2000.
Potential Funding Source:	Town Board
Implementation Measure 3.3	Incorporate the use of Agricultural Data Statements as a resource in a Planning Board site plan and special permit review process as well as municipal infrastructure investments and other Town actions that may affect agricultural land resources.
Time Frame:	Begin Immediately (within one year); Ongoing
Responsible Agencies:	Agricultural Advisory Committee; surrounding Towns; Tioga County; Cornell Cooperative Extension; local farmers; Chamber of Commerce
Estimated Cost:	see Implementation Measures 1.1
Potential Funding Source:	Town Board
Implementation Measure 3.4	Provide copies of current Agriculture and Markets Law to all Planning and Zoning Board members.
Time Frame:	Begin Immediately (within one year); Ongoing
Responsible Agencies:	Agricultural Advisory Committee; surrounding Towns; Tioga County; Cornell Cooperative Extension; local farmers; Chamber of Commerce
Estimated Cost:	Minimal
Potential Funding Source:	Town Budget; private funding

Town of Nichols

Agriculture & Farmland Protection Plan

Goal 4	Promote the link between farms and food: educate the general public about agriculture in the Town of Nichols, its value and its benefits to the overall community.
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Implementation Measure 4.1	Collaborate with Tioga County, other towns, Cornell Cooperative Extension and other partners to develop an educational program for members of Town boards and Town staff about tools for planning and promoting the long-term viability of agriculture.
Time Frame:	Begin Immediately (within one year); Ongoing
Responsible Agencies:	Agricultural Advisory Committee; surrounding Towns; Tioga County; Cornell Cooperative Extension; local farmers; Chamber of Commerce
Estimated Cost:	Minimal
Potential Funding Source:	various public sources
Implementation Measure 4.2	Collaborate with Tioga County, other towns, Cornell Cooperative Extension and other partners to develop educational programs that raise the profile of agriculture in Nichols and re-connect the larger community with the agricultural community.
Time Frame:	Begin Immediately (within one year); Ongoing
Responsible Agencies:	Agricultural Advisory Committee; surrounding Towns; Tioga County; Cornell Cooperative Extension; local farmers; Chamber of Commerce
Estimated Cost:	Minimal
Potential Funding Source:	various public sources
Implementation Measure 4.3	Create an identity for Nichols as an agricultural town through the use of informational signs (e.g. "Right to Farm Town") along major travel routes through the town.
Time Frame:	Begin Immediately (within one year); Ongoing
Responsible Agencies:	Agricultural Advisory Committee; Chamber of Commerce, Town
Estimated Cost:	Minimal
Potential Funding Source:	Town Budget; Chamber of Commerce; Farm Bureau; other private sources

Town of Nichols

Agriculture & Farmland Protection Plan

Implementation Measure 4.4	Create educational materials to communicate a Town right to farm policy to the non-farm community.
Time Frame:	Begin Immediately (within one year); Ongoing
Responsible Agencies:	Agricultural Advisory Committee; surrounding Towns; Tioga County; Cornell Cooperative Extension; local farmers; Chamber of Commerce
Estimated Cost:	Minimal
Potential Funding Source:	Town budget; Chamber of Commerce, Farm Bureau, other private sources
Implementation Measure 4.5	Publish a guide for real estate professionals to assist them in complying with Agricultural District notification requirements and provides information on resources available at the county and state levels.
Time Frame:	Begin Immediately (within one year); Ongoing
Responsible Agencies:	Agricultural Advisory Committee; Real Estate Professionals; Town
Estimated Cost:	Minimal
Potential Funding Source:	Private fundraising
Implementation Measure 4.6	Acquire or create for public distribution educational materials on the impacts of development on the Chesapeake Bay ecosystem and the role agriculture can have in helping to protect and enhance that ecosystem.
Time Frame:	Begin Immediately (within one year); Ongoing
Responsible Agencies:	Agricultural Advisory Committee; Tioga County; Cornell Cooperative Extension; Chamber of Commerce; Private Conservation foundation(s)
Estimated Cost:	Minimal
Potential Funding Source:	Not applicable; Private fundraising

Town of Nichols

Agriculture & Farmland Protection Plan

Appendix A – Farm Community Survey Tabulations

Total of 107 surveys were distributed and 27 surveys were returned. 2 of the returned surveys were not filled out and 1 had only questions 10 - 16 filled out. Therefore these tabulations reflect 24 completed surveys.

	Number of Responses	Number of Responses	Cumulative # of Acres Owned or Rented	Notes
Quest. 1 Do you:	Yes	No		
own farmland in the Town of Nichols	21	3	3,121	Active Farmers own 2,138 acres; Retired Farmers own 408 acres; Non-Farmers own 575 acres
rent farmland in the Town of Nichols	8	16	1,035	845 acres rented by farmers; 190 rented acres to farmers
amount of acreage farmed outside Town of Nichols	n/a	n/a	3,728	
Quest. 2 Are you:	Yes			Notes
actively engaged in farming	13			13 Active Farmers
own farmland but do not farm	11			3 Retired Farmers 8 Non-Farmers
Quest. 3 If actively engaged as a farmer, what type of farm do you operate?	Number of Responses	Cumulative # of Animals	Cumulative # of Acres	Notes
beef, pork, poultry (# head)	4	90,25,unknown		Not everybody gave #s; acreage not asked
dairy (# milking)	9	1,510		acreage not asked
fruit/vegetable (# acres)	1		2	
hay/grain (# acres)	10		5,115	Not everybody gave #s
timber (# acres)	5		615	
other - honey/aplary	1		3	bees forage over 1,000s of acres in Tioga, Tompkins, Chemung Co's
other maple syrup	1		69	
Quest. 4 What is the total number of acres that you farm?	Number of Responses	Number of Acres		Notes
0-10 acres	1	3		
11-50 acres	0	0		
51-100 acres	1	69		
101-200 acres	1	200		
201-300 acres	1	280		
301-500 acres	1	490		
501-600 acres	1	550		
601-700 acres	0	0		
701-800 acres	3	2,400		
801-900 acres	1	900		
901-1500 acres	1	1,200		
1501-1800 acres	1	1,600		
1801-2000 acres	1	1,966		
Totals	13	9,658		
Quest. 5	Number of Responses	Number of Responses	Number of Responses	Notes
Are you enrolled in the Agricultural District Program	Yes	No	Unsure or Blank	
				Yes = 11 farmers, 1 retired farmer, 1 non-farmer; No = 2 farmers, 1 retired farmer, 4 non-farmers; Unsure/Blank = 1 retired farmer, non-farmers 3
Responses to "Why or why not?" question:				
Did not know they had one				
Don't know what it is				
To get ready for CAFO				

Town of Nichols

Agriculture & Farmland Protection Plan

Town of Nichols Farmer/Farmland Owner Survey Results Tabulation

Quest. 6 Do you currently have an agricultural assessment?	Number of Responses Yes 8	Number of Responses No 12	Number of Responses Unsure or Blank 4	Notes Yes = 7 farmers, 1 retired farmer; No = 6 farmers, 1 retired farmer, 5 non-farmers; Unsure/Blank = 1 retired farmer, 3 non-farmers
Quest. 7 Do you apply for the agricultural assessment every year?	Number of Responses Yes 7	Number of Responses No 14	Number of Responses Unsure or Blank 3	Notes Yes = 6 farmers, 1 retired farmer; No = 6 farmers, 2 retired farmers, 6 non-farmers; Unsure/Blank = 1 farmer, 2 non-farmers
Quest. 8 How long has your farm been in business? less than 30 31 to 40 years 41 to 50 years 51 to 60 years 61 to 70 years 71 to 80 years 81 to 90 years 91 to 150 years 151 to 160 years 161 to 170+ years	Number of Responses 0 3 0 3 2 0 2 0 1 2			Notes
Quest. 9 How many generations (of your family) are actively involved in the farm today? 1 generation 2 generations 3 generations 4 generations Self One or more parents are involved. One or more children are involved? One or more grandchildren are involved. Other Family No answer	Number of Responses 5 1 6 1 13 2 7 6 1 1			Notes
Quest. 10 What is age of - under 16 16-20 21-25 26-30 31-35 36-40 41-45 46-50 51-55 56-60 61-65 66-70 71-75 76-80 81-85 86-90 90 +	Respondent Active Farmer	Active Farmer Principal	Active Farmer Other	Respondent Retired Farmer Respondent Non-Farmer
			2	
	1			
	1	1	1	1
		1		
		2		1
	3			1
	2			
	3	1		1
	2	2		1
	1	1		1
				2

Town of Nichols

Agriculture & Farmland Protection Plan

Town of Nichols Farmer/Farmland Owner Survey Results Tabulation

Quest. 11 How many people work on your farm 1 family member 2 family members 3 family members 4 family members 5 family members 6 family members 7 family members 8 or more family members 1 non-family member 2 non-family members 3 non-family members 4 non-family members More than 4 non-family members	Number of Responses 2 3 1 1 1 4 1 1 1 2 1 1 0	Notes
Quest. 12 How many people work on your farm 1 full-time year-round 2 full-time year-round 3 full-time year-round 4 full-time year-round More than 4 full-time year-round 1 part-time 2 part-time 3 part-time 4 part-time More than 4 part-time	Number of Responses 1 3 4 1 2 1 1 4 1 3	Notes
Quest. 13 In the next five years, do you plan to: stay the same size? increase size of operation? decrease size of operation What will change (increase or decrease) acreage? employees? livestock? other?	Number of Responses 6 8 0 4 3 6 1	Notes "hard to tell - depends on economy" 7 of 9 dairies plan expansion 3 dairies, 1 field crop expand all dairies
Quest. 14 Over the past ten (10) years, what is the estimated total investment (replacement value) that you've made in your farm (including land, livestock, equipment) less than \$50,000 \$50,000 to \$100,000 \$100,000 to \$500,000 \$500,000 to \$1,000,000 more than \$1 million No answer	Number of Responses 1 3 6 1 2 1	Notes
Quest. 15 What is the average gross income generated by your farm? (Optional) under \$10,000 \$10,000 to \$50,000 \$50,000 to \$100,000 \$100,000 to \$500,000 greater than \$500,000 No Answer	Number of Responses 1 4 0 1 4 4	Notes

Town of Nichols

Agriculture & Farmland Protection Plan

Town of Nichols Farmer/Farmland Owner Survey Results Tabulation

Quest. 16	If you wanted to expand your operation, what factors would affect your decision?					No Answer
		High	Medium	Low	Checked	
	lack of affordable land	3	1	2	0	2
	lack of available land in Town of Nichols	2	1	3	0	2
	lack of accessible land	1	2	3	0	2
	lack of land within a reasonable distance of farm	3	1	3	1	1
	lack of quality land	4	0	2	0	2
	traffic patterns/constraints (bridges, bus routes)	0	1	5	0	2
	lack of quality labor	1	2	3	0	2
	lack of capital for expansion	2	2	2	1	1
	property or other taxes	5	1	0	1	1
	zoning, or other local or state laws	2	2	2	0	2
	floods	1	2	3	0	2
	commodity prices	3	2	1	0	2
	other	1	0	0	0	0
Other	"government control" (1 response)					

Responses to Open Ended Questions

Quest. 1	In your opinion, what is the state of agriculture in the U.S. and New York in general?
Active Farmers, Dairy	bleak for most and bright for the creative non-traditional
	Hurting, decreasing
	I believe they are trying to starve us out of business
	low milk prices = with high expenses make operating the ag business difficult
	poor
	the state continues to increase regulations, permits, taxes, electric, fuel (all of these will push farms out)
	Tough (2 responses)
	With low milk prices and high cost of operating it is in a sad state
Active Farmers, Non-Dairy	In the East, due to population of non-farmers, are put into an awkward position – vs. people out West in more rural agricultural areas
	some areas in U.S. are growing; In New York decreasing
	Under stress from increasing costs and often low prices induced by Corporate overproduction and globalization
	Help with problems instead of more rules and regulations
Retired Farmers	declining
	not good. Market prices do not cover expenses of operations
	too much farmland being used for commercial building
Non-Farmers	don't know much about status
	Farmers do not get fair prices for what ever they produce
	It is not too good. The small farms cannot compete with the larger farms
	Same as our streams – it's being neglected
	too worried about land use re. Wind farms and gas drilling. Legislators too worried about pork and lobbying
	No answer (3)

Town of Nichols

Agriculture & Farmland Protection Plan

Town of Nichols Farmer/Farmland Owner Survey Results Tabulation

Quest. 2	In your opinion, what is the state of agriculture in Tioga County and the Town of Nichols?
Active Farmers, Dairy	bleak for most and bright for the creative non-traditional
	Hurting, decreasing
	I believe they are trying to starve us out of business
	low end of the totem pole (always getting the blame - manure smell, crippled cows outside of barn, etc.)
	low milk prices = with high expenses make operating the ag business difficult
	poor
	sad
	tough
	With low milk prices and high cost of operating it is in a sad state
Active Farmers, Non-Dairy	going backward
	less farms
	Under stress from increasing costs and often low prices induced by Corporate overproduction and globalization
	It is doing fair with taxes and the way some people look at farming (who is going to feed these people)
Retired Farmers	declining
	farmland is wasted around 2 exits off Route 17, while some hill land is growing brush lots
	not good. Market prices do not cover expenses of operations. Commercial competition. Loss of prime farm land
Non-Farmers	don't know much about status
	Farmers do not get fair prices for what ever they produce
	Less and less farms every year. The young men don't want to work as hard as their parents. Farming is long and hard days
	Same as our streams – it's being neglected
	taxed out of business
	No answer (3)
Quest. 3	What do you see as the primary strengths of the agricultural sector in the Town of Nichols?
Active Farmers, Dairy	agriculture operators staying together as a whole ag unit
	friends and neighbors
	good fertile land and good agriculture operators. They are doing the best to produce products that they can
	location
	small, newbie farmers
	tax deduction on farm material (continue local support of ag industry within our community)
	No answer (3)
Active Farmers, Non-Dairy	providing an opportunity for work for those who would probably be unemployed otherwise – farmers will employ the unemployable
	river bottom land
	Still family oriented – no CAFO's yet – have had support from local government
	A group of food farmers but some are getting older and there is not any wanting to replace them
Retired Farmers	lower the tax burden to owners of farmland
	No answer (2)
Non-Farmers	don't know much about status
	none
	the cost of the land is cheap compared with other places
	Years of experience, heritage or traditions. Close to markets.
	No answer (4)

Town of Nichols

Agriculture & Farmland Protection Plan

Town of Nichols Farmer/Farmland Owner Survey Results Tabulation

Quest.4	What do you see as the major problems facing agriculture in the Town of Nichols?
Active Farmers, Dairy	community support of agriculture low prices, high taxes not in my back yard; lack of support from town People who don't want farms in the town prices received for products compared to the price you pay for products and equipment taxes, government regs (DOT, DEC) taxes, income prices, expenses of products being used on ag business the fact that it's going away and we're losing our (farm) infrastructure with it zoning. Non-farm people have a lot to say
Active Farmers, Non-Dairy	Activate <<< not sure what it says on survey groups such as PETA. New people will want to change the zoning and keep manure smell down competition for land with other farmers Under stress from increasing costs and often low prices induced by Corporate overproduction and globalization... plus increasing age of farmers with low interest from most young people Taxes and Land use
Retired Farmers	falling milk prices to the farmer while his costs keep going up farm land taken for gravel. Prime farm land being used for commercial sites No answer (1)
Non-Farmers	don't know much about status Flooding, lack of a water plan No one wants to work as a farmers as it is long and hard. Also if you have to start it is costly for tractors, etc. what difference does it make? As in the past the town board is too self serving to care! No answer (4)
Quest. 5	What opportunities do you see for farmers/agriculture in the Town of Nichols?
Active Farmers, Dairy	farm market stand at old creamery, organic store, ice cream stands, crop land gas wells coming to area to help operate the ag business Law -or- Low (lower taxes?) <<< not sure what it says on survey... limited none probably an opportunity for more direct marketing (close to markets – miles matter for food) to find better ways to operate at cost savings No answer (2)
Active Farmers, Non-Dairy	? – marketing the product in the surrounding area opportunity to invest all their money just to maintain the status quo Possibilities exist to diversity crops grown and to market more directly in some cases not a whole lot
Retired Farmers	No answer (3)
Non-Farmers	don't know much about status more diversification and direct to consumer none Since there are many farms vacant it should be cheap to rent or buy the land No answer (4)

Town of Nichols

Agriculture & Farmland Protection Plan

Town of Nichols Farmer/Farmland Owner Survey Results Tabulation

Quest. 6	Are there specific government regulations that the Town of Nichols has adopted, or actions that the Town has taken, that have impacted agriculture?
Active Farmers, Dairy	missed opportunity when chicken farm was not developed (more jobs + funds, etc.)
	that stupid chicken farm rule
	yes
	yes, when the Town didn't let the chicken farm in
	Zoning, Moratorium
	?
	No answer (3)
Active Farmers, Non-Dairy	not knowing
	yes, Villages of Owego and Waverly wanted to spread treated, neutralized waste water from their sewage treatment plans on farmland. Town board passed ordinance that I could not import any "putrescible" material to spread on my land. Weight limits on roads that impact agriculture.
	the actions taken to discourage the CAFO were great, bringing the Best Buy in not so much
	I do not know
Retired Farmers	not sure
	No answer (2)
Non-Farmers	don't know much about status
	zoning and land use regs
	No answer (6)
Quest. 7	What do you think the Town of Nichols could do to better support agriculture?
Active Farmers, Dairy	educate residents on how farms support + feed them
	educate the non ag people more
	get together. they could have a chicken farm here already
	lower or eliminate taxes on ag assets
	quit making our best farmland into gravel pits and Best Buy warehouses
	work for and with farmers
	No answer (3)
Active Farmers, Non-Dairy	lower taxes and get off our asses
	zoning agriculture. Keep river bottom land in agriculture zoning
	the 64 dollar question – Maybe try to get a canola pressing facility to set up here
	Give them a break in any way it can
Farmers	lower taxes on farm land
	not sure
	No answer (1)
Non-Farmers	don't know much about status

8. If you are an active farmer, do you plan to remain in farming?

YES	NO
12	1

Yes "Other business are having financial problems"

8a. If no, why not? "We are aging."

Town of Nichols Agriculture & Farmland Protection Plan

Town of Nichols Farmer/Farmland Owner Survey Results Tabulation

9. Do you feel pressure or competition with non-agricultural development?

YES	NO	Not Sure
7	5	1

Competing Types of Development (some checked more than one type)

Commercial interests	3
Residential interests	2
Mining Interests	2
Blank	6

9a. Responses to "Please explain:"

They are taking prime farmland
Loss of best farmland

Low value of farm products prevents competing for land
I think every farmer does

Any development/more people means lower water & air quality, which leads to lower production of honey and loss of apiary locations

Government control

Because our competition is the price of our products

10. If you received an unplanned windfall (natural gas, windmill, lottery), would you?: (check all that apply)

Number of responses

Invest funds in your farm	11
Retire / Semi-retire	3
Invest money in non-farm investment(s)	6

My lifelong goal is to have the farm remain in the family name, started in 1926

11. Does your farm include land located within the floodplain?

YES	NO
2	11

11a. If yes how often does the land flood?

Some yearly	1
Every 2-3 years	1
Every 3-5 years	0

11.b What sort of damage or other issues are caused by flooding on the land you farm?

Erosion of streambanks	1
Loss of crops	2
Personal property damage	1
Flood trash	1
Gully erosion due to heavy runoff	1

Town of Nichols
Agriculture & Farmland Protection Plan

Appendix B - Sample Right to Farm Law, Town of Eden, NY

Town of Eden, Erie County, New York

ARTICLE I Right to Farm (§ 106-1 — § 106-5)

[Adopted 3-14-2001 by L.L. No. 2-2001]

(Downloaded 6/1/10⁷)

§ 106-1 Legislative intent and purposes.

- A. The Eden Town Board finds, declares, and determines that agriculture is vital to the Town of Eden, New York, because it is a livelihood and provides employment for agriservice; provides locally produced, fresh commodities; agricultural diversity promotes economic stability; agriculture maintains open space and promotes environmental quality, and agricultural land does not increase the demand for services provided by local governments. In order to maintain a viable farming economy in the Town of Eden, farmers must be afforded protection allowing them the right to farm. When nonagricultural land uses extend into agricultural areas, agricultural operations may become the subject of nuisance suits. As a result, agricultural operations are sometimes forced to cease operation or are discouraged from making investments in agricultural improvements.
- B. It is the purpose of this article to reduce the loss to the Town of Eden of its agricultural resources by limiting the circumstances under which farming may be deemed to be a nuisance and to allow agricultural practices inherent to and necessary for the business of farming to proceed and be undertaken free of unreasonable and unwarranted interference or restriction.

§ 106-2 Definitions.

- A. As used in this article, the following terms shall have the meanings indicated:

AGRICULTURAL PRACTICES

All activities conducted by a farmer on a farm to produce agricultural products and which are inherent and necessary to the operation of a farm and the on-farm production, processing, and marketing of agricultural products, including, but not limited to, the collection, transportation, distribution, storage, and land application of animal wastes; storage, transportation, and use of equipment for tillage, planting, harvesting, irrigation, fertilization, and pesticide application; storage and use of legally permitted fertilizers, limes, and pesticides all in accordance with local, state and federal law and regulations and in accordance with manufacturers' instructions and warnings; storage, use, and application of animal feed and foodstuffs, construction and use of farm structures and facilities for the storage of animal wastes, farm equipment, pesticides, fertilizers, agricultural products, and livestock, for the sale of agricultural products, and for the use of farm labor, as permitted by local and state building codes and regulations, including the construction and maintenance of fences.

AGRICULTURAL PRODUCTS

Those products as defined in § 301(2) of Article 25-AA of the Agricultural and Markets Law.

FARM

⁷ Source: Town of Eden Code. General Code, LLC <http://www.ecode360.com/?custId=ED1729>;
<http://www.edenny.org/serv.html>

Town of Nichols

Agriculture & Farmland Protection Plan

The land, buildings, farm residential buildings, and machinery used in the production, whether for profit or otherwise, of agricultural products.

FARMER

Any person, organization, entity, association, partnership, or corporation engaged in the business of agriculture, for profit or otherwise, including the cultivation of land, the raising of crops, or the raising of livestock, poultry, fur-bearing animals, or fish, the harvesting of timber or the practicing of horticulture or apiculture.

GENERALLY ACCEPTED AGRICULTURAL PRACTICES

Those practices which are feasible, lawful, inherent, customary, necessary, reasonable, normal, safe, and typical to the industry or unique to the commodity as they pertain to the practices listed in the definition of "agricultural practices."

RESOLUTION COMMITTEE

Shall be made up of the Chairman of the Conservation Board or designee, Chairman of the Agricultural Committee or designee, and a member of one other standing committee of the Town designated by the Town Supervisor.

B. Unless specifically defined, above words or phrases used in the article shall be interpreted so as to give them meanings they have in common usage, and to give this article its most reasonable application.

§ 106-3 Authority to engage in agricultural practices.

- A.** Farmers, as well as those employed, retained, or otherwise authorized to act on behalf of farmers, may lawfully engage in agricultural practices within the Town of Eden at all such times and in all such locations as are reasonably necessary to conduct the business of agriculture. For any agricultural practice, in determining the reasonableness of the time, place, and methodology of such practice, due weight and consideration shall be given to both traditional customs and procedures in the farming industry as well as to advances resulting from increased knowledge and improved technologies.
- B.** Agricultural practices conducted on farmland shall not be found to be a public or private nuisance if such agricultural practices are:
- (1)** Reasonable and necessary to the particular farm or farm operation.
 - (2)** Conducted in a manner which is not negligent or reckless.
 - (3)** Conducted in conformity with generally accepted agricultural practices.
 - (4)** Conducted in conformity with all local, state, and federal laws and regulations.
 - (5)** Conducted in a manner which does not constitute a threat to public health and safety or cause injury to health or safety of any person; and
 - (6)** Conducted in a manner which does not unreasonably obstruct the free passage or use of navigable waters or public roadways.
- C.** Nothing in this article shall be construed to prohibit an aggrieved party from recovering damages for bodily injury or wrongful death.

Town of Nichols

Agriculture & Farmland Protection Plan

§ 106-4 Duty of Town officers and boards to consider impact of farm operations on certain applications.

The legislative intent and purposes of this article shall be taken into consideration by each Town officer and/or board in processing any application requesting rezoning, site plan approval and/or special use permit approval when the property which is the subject of such application is located within one mile of an existing farm. Such Town officer and/or board shall, as part of its review of such application, determine whether appropriate and reasonable conditions may be prescribed or required, which would further the purposes and intent of this article as part of an approval of the application. Such appropriate and reasonable conditions shall be determined on a case-by-case basis and may include, but not be limited to, requiring declarations, deed restrictions and/or covenants which run with the land which would notify future purchasers and owners of the subject property that owning and occupying such property might expose them to certain discomforts or inconveniences resulting from the conditions associated with agricultural practices and operations in the Town.

§ 106-5 Informal resolution of disputes.

- A. Should any controversy arise regarding any inconveniences or discomforts occasioned by agricultural operation, including, but not limited to, noise, odors, fumes, dust, the operation of machinery, the storage and disposal of manure, and the application by spraying or otherwise of chemical fertilizers, soil amendments, herbicides and/or pesticides, the parties may submit the controversy to the resolution committee as set forth below in an attempt to resolve the matter prior to the filing of any court action.
- B. Any controversy between the parties may be submitted to the resolution committee, whose decision shall be advisory only, within 30 days of the date of the occurrence of the particular activity giving rise to the controversy or of the date a party became aware of the occurrence.
- C. The effectiveness of the resolution committee as a forum for resolution of grievances is dependent upon full discussion and complete presentation of all pertinent facts concerning the dispute in order to eliminate any misunderstandings. The parties are encouraged to cooperate in the exchange of pertinent information concerning the controversy.
- D. The controversy shall be presented to the committee by written request of one of the parties within the time limits prescribed above. Thereafter, the committee may investigate the facts of the controversy but must, within 30 days, hold a meeting to consider the merits of the matter and within 20 days of the meeting must render a written decision to the parties. At the time of the meeting, both parties shall have an opportunity to present what each party considers to be the pertinent facts.

Town of Nichols
Agriculture & Farmland Protection Plan

Appendix C - Sample Local Law Establishing Agricultural Advisory Committee

Sect. 1. Title.

This Local Law shall be known as Local Law No. ____ of 2012, the "Agricultural Advisory Committee Law of the Town of Nichols, New York."

Sect. 2. Purpose.

The purpose of this Local Law is to recognize the importance of agriculture as an integral component of the rural character that enhances the quality of life of all residents of the Town of Nichols and to assure the continued viability of agriculture as an industry which is important to the local economy and to the preservation of open space and vistas in the Town of Nichols. In addition this Local Law is intended to:

1. Encourage the wise use and management of the town's natural resources through best management farming practices that support the most beneficial relationship between the use of land and buildings and the agricultural practices of the community; and
 2. Provide the Town Board, Planning Board and other relevant boards or committees of the Town of Nichols with an advisory body on a variety of matters of importance to or which may impact the agricultural community of the Town of Nichols.
-
- A. The Committee shall be appointed by the Town Board and be composed of four (4) members of the Town of Nichols agricultural community, defined as persons who are engaged in agriculture or a vocation related to agriculture in the Town of Nichols, whether they reside within the Town of Nichols or not, and (1) resident not associated with agriculture. The Committee make-up shall represent the diversity of farms and farmers in the Town of Nichols.
 - B. One member of the Town Board, Planning Board, and Board of Assessors shall serve as ex officio members.
 - C. The members appointed to the Committee shall serve for a three-year term. Upon initial formation, one member shall serve for a one-year term, two members for a two-year term and all others for a three-year term. Each year thereafter, reappointments or new appointments will be for three-year terms.
 - D. Appointments shall be from January 1 through December 31.
 - E. Members shall serve without salary.
 - F. The members shall recommend a Chairperson for appointment by the Town Board.
 - G. The Agricultural Advisory Committee shall set it's own meeting schedule, however it shall meet at least two times in any calendar year.

Town of Nichols

Agriculture & Farmland Protection Plan

Sect. 4. Powers and Duties.

The Agricultural Advisory Committee shall:

1. Advise the Town Board and the County Agricultural and Farmland Protection Board in relation to the proposed establishment, modification, continuation or termination of any county agricultural district. The Committee shall present advice relating to the desirability of such action, including advice as to the nature of farming and farm resources within any proposed or established area.
2. Advise the Town Board on methods, review proposals and develop proposals for the implementation of the recommendations and implementation actions of the Agriculture and Farmland Protection Plan.
3. Review any Agricultural Data Statements forwarded to the Committee and provide for a publicized time and location for discussion of potential impacts on the neighboring farms.
4. Review any proposed local law or policy affecting property or agricultural operations within any town agricultural zoning district or within or contiguous to a county agricultural district.
5. Review any application to the Town Board, Planning Board or Zoning Board of Appeals affecting property within any town agricultural zoning district or within or contiguous to a county agricultural district.
6. Review the State Agriculture and Markets Law on an annual basis for amendments that may affect agriculture and policies affecting agriculture in the Town, and report findings to the Town Board.
7. Review other county and state legislation affecting agriculture in the Town of Nichols brought to its attention, identify issues related to the proposed legislation and report on said issues to the Town Board and other appropriate board or committee.
8. Participate in the review and consideration of any public infrastructure improvements proposed within the agricultural areas of the Town.
9. Assist in the preparation and review of any application for participation in farmland preservation programs referred to the Committee.
10. Serve as a vehicle for communication between the agricultural community, boards and committees of the Town of Nichols, and the County Agricultural and Farmland Protection Board.
11. Submit to the Town Board an annual summary of the activities of the Agricultural Advisory Committee.

Sect. 5. Review Process.

The Agricultural Advisory Committee shall have 45 days to respond to any matter referred to it. The Committee in any report shall present advice relating to the desirability of such action, including advice as to the nature of farming and farm resources within any proposed or established area potentially impacted by said action. This report shall include a determination as to whether the proposed action or actions will have an unreasonable adverse effect on the continuing viability of a farm enterprise or enterprises within the county or town agricultural districts.

The reports and recommendations of the Agricultural Advisory Committee shall be advisory only.

Town of Nichols
Agriculture & Farmland Protection Plan

**Appendix D – Form RA-103 Land Classification System Affidavit
Concerning Soils That Flood**

Town of Nichols
Agriculture & Farmland Protection Plan

RA-103 (Rev. 3/94)

New York State
Department of Agriculture and Markets
10B Airline Drive
Albany, New York 12235

LAND CLASSIFICATION SYSTEM
AFFIDAVIT CONCERNING SOILS THAT FLOOD

I, _____, residing at _____
(Name of Applicant) (Address)
being duly sworn depose and say that in Tax Parcel _____
(Number)
that _____ of _____ soil
as _____ (Acres) _____ (Soil Symbol) _____ (Soil Name)
shown on the attached soil survey map or overlay of soil survey map currently placed in soil
group number _____ by the current New York State Agricultural Land
Classification of _____ County (commonly called County Master List of
Agricultural Soil Groups) floods more frequently than identifiable by criteria as currently defined in
the National Cooperative Soil Survey (Soil Interpretation Record). Further, that based on the
flooding criteria contained in the instructions on the reverse side, this soil could be placed in a soil
group which appropriately reflects the flooding condition I have identified below:

I. (Check one only)

☐

Some Flooding

☐

Usually Floods

II. Indicate flooding by calendar
year for each year(s) in the
last 10 years

List Type of
Crop Grown

List Percentage
of Crop Loss
for Each Year

20	_____	_____	_____ %
20	_____	_____	_____ %
20	_____	_____	_____ %
20	_____	_____	_____ %
20	_____	_____	_____ %
20	_____	_____	_____ %
20	_____	_____	_____ %
20	_____	_____	_____ %
20	_____	_____	_____ %
20	_____	_____	_____ %

Signature

Sworn to before me this _____ day
of _____, 20____

/s/ _____

NOTARY PUBLIC

(SEE INSTRUCTIONS ON REVERSE SIDE)

Town of Nichols
Agriculture & Farmland Protection Plan

INSTRUCTIONS

This affidavit should be completed by a landowner. The landowner should also provide a soil survey map or overlay showing the area in question and transmit by letter to the agency handling the appeal (either the County Agricultural and Farmland Protection Board or County Soil and Water Conservation District). The appeal agency is requested to complete the Land Classification Review Request (Form RA-100), attach the landowner's document and forward to the Commissioner of Agriculture and Markets for appropriate action if it is claimed that soils are subject to flooding as defined below:

Flooding for the purpose of the Land Classification System is defined as a condition when the surface of the soil is covered with water as a result of a stream or river being high enough to prevent the water on the surface from draining away. It is not the result of the soil slope being too flat that water ponds, or having insufficient time to drain.

Three phases of flooding are recognized. They are identified as follows:

- **Rarely floods (R):** no complete crop loss in the last ten years or the sum of crop losses is less than one complete crop loss in the last ten years;
- **Some flooding (S):** one complete crop loss within the last ten years or the sum of crop losses is equal to or greater than one, but less than two complete crop losses in the last ten years; and
- **Usually floods (U):** two or more complete crop losses within the last ten years or the sum of crop loss is equal to or greater than two complete crop losses in the last ten years.

Crop loss is defined as that loss due to flooding which includes the yield loss from decreased productivity during the normal crop growing season or the yield loss due to planting and/or harvesting delays that exceed those normal for the soil on which the crop is grown.

NOTE: A separate affidavit must be filed for each soil type.

Distribution: Original to NYS Department of Agriculture and Markets; one copy each to landowner and Soil and Water Conservation District

Attachment 8

State Historic Preservation Office Documentation

SHPO Archaeological Survey Recommendation (5/24/18)

SHPO No Effect Response (6/7/18)



Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

May 24, 2018

Mrs. Andrea Gievers
Sr Env Mgmt Analyst
Tectonic Engineering & Surveying Consultants. P.C
70 Pleasant Hill Road
Mountainville, NY 10953

Re: GOSR
Recreation Improvements Project: Kirby Park & Memorial Park
Village of Nichols, Tioga County, NY
18PR03145

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

The locations of these two parks are highly sensitive for Native American archaeological sites because of the known archaeological sites in the vicinity and the presence of Wappasening Creek and the Susquehanna River. Native American camp and village sites are often located at the confluences of waterways. Given this high archaeological sensitivity, the SHPO recommends a Phase IA/IB archaeological survey to document areas of previous disturbance and to identify any archaeological sites present within these two project areas.

If you have any questions, I can be reached at (518) 268-2179.

Sincerely,

Nancy Herter
Archaeology Unity Program Coordinator

Division for Historic Preservation

P.O. Box 189, Waterford, New York 12188-0189 • (518) 237-8643 • www.nysparks.com



Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

June 7, 2018

Mrs. Alicia Shultz
Senior Environmental Scientist
Governor's Office of Storm Recovery
38-40 State St., 408N, Hampton Plaza
Albany, NY 12207

Re: GOSR
Recreation Improvements Project: Kirby Park & Memorial Park
Village of Nichols, Tioga County, NY
18PR03145

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

Based on this evidence of previous ground disturbance, the SHPO no longer recommends that a Phase IA/IB archaeological survey is warranted. Therefore, it is the opinion of the OPRHP that your project will have **No Impact** upon cultural resources in or eligible for inclusion in the State and National Register of Historic Places

If you have any questions, I can be reached at (518) 268-2179.

Sincerely,

Nancy Herter
Archaeology Unit Program Coordinator

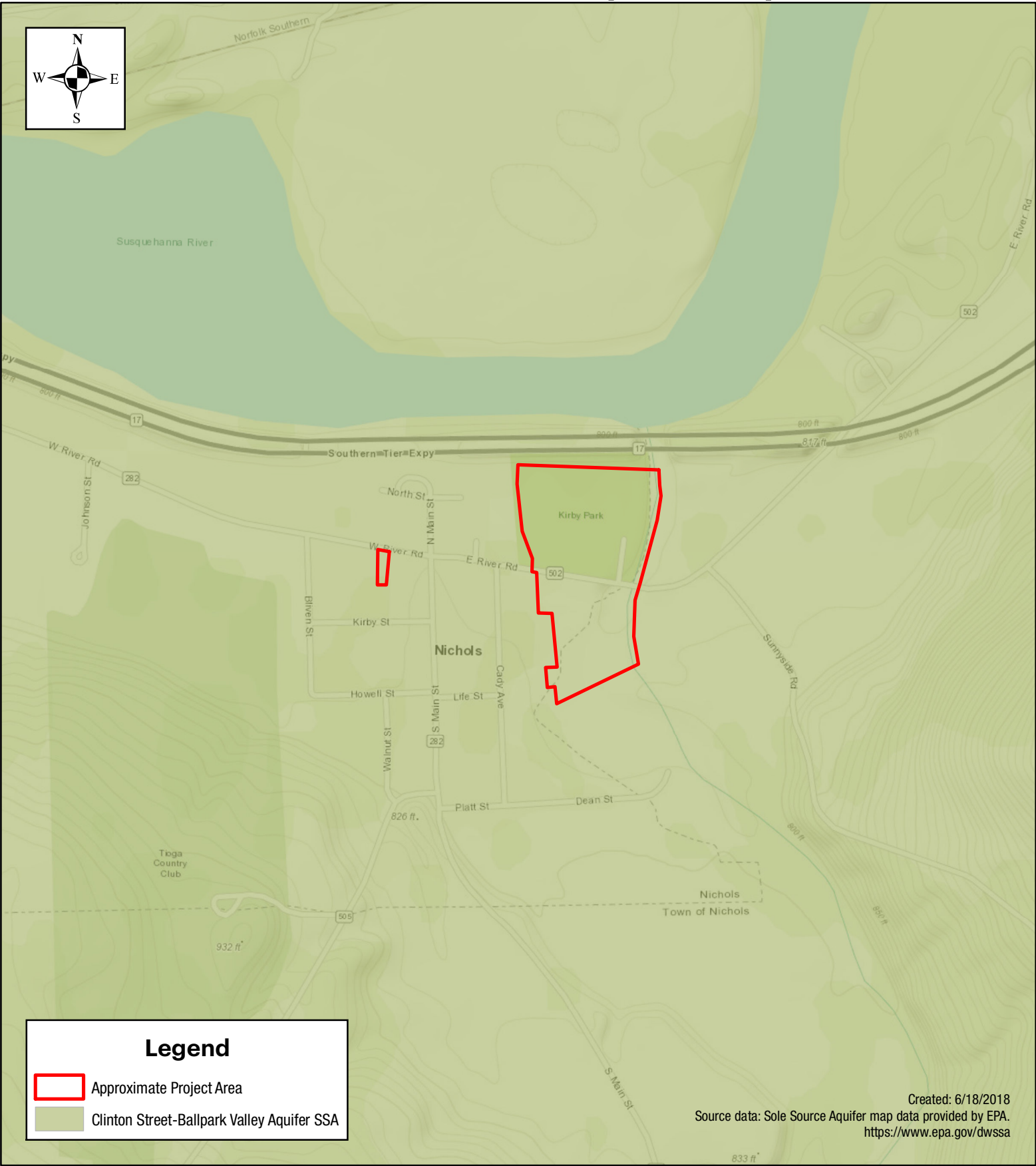
Attachment 9

EPA Sole Source Documents

EPA Sole Source Aquifer Map

EPA Sole Source Aquifer Analysis Response (6/13/18)

EPA Sole Source Aquifer Map





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

JUN 13 2018

Alicia Shultz
Senior Environmental Scientist
New York State Homes and Community Renewal
38-40 State Street
408N, Hampton Plaza
Albany, NY 12207

Dear Ms. Shultz:

This is in response to your May 21, 2018 request to the U.S. Environmental Protection Agency for a Sole Source Aquifer review of the proposed construction at two locations: Kirby Park at River Street (NYS Route 502) and a Village of Nichols owned parcel at West River Road (NYS Route 282), both in the Village of Nichols, Town of Nichols, Tioga County, New York 13812. The Village of Nichols is requesting Community Development Block Grant - Disaster Recovery (CDBG-DR) funding for recreational improvements to Kirby Park and the creation of a new village park, Veterans Memorial Park. During Tropical Storm Lee, the Wappasening Creek rose over its banks and flooded 90% of Kirby Park. The water washed away goal posts, caused structural damage to park facilities and left the grounds covered in mud and debris. The Village is within the Clinton Street Ballpark Aquifer System, designated by EPA as a Sole Source Aquifer on January 14, 1985 (citation 50 FR 2025). Therefore, our review has been conducted in accordance with Section 1424(e) of the Safe Drinking Water Act (SDWA).

The recreational improvements to Kirby Park will include installing new park sign(s) and lighting, multi-use trails, a pedestrian walkway, a children's play area, portable toilet facilities, resiliency landscaping, and a trail connection to the edge of Wappasening Creek; upgrading Kirby Park's perimeter and entrance; improving the southern parcel of Kirby Park; repositioning the practice baseball field, pavilion, and basketball court; and increasing handicapped accessible parking. The new Veterans Memorial Park will be a small outdoor space that conserves the existing landscape and supports the surrounding landscape and local wildlife. The creation of the park will involve the installation of a landscaped park entrance with a park sign along West River Road, benches, and a five to six foot-wide paved park walkway along a loop configuration that will be approximately 65 feet long. Additional amenities will include lighting, benches, a shade structure or gazebo and a Veteran's Memorial with flagpole(s).

The precise location of the pavilion has not yet been determined, but it may be quite close to an existing public water supply well in Kirby Park. We do not anticipate any impact on the well due to construction of the pavilion, but EPA strongly recommends that the location of this pavilion and the details of its construction be developed in close consultation with Suez Water of Nichols, the owner/operator of the Kirby well.

Based on the information provided, it is anticipated that this project will not pose a significant threat to public health or ground water resources and complies with Section 1424(e) of the SDWA. Please be advised that meeting the requirements of 1424(e) does not preclude the need to meet National Environmental Policy Act (NEPA) requirements to address direct, indirect, and cumulative impacts. This review does not constitute a review under Section 309 of the Clean Air Act; EPA therefore reserves the right to review additional environmental documents on this project.

If you have any questions concerning this matter or would like additional information, please feel free to contact Michael Poetzsch of my staff at (212) 637-4147.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Grace Musumeci", followed by a horizontal line.

Grace Musumeci, Chief
Environmental Review Section

Attachment 10

Potential Environmental Justice Areas Map



0 500 1,000 2,000 Feet

Nichols Recreation Improvements Project
Village of Nichols
Town of Nichols
Tioga County, New York